ADVANCED THERAPIES
Text Book of:

NEW STARTS – Nutrition Sciences and Lifestyle Adaptations.

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Textbook of NEW STARTS – Nutrition Sciences and Lifestyle Adaptations [Part 1 to 5] ©

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Dedication and Acknowledgements

This book is dedicated to the Members of Doctors Across Borders t/as Doctors Beyond Medicine, who, for many years, tirelessly offered hope and care to those that have no access to medicine due to financial circumstances, socio-economic reasons, or distance.

Compiled with care and love and dedicated also, to all past, present and future natural health physicians, practitioners and healers who were, or are not afraid to lay down old belief systems and open themselves to knowledge. To those not afraid to go BEYOND MEDICINE.....

For those that walked this journey with me during the compilation of the various programs [Doctors Beyond Medicine – Natural and Integrative Medicine] and not only this research document: Tracey Siebert, Lauren de Carvalho and Janet Wale – the simple words ‘Thank You’ somehow seem insufficient.

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Apples
An apple a day….

Tips for Using Apples
Eat the entire apple, except the core, and ensure that it is organic. Almost half of the Vitamin C content in an apple is just underneath the skin, and over two-thirds of the fibre and almost all the antioxidants are found in the peel. In a report published by the Environmental Working Group, apples were found to be the fruit with the second highest levels of pesticides, so try to buy organic apples whenever possible.

DBM PROTOCOL - ADJUNCT TREATMENT - GUT DISCOMFORT
- Treat stomach upsets with grated apple, left to turn brown and mixed with a little honey.
- The pectin in apples helps to regulate the digestive system and improves nutrient absorption.

Comment: The apple of choice in all DBM protocols is the Granny Smith apple.
Apple Cider Vinegar

Different from the refined and distilled vinegars usually found in supermarkets, Natural Apple Cider Vinegar is made from fresh, crushed, organically grown apples, and allowed to mature in tanks, which boosts its natural fermentation qualities. When mature, it contains a web-like substance, called "mother" that becomes visible when the rich brownish liquid is held to the light.

DBM PROTOCOL - ADJUNCT TREATMENT - APPLE CIDER VINEGAR
Drinking Apple Cider Vinegar as a pH balancer
Whilst not as tasty as lemon juice, ACV can replace the lemon juice in the lemon tea/water that our cleanse programs require. One tablespoon added to hot water with a dash of honey is acceptable.

Side Effects
• There are no side effects noted with normal consumption.
• The best way to incorporate it into your diet is to use it in your cooking, for salad dressings, etc.
• It is recommended to use organic, unfiltered apple cider vinegar with the “mother.”
• Apple cider vinegar also has various other non-health related uses like hair conditioning, skin care, dental care, pet use and as a cleaning agent (to name a few).
Basal Body Temperature - Thyroid

Simple Home Test for Patients - Thyroidism

**Purpose**

Body temperature reflects the metabolic rate, which is largely determined by hormones secreted by the thyroid gland and by the ability of your cells to convert these hormones to their more active form. Your level of thyroid activity can be determined simply by measuring your basal body temperature. All you need is a high-quality thermometer.

**DBM PROTOCOL – ADJUNCT TREATMENT - THYROID**

**Procedure**

1. Place the thermometer by your bed before going to sleep at night. If using a mercury thermometer, shake it down to below 95°F / 35°C.
2. On waking, place the thermometer in your armpit for a full 10 minutes. It is important to make as little movement as possible. Lying and resting with your eyes closed is best. DO NOT get up until the measurement is completed.
3. After 10 minutes, read and record the temperature and date (see chart over page)
4. Record the temperature for at least three mornings (preferably at the same time every day).
5. Menstruating women must perform the test on the 2nd, 3rd and 4th days of menstruation.
6. Men and postmenopausal women can perform the test at any time.

**Interpretation**

Your basal body temperature should be between 97.6°F / 36.4°C and 98.2°F / 36.7°C. Low basal body temperatures are quite common and may reflect hypothyroidism.
A Review
Resetting the body’s natural rhythm is central to good health. The biological clock is in the brain’s suprachiasmatic nucleus (SCN), a tiny region within the hypothalamus – a section of the brain that controls hormone production. The SCN maintains a 24-hour cycle of rest and activity that helps our bodies to establish when to eat and when to sleep. The cycle is also linked to biological activities such as hormone regulating, brain wave activity and cell regeneration. While these rhythms are regulated in the brain, external cues affect them such as light and temperature.

Our circadian rhythms are physical, mental and behavioural changes that follow this 24-hour cycle.

<table>
<thead>
<tr>
<th>TIME</th>
<th>MERIDIAN</th>
<th>FUNCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>01:00 to</td>
<td>Liver</td>
<td>The liver gets down to the work of apportioning the day's nutrients and detoxifying the day's toxin load. Deep resting and dreaming also occurs during this time and it is the worst time to eat as the Small Intestine meridian is at its lowest ebb. Anger, frustration, and rage reach a peak.</td>
</tr>
<tr>
<td>03:00 to</td>
<td>Lung</td>
<td>The respiratory tract, lungs and sinuses are cleansed and maintained. Gentle breathing occurs and sleep becomes shallower in preparation for waking. Grief and sadness may be experienced at this time.</td>
</tr>
<tr>
<td>05:00 to</td>
<td>Large Intestine</td>
<td>The large intestine packs the stool for excretion ideally at 7 am so it is important to allow time for elimination in the early morning. Drinking water and avoiding caffeine during this time helps promote defecation. Guilt and defensiveness may occur at this time.</td>
</tr>
<tr>
<td>07:00 to</td>
<td>Stomach</td>
<td>The peak time of the day for digestion. For this reason, TCM advocates suggest having the main meal including protein at breakfast. The emotions of disgust and despair may be experienced at this time.</td>
</tr>
<tr>
<td>09:00 to</td>
<td>Spleen</td>
<td>Said to be the most important digestive organ in TCM, the Spleen meridian directs the processes of digestion, transforming foods into Chi and blood. The Spleen also governs the immune system and allergies may be most</td>
</tr>
</tbody>
</table>
pronounced at this time. This time window is good for thinking and working, although jealousy, worry and low self-esteem may also be experienced.

<table>
<thead>
<tr>
<th>Time</th>
<th>Meridian</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:00 to 13:00</td>
<td>Heart</td>
<td>Palpitations may be noticed during this time and the majority of heart attacks are said to occur during the late morning. This is not a time to place the heart under additional stress by exercising or being exposed to excessive heat. A good time for meeting, talking and eating, although joy and sadness may also occur.</td>
</tr>
<tr>
<td>13:00 to 15:00</td>
<td>Small Intestine</td>
<td>The small intestine is busy digesting lunch and this may be the time when symptoms such as indigestion, abdominal pain and bloating most occur. This time window is good for sorting and organising, although insecurity, vulnerability and abandonment may also be experienced.</td>
</tr>
<tr>
<td>15:00 to 17:00</td>
<td>Bladder</td>
<td>The Bladder meridian is associated with the skin and skin irritations and eczema may be noticed during this time. Many people may feel tired and want a nap mid-afternoon and a salty snack is said to strengthen the Bladder meridian. Good for storing and reserving, although this time may be associated with timidity.</td>
</tr>
<tr>
<td>17:00 to 19:00</td>
<td>Kidney</td>
<td>Tiredness may carry over from Bladder time if the adrenals are depleted (also governed by the Kidney meridian). However, if the adrenals are strong, there may be a second wind of energy. Good for driving and consolidating, although fear and terror may reach a peak.</td>
</tr>
<tr>
<td>19:00 to 21:00</td>
<td>Circulation-Sex</td>
<td>This meridian governs the master glands and reproductive organs. If depleted, low back pain may result arising from the kidneys. Good for socialising, flirting and intercourse. Negative aspects include being unresponsive and unable to express emotions, feeling hurt, or extremes of joy.</td>
</tr>
<tr>
<td>21:00 to 23:00</td>
<td>Triple Warmer</td>
<td>The Triple Warmer meridian governs the endocrine system and the blood vessels. Headaches or feeling tired and weak during this time may indicate significant arterial repair taking place. Good for relaxing, although may be associated with feelings of hopelessness, confusion, and paranoia.</td>
</tr>
<tr>
<td>23:00 to 01:00</td>
<td>Gall Bladder</td>
<td>This meridian is associated with regeneration and sleep which is why we are told that the hours before midnight are important! If restless during this time, this indicates that the gallbladder and liver are overwhelmed and the toxins remaining in circulation are acting as an irritant to the brain. Emotions associated with this time window include bitterness and resentment.</td>
</tr>
</tbody>
</table>

What It Means to Keep to a Circadian Rhythm
If your circadian rhythm is off, your sleep will be disrupted. The circadian rhythm is the key to health and weight loss. Hence, why this is more important than sleep.
About Your Circadian Rhythm
Here’s a simple way to think about the circadian rhythm. The body has thousands of processes going on at any given moment. Many of these processes function better in concert with other processes – just like in a symphony, where different sounds work better with other sounds.
These processes have a certain rhythm or flow. The body conducts this orchestra with ‘CLOCK genes’, which get activated in many cells in the body, in a synchronous way.

Research over the past few decades have recognized the importance of circadian biology in obesity. Circadian biology has a massive influence on energy balance and metabolism. (R)

Many hormone receptors have been observed to exhibit circadian rhythms of expression. (R)
The daily timing of food intake has itself been shown to affect body weight regulation in mammals though the regulation of genes that control metabolism. (R)

In particular, CLOCK genes control NAD+/SIRT1, which if you have low levels of these proteins, your mitochondria won’t work well, you’ll be tired and your metabolism will be slower. (R)
Many variations in genes of the circadian rhythm raise the risk of diabetes. (R)
Circadian Rhythm of Hormones

- In the morning, light on the retinas signals the SCN to shut off melatonin (R). GHRH spikes at about midnight and growth hormone gets released a bit later. TRH spikes at 3-4AM, followed by TSH, T4 and T3.
- Metabolism is lowest at about 4AM and this corresponds to our lowest body temperature. Toward the end of the sleep phase, before early morning, the renin-angiotensin system kicks up. This increase causes aldosterone to also increase (before cortisol rises) (R).
- Cortisol spikes at 6AM. CRH and ACTH precede the cortisol spike by an hour or so. Aldosterone and cortisol both cause a blood pressure spike.
- VIP is highest at 6 AM and lowest at 6 PM.
- In lean people, ghrelin rises rapidly at midnight and peaks about 2:30AM, but not in obese people, where it stays flat (R). This burst of ghrelin stimulates growth hormone.
- Ghrelin continues to be high until the morning. Ghrelin stimulates NPY in the hypothalamus increasing our desire and ability to eat a lot more. Melatonin is known to acutely decrease ghrelin.
- Light at night can disturb the ghrelin release (R).
- Leptin rises as the day goes on and peaks at midnight and is at the lowest point between 9AM-12PM. The timing of your meals affect when you have a peak of leptin (R).
- Leptin makes NPY decline normally, but if one is leptin resistant this does not occur and appetite is out of control at the brain level.
- Testosterone secretion peaks at about 9AM. This is preceded by FSH and LH secreted at about 6AM.
- At 6:30 PM we see our highest blood pressures due to changes in atrial natriuretic factor and antidiuretic hormone (ANF, ADH).

Circadian Rhythm of Disease
- Heart attacks often occur in the morning. Epileptic seizures peak in the late afternoon. Asthma attacks get worse and more deadly between 11 p.m. and 3 a.m. (R).
In the morning, the immune system may be overactive, inflaming airways in asthma sufferers and swelling arthritic joints. (R).

Blood pressure and heart rate start increasing in the morning due to cortisol (R).

Heart attacks and strokes peak at around 9 a.m., partly because of the higher blood pressure (R).

Also, PAI-1, which makes blood clot more readily, peaks around 6:30 a.m. (R).

GERD may be higher at night. Stomach-acid production peaks between 10 p.m. and 2 a.m. (R).

**DBM Protocol - Biological Reset**

For gut repair and biological reset, the patient should be fasting 16 hours daily (evening and nights from after lunch [i.e. no solids at night]) for 7-10 days to give the gut the time to recover every day is highly recommended.

**Clean filtered water:** A minimum of 2.5 – 2.7 litres of fluid needs to be consumed daily to relieve bowel problems; water and teas/tisanes can be drunk throughout the day; broths are more ideal when fasting starts in the late afternoons.

When the system is burdened with chemicals (even “natural” supplements become toxic to the body if one is taking too many things at the same time), which the system can no longer deal with, then many other things go wrong. Stress is a killer, as the amounts of adrenalin released into the body (for fight or flight), burdens the system tremendously, even leading to more inflammatory responses and of course chemical imbalances. Exercise will help to get rid of some of that.

**In short: CLEAN Nourish, replenish, rest and get mind and spirit in a better state.**

This directly involves getting the gut into a better state. The gut is an underestimated cause of many neurological challenges and mood, depression, seizures, and motivation troubles, as the gut is directly connected to the nervous system (more neurons than in the spinal cord) and medications and toxic foods can wreak havoc on how the gut transfers nutrients to the rest of the body, affecting mood, brain function and many other things.

**DBM Protocol - Recommendations**

- Dark green vegetables contain magnesium, vitamin B's, iron, and chlorophyll — good for the gut, brain, liver, and blood and should be part of one's daily intake. In addition, hydration, and replenishment of electrolytes through broths will recover and correct many of the imbalances of electrolytes in the “water” of the body, which should speed up recovery and plasma cellular constitution to be more normal again.

- Hydration throughout the day is crucial (the body is 70% water, get the water and electrolytes right and everything else functions better again!).

- Recommend that patients take (3mg) melatonin an hour to 90 minutes before going to bed and be sure to the bedroom is completely dark, to ensure proper exchange of serotonin to melatonin. Even fluorescent light, TV or computer screens or exposure to that within an hour prior to going to bed, can prevent the melatonin exchange. Melatonin is also responsible for shrinking tumours and is necessary for brain as gut health.

- The food recommendations (other than the hydrating broths mentioned above for having in the afternoons and evenings) should help get the balance in the gut restored, along with natural sources of probiotics.

- Probiotics should be taken 6 x per day, half an hour before and after meals.

- Ensure sufficient Zinc as part of the daily eating program when formulating a program for patients as sufficient Zinc intake is fundamental to good health.
• The eating program should provide sufficient essential fatty acids – in this case Omega-3’s in the form of flaxseed. Add 1 teaspoon of flaxseed to the patient’s meals (they can grind or bruise the seeds in a mortar and pestle) prior to adding it to their food, to provide more of its nutrition to the system.

• Flaxseed is one of the richest sources of fibre and will benefit the body at many levels to excrete toxins over and above providing omega-3 essential fatty acids, to balance out the natural intake of omega-6’s.

• To aid digestion for those patients encountering problems in this area, suggest ginger, lemon, and mint in diluted or extracted form can be added to warm water prior to eating meals. Patients with digestive problems should avoid drinking cold foods prior to the intake of foods or with meals.

• Digestive enzymes in the form of raw fruits and vegetables, should form a crucial part of the eating program. However, raw vegetables can often be taxing on the digestive system, so when the gut feels over sensitive, patient should rely for a few days on lightly steamed, boiled, or baked vegetables or soups for easy digestion, whilst all along ensuring proper hydration as recommended.

See Nutrition for Life on this website for foods that reset the Biological Clock
**Bowel Cleanse**

*Or Intestinal Cleanse*

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**The Bowel**

Do you suffer from bouts of diarrhoea and/or constipation? Are your bowel movements less than once a day? Or are you frequently tired or do you often feel bloated or mentally sluggish? If so, you may want to consider improving your bowel health to improve your overall health.

So why is good bowel health so important? According to the Royal Society of Medicine, over 90% of all chronic diseases are due to an infection of the Gastrointestinal tract. You may already have heard it said ‘death begins in the bowel’ and this is indeed true.

The bowel is in fact a waste treatment system, but with neglect and abuse - it becomes a cesspool. Whenever the bowel is clean and working well, we are healthy and happy; but if it’s left to stagnate and become overburdened with toxins, it will poison the body - a process known as auto-intoxication. Auto-intoxication can cause depression, fatigue, irritability, poor concentration, insomnia, muscular aches, bloating, headaches, poor skin, bad breath and much more. In fact, if toxins are left to accumulate inside the body, your organs slow down to cause degenerative diseases and serious health problems.

The bowel, otherwise known as the large intestine or colon is approximately 5 feet long and is primarily made up of muscle. The muscles in the bowel contract and relax to push liquefied waste matter along its length. The bowel's main function is to absorb water and mineral salts from faecal matter and to pass these nutrients into the blood or lymphatic vessels to keep levels in the body constant and prevent dehydration.

A sluggish bowel can hold onto several kilos of old toxic and poisonous waste material. Because the bowel can also reabsorb many soluble toxins, it’s important that your bowel movements are regular and take place daily to enable toxins to be eliminated from the body as swiftly as possible.
Essentially, the bowel also provides the passage for elimination of all remaining waste, which is collected in the rectum and excreted through the anus at intervals. Faecal matter can remain in the bowel any length of time from 10 hours to several days, depending on the efficiency of the colon; however, the shorter the transit time, the better. Unfortunately, modern diets – refined, processed, low-fibre foods and animal fats, along with the use of allopathic medication and poor health habits and lifestyles can often result in greatly increased transit times. The colon can become a breeding ground for parasites, bacteria, and viruses. If your colon is not clean, then your body can’t absorb nutrients from food as effectively as it should.

Almost all mammals, including man, should have one bowel movement for every meal that is eaten every day.

This leads us to the next step: replacing the decimated pathogenic microbes with desirable lactobacilli. This must be done in a massive dose 30—60 minutes after each flush; otherwise the unwanted microbes may grow back to full strength after the next meal. Commonly probiotics contain acidophilus and bifidobacteria in addition to other lactobacteria.

Preferably buy milk-free (dairy-free) cultures, especially with Type 1 diabetes and allergies. High-potency cultures contain 10 to 25 Billion live bacteria per gram or per capsule. However, these dried cultures are dormant and relatively inactive as compared to bacteria in fresh or live ferments. Initially you may use dry cultures as starter or buy fresh ferments.

Alternatively experiment with making your own ferments, genuine fermented sauerkraut is one of the best natural probiotics. We do not recommend using commercial yogurt to sanitise the gastrointestinal tract because of the high content of mucus-causing lactose and the limited strains of lactobacteria.

Better for fermenting milk products are Kefir grains which can ferment at room temperature. You may ferment goat’s milk or even bee pollen. These ferments do not set as solid as cow’s milk because of the lower protein content, but that does not matter as the beneficial bacteria are in the liquid AND DAB does not advocate the use of ANY dairy products from COWS.

You keep it warm for several hours, and it is ready to use when it tastes somewhat acid and starts frothing, keep refrigerated.

Use a glassful of this liquid as a starter for the next batch. For individuals with Candida it is preferable to ferment in a yogurt maker close to 40°C as yeast fermentation increases at lower temperatures and can cause problems, this may also happen with sauerkraut.

Commonly these ferments are rather acidic and may upset sensitive individuals. In this case, partly neutralise the acidity by adding some bicarbonate until it is only slightly sour or you may let the ferment stand for a few hours with the addition of some dolomite powder and decant shortly before use.

Take a cupful of ferment after each flush, and possibly more before other meals. Continue taking either cultures or ferment daily during the intestinal cleanse and preferably during the systemic antimicrobial therapy.

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**See More Information on Pre-and Probiotics – Nutrition on this website**

**Tissue and Bowel Cleansing Maintenance**

When the bowel is dirty, it can harbour an amazing variety of very harmful bacteria and parasites. Constipation contributes toward the lowering of body resistance, predisposing it to many acute illnesses and the creation of many degenerative and chronic processes. Intestinal constipation causes cellular constipation and increases the workload of other excretory organs – kidney, skin, liver, lungs, and lymph,
which upon overworking has lowered ability to eliminate waste materials. Decline in tissue and organ functionality results.

Never before has man been in more toxic, poisonous environments. From the air, water, food, soil, clothing, things we touch, all find their way into the body. The need to detoxify and cleanse the body has never been greater than right now.

Some Causes of constipation
(Constipation also involves the amount of faecal matter excreted vs what was eaten, not only regularity of bowel movement)

1. Faulty nutrition (processed, devitalized foods low in fibre) does not promote health and well-being.
2. Ignoring the call to eliminate faeces or urine greatly increases cellular congestion.
3. Lack of physical exercise makes weak and flaccid muscle tone that holds up poorly under demands of poor diets and extra eliminative duty
4. Emotional and mental strain and tension cause chemical imbalances and abnormal secretions to occur
5. Poisons in the form of tobacco, coffee, alcohol, chocolate, and sugar have unfavourable effects upon digestion and elimination by upsetting gastric secretions and nerve responses
6. Medications are very upsetting to the bowel. Antibiotics can eliminate favourable intestinal flora, leaving opportunity for re-infestation by harmful bacteria and viruses
7. Not drinking enough water and dehydration causes body tissues and fluids to become thicker. The mucous lining in the colon changes consistency, failing to provide a slick lubrication for movement of faeces.
8. Not having healthy routines deny the body regularity and with it never knowing what is coming next, it is always on the defensive. This results in a depletion of vital nerve force and undermines the body’s ability to set periods of rest.

Solutions
- Remove accumulated faecal matter
- Change the diet from a toxin-producing process to that of elimination and cleansing

Eat plenty of colourful, fresh raw fruit and vegetables daily, do the change-over from soft processed foods diet to more rough wholesome diet in gradual manner to avoid excessive flatulence (containing skins, after washing the fruits and veg properly)

a. Do regular fasting sessions and cleanse with juicing
b. Do colonic flushing with enemas or colonic irrigations
c. Exercise 30 minutes per day. Walking, rebounding, stretching, swimming, cycling, etc.
d. The bowel should ideally empty every 6 hours
e. Keep medicines to the minimum, work out a medication reduction plan with your doctor
f. Have regular/daily natural probiotic – sauerkraut is a good source
g. Drink at least 6-8 glasses of pure, clean water per day (see tips on WATER under the heading 30)
h. Cleanse the mind of old negative and stressed habit patterns
i. Don’t try to do it all at once. Go about it slowly but surely in the right direction.
j. Surround yourself with people who encourage your wellness, who have knowledge and consciousness about these things.

Bowel Cleanse / Intestinal Cleanse

The purpose of a Bowel Cleanse is to rid the bowel of toxic accumulated waste and provide an optimal environment to re-establish healthy intestinal flora.
The Bowel Cleanse sets the GI tract up for the following processes:

REMOVE
We remove things that negatively affect the environment of the gut, such as inflammatory foods, infections from parasites, bacteria, or yeast, and remove the pathogenic microbes in the intestines (we make use of garlic which has a powerful antimicrobial and fungicidal action).

**REPAIR**
The next step is to begin the repair process of the gut lining, which we do through our Gut Repair Program.

**REPLACE**
The final step is to replace healthy bacteria in the gut by eating foods rich in L-glutamine (cabbage, spinach, parsley) which in turn heals the gut and creates an optimal environment for healthy bacteria to flourish and then REPLENISH the healthy bacteria in the gut through natural probiotics such as sauerkraut or our liquid Probiotic.
To maintain a healthy gut, we need to feed the good bacteria. This is done through healthy dietary fibre.

**It’s a Delicate Balance**
Factors that can upset the delicate balance of the GI tract include:
- Overgrowth of undesirable bacteria
- Overgrowth of yeast, including candida
- Parasites, such as amoebas
- Viral illnesses, such as measles
- Bad water or poor hygiene
- Too many sweets or starchy foods
- Too many alcoholic beverages
- Food allergies
- Certain medical drugs
- Frequent use of antibiotics
- Exposure to radiation
- Surgical complications
- Physical injury
- Excessive stress
- Environmental toxins
- Genetic sensitivities to any of the above

**DBM PROTOCOL – ADJUNCT THERAPY – BOWEL CLEANSE**
Refer to the Body Cleansing Page

**DBM PROTOCOL – ADJUNCT THERAPY - NAUSEA - GINGER TEA**
Refer to the Nutrition for Life Page
Breast Self-Examination (BSE)

Remember, BSE Is Not a Substitute for Routine Thermograms Or Regular Checks by A Gynaecologist

Women should have breast examinations during their routine check-ups.

You may find it convenient to schedule this exam during your routine physical check-up. If a breast exam is not done during that check-up, you should ask for one. During the exam, the health professional feels the breast and underarm with the fingers, checking for lumps. This is called palpation. The breasts also are checked for other changes such as dimpling, scaling, or puckering of the skin or a discharge from the nipples.

Women 40 and older should have breast examinations annually.

Breast Self-Exam (BSE)
Women do breast self-examination monthly.

Breasts come in all sizes and shapes, just as women do. Your own breasts will even change throughout your life. Your monthly menstrual cycle, menopause, childbirth, breast-feeding, age, weight changes, and birth control pills or other hormones may change the shape, size, and feel of your breasts.

It is important to learn what is normal for you. This can be done by using BSE. It is easy to do, and, as the name implies, you do it yourself. Women taking charge of their own health are doing BSE regularly. They are also eating healthy foods, exercising regularly, and avoiding tobacco use.

BSE is done once a month so that you become familiar with the usual appearance and feel of your own breasts. Familiarity makes it easier to notice any changes in your breasts from one month to another. In fact, some health professionals suggest that, at first, women do BSE every day for a month so that they really know the "geography" of their breasts. Early discovery of a change from what is normal is the whole idea behind BSE.

The best time to do BSE is 2 or 3 days after the end of your period, when your breasts are least likely to be tender or swollen. A woman who no longer has periods may find it helpful to pick a day, such as the first day of the month, to remind herself that it is time to do BSE.

If you discover anything unusual, such as a lump, a discharge from the nipple, or dimpling or puckering of the skin, you should see your doctor at once. Remember, 8 out of 10 biopsied breast lumps are not cancer. Many women have irregular or "lumpy" breasts. The term "benign breast condition" refers to those changes in a woman's breasts that are not cancerous. Many doctors believe that nearly all women have some benign breast changes after age 30. But any change is best diagnosed by your doctor.

Discussing BSE with your doctor will help you understand the procedure better. Ask your doctor or other health professional to review with you the steps of BSE, as well as to explain what you are feeling in your breasts. This will assure you that you are doing your BSE correctly and thoroughly, and you will gain more confidence in examining your breasts.

Remember every part of the breast cancer detection plan:
- Regular Digital infrared thermogram screening
- Routine breast examination by a health professional.
- Monthly breast self-examination.

Breast self-examination should be done once a month so you become familiar with the usual appearance and feel of your breasts. Familiarity makes it easier to notice any changes in the breast from one month
to another. Early discovery of a change from what is "normal" is the main idea behind BSE. The outlook is much better if you detect cancer in an early stage.

If you menstruate, the best time to do BSE is 2 or 3 days after your period ends, when your breasts are least likely to be tender or swollen. If you no longer menstruate, pick a day such as the first day of the month, to remind yourself it is time to do BSE.

Here is one way to do BSE:

**Step 1:** Begin by looking at your breasts in the mirror with your shoulders straight and your arms on your hips.

Here’s what you should look for:
- Breasts that are their usual size, shape, and colour
- Breasts that are evenly shaped without visible distortion or swelling

If you see any of the following changes, bring them to your doctor’s attention:
- Dimpling, puckering, or bulging of the skin
- A nipple that has changed position or an inverted nipple (pushed inward instead of sticking out)
- Redness, soreness, rash, or swelling.

**Step 2:** Now, raise your arms and look for the same changes.

**Step 3:** While you’re at the mirror, look for any signs of fluid coming out of one or both nipples (this could be a watery, milky, or yellow fluid or blood).

**Step 4:** Next, feel your breasts while lying down, using your right hand to feel your left breast and then your left hand to feel your right breast. Use a firm, smooth touch with the first few finger pads of your hand, keeping the fingers flat and together. Use a circular motion, about the size of a quarter.
Cover the entire breast from top to bottom, side to side — from your collarbone to the top of your abdomen, and from your armpit to your cleavage.

Follow a pattern to be sure that you cover the whole breast. You can begin at the nipple, moving in larger and larger circles until you reach the outer edge of the breast. You can also move your fingers up and down vertically, in rows, as if you were mowing a lawn. This up-and-down approach seems to work best for most women. Be sure to feel all the tissue from the front to the back of your breasts: for the skin and tissue just beneath, use light pressure; use medium pressure for tissue in the middle of your breasts; use firm pressure for the deep tissue in the back. When you’ve reached the deep tissue, you should be able to feel down to your ribcage.

**Step 5:** Finally, feel your breasts while you are standing or sitting. Many women find that the easiest way to feel their breasts is when their skin is wet and slippery, so they like to do this step in the shower. Cover your entire breast, using the same hand movements described in step 4.
Breathing
From Health Facts

The Breath of Life

“We live longer if we breathe better” - Leon Chaitow

Breath is life. It the first and last thing we do that defines us as living human beings. Breathing is linked to all bodily functions and processes. It is defined as the process of taking in oxygen from the atmosphere and releasing carbon dioxide out of the body. Breathing dysfunctions are a contributing factor to disease. Learning how to breathe properly and how to use breath therapeutically is an essential aspect of health and healing.

Mechanics of Breathing – A Review
Breathing is a complex process that is under both conscious and unconscious control. It involves three distinct phases: inhalation, exhalation, and the rest period.

- **Inhalation**, or breathing air in, is an active movement. During inhalation, the diaphragm contracts downward and a vacuum, or negative pressure, is created for air to move into the lungs. Inhalation is associated with “taking in life.”
- **During exhalation**, or breathing air out, the diaphragm relaxes and recoils and the lungs deflate as air moves out. Exhalation is associated with “letting go”.

Source: WikiHow
The rest period is the time between the exhalation and the subsequent inhalation. The rest period is associated with “contemplation of life.”

“Normal” relaxed breathing occurs at a rate of 4 – 4 - 4. A count of 4 for each phase – inhalation, exhalation, and rest period.

Proper breathing is done through the lower torso. During inhalation, the belly, lower back, and ribs expand while the shoulders, neck, face, and chest remain relaxed.

As air is inhaled through the mouth or nose, it travels to the lungs and proceeds to the alveoli where oxygen is picked up by the blood for delivery throughout the body. Alveoli are found in the lungs and are responsible for gas exchange within the body. At the same time, the blood unloads carbon dioxide into the lungs and upon exhalation, carbon dioxide is released into the atmosphere.

Unconscious breathing is under the control of the autonomic nervous system. The rate and depth of breathing is controlled by specialized centres, the medulla oblongata and the pons, in the brainstem. These areas alter breath depending on the level of carbon dioxide, or carbonic acid, in the blood. They also respond to changes in the blood’s pH.

Conscious control. Through conscious awareness it is possible to alter the rate and depth of breathing. It is also possible to alter the muscles used in breathing. Conscious control of breath is part of meditation, yoga, fitness training, speech or vocal training and speaking itself.

Corrective Steps to Better Breathing

1. Breathe through the nose
   - The breath should go in and out through the nose. The nose refines and prepares the air coming in to be used by the body as effectively as possible.
   - When you breathe through your mouth the lungs get a lot more “unfiltered” air that is raw, cold, dry, and full of viruses and bacteria.
   - If you feel like your nose is too stuffy to close your mouth that’s most likely because you’ve been breathing through your mouth for so long that your nose has adapted.
   - Usually it won’t take more than a couple of days of nose breathing to open up your nostrils again.

2. Breathe with the diaphragm
   - The air you breathe in through your nose should go all the way down to your belly. Your breathing muscles consist of the diaphragm and muscles in the abdomen, chest, neck, and shoulders.
   - 70-80% of the inhaling should be done by the diaphragm so that your breathing is nice and deep. +

   This has a couple of advantages:
   - It helps your lungs with the gas exchange which is much more effective way down in the lungs.
   - The diaphragm massages your liver, stomach and intestines and gives these organs a rhythymical balance.
   - The lymphatic system, which is important for our immune system, gets the help it needs to get rid of the waste products from the bowels.
   - The pressure in the chest and belly is decreased so that the heart won't have to work as hard.
   - More effective muscle work as the wrong breathing muscles won’t have to do unnecessary work.
   - As the chest gets more relaxed so does the neck and shoulders and as a result the likelihood of pain in these areas go down.

3. Breathe relaxed
   No matter what we want to do, we do it better if we are relaxed. Since our breathing reflect our thoughts, feelings, and physical body it means that situations that have us feeling tense also lead to tense and stressed breathing. This way of breathing then leads to a lack of oxygen which in turn makes the body and brain even more stressed.
By taking control of our breathing and making it more relaxed, our body tunes in and becomes relaxed as well which leads to better functioning in general. When the body is relaxed, health is good, energy is high and it becomes easier to be happy and loving toward yourself and others.

4. Breathe rhythmically
Everything has a natural rhythm – the ocean waves, the seasons, the moon. Your body is no different. The rhythm of the heart is measured in EKG and the brain in EEG. The hormones in the body follows our natural rhythm. One example the melatonin that is released when we’re going to sleep.
Optimal breathing is no different, it’s in the rhythm we find well-being. When everything is in tune the body functions at its very best.

5. Breathe silently
Coughing, snoring, sniffling and so on are suboptimal breaths in disguise. It’s easy to neglect all these sounds we are making but a breathing pattern that contain a lot of these elements is a huge strain to the body. The natural breath falls out of its rhythm and we mess up principle number 4.
Before we sigh or cough we usually take a big breath which leads to irregular breathing. Snoring means we must compensate through breathing faster.
A lot of us breathe quickly and even loudly when we talk. All these noises and talking lead to incorrect breathing

The Implementation of Correct Breathing Into your life
1. Conscious breathing – Become aware of how you breathe during different parts of the day. A practical tip for this is to let your phone alarm go off every hour or so and check your breathing each time it does. Are you breathing relaxed, rhythmically, silently, and deeply through your nose? Is there room for improvement in this situation?

2. Breathe through your nose – A closed mouth, with the tongue placed up the palate ensures that the breathing happens in and out the nose. If your nose is stuffy, do a sinus rinse.

3. Extended exhale – An extended exhale increases the relaxation and makes the inhale deeper and more rhythmical. For optimal breathing the inhale should be 2-3 seconds, exhale 3-4 seconds followed by a pause for 2-3 seconds. The extended exhale also has a positive effect on the inhale which gets deeper.

4. Straight posture – An upright posture gives a deeper breathing where the diaphragm gets more space to work. Your thoughts and feelings are affected in a positive way and at the same time it gets easier to breathe through the nose.

5. Body consciousness – Be aware of your body and how tense or relaxed it is in different situations. A relaxed body makes it easier to keep a rhythmical and relaxed breathing.

Recommended Breathing Exercises
Deep, cleansing breaths done by practicing the “Breathing Exercises” below create movement in the thoracic area. The movement of the ribcage (thoracic) stimulates the lymph - which moves lymph fluid more efficiently while resupplying oxygen and boosting circulation.

Another way to improve breathing is through Tai Chi, Qigong, or Yoga exercises.
A gentle massage also helps to move stagnant fluid back into the lymph system, break up toxins, and boost one’s mood at the same time.

DBM PROTOCOL – ADJUNCT THERAPY - BREATHING EXERCISES
Ho’oponopono Breathing
Directions:
This breathing meditation comprises of 10 rounds of breathing. Breathe in for 7 seconds, hold for 7 seconds, breathe out for 7 seconds and hold for 7 seconds. The entire process will take about 4 minutes to complete — Breathing is done all through the nose, which adds a natural resistance to the breath. You can also use the Ho’oponopono mantras while practicing the breath, "I am sorry, please forgive me, I love you and I thank you".

When it Works Best:
Anytime, anyplace — especially when faced with any adverse situation.

Level of Difficulty:
Beginner

Equal Breathing

Directions:
Balance can do a body good, beginning with the breath. To start, inhale for a count of 4, then exhale for a count of 4 — all through the nose, which adds a natural resistance to the breath. More advanced focused breathers can aim for 6 to 8 counts per breath with the same goal in mind: calm the nervous system, increase focus, and reduce stress.

When it Works Best:
Anytime, anywhere. This breath can help take your mind off the racing thoughts, or whatever might be distracting you from sleep.

Level of Difficulty:
Beginner

Abdominal Breathing Technique

Directions:
With one hand on the chest and the other on the belly, take a deep breath in through the nose, ensuring the diaphragm (not the chest) inflates with enough air to create a stretch in the lungs. The goal: 6 to 10 deep slow breaths per minute for 10 minutes each day to experience immediate reductions to heart rate and blood pressure. Keep at it for 6 to 8 weeks, and those benefits might stick around even longer.

When it Works Best:
Before anything stressful, but keep in mind, “Those who operate in a stressed state all the time might be a little shocked how hard it is to control the breath,” Pacheco”.

Level of Difficulty:
Beginner

Alternate Nostril Breathing

Directions:
This breath is said to bring calm and balance, and unite the right and left sides of the brain. Starting in a comfortable meditative pose, hold the right thumb over the right nostril and inhale deeply through the left nostril. At the peak of inhalation, close off the left nostril with the ring finger, and then exhale through the right nostril. Continue the pattern, inhaling through the right nostril, closing it off with the right thumb and exhaling through the left nostril.

When it Works Best:
Whenever it’s time to focus or energise. Just don’t try this one before bed.

Level of Difficulty:
Intermediate
**Skull Shining Breath**

*Directions:*
Begin this exercise with a long, slow inhale, followed by a quick, powerful exhale generated from the lower belly. Once comfortable with the contraction, up the pace to: Inhale—exhale (all through the nose) every 1 to 2 seconds, for a total of 10 breaths.

*When it Works Best:*
When it’s time to wake up, warm up or start looking on the brighter side of things. It is abdominal—intensive and will warm up the body, shake off stale energy and wake up the brain.

*Level of Difficulty*
Advanced

**Progressive Relaxation**

*Directions:*
To eliminate tension from head to toe, close the eyes and focus on tensing and relaxing each muscle group for 2 to 3 seconds each. Start with the feet and toes, then move up to the knees, thighs, rear, chest, arms, hands, neck, jaw, and eyes — all while maintaining deep, slow breaths. Having trouble staying on track? Anxiety and panic specialist Dr. Patricia Farrell suggests we breathe in through the nose, hold for a count of 5 the muscles tense, and then breathe out through the mouth on release.

*When it Works Best:*
At home, at a desk or even on the road. One word of caution: Dizziness is never the goal. If holding the breath ever feels uncomfortable, tone it down to just a few seconds at most.

*Level of Difficulty:*
Beginner
Camellia sinensis
Green Tea

The Chinese plant (sometimes called C. sinensis var. sinensis) is a small-leafed bush with multiple stems that reaches a height of some 3 meters. It is native to southeast China. The first tea plant to be discovered, recorded, and used to produce tea three thousand years ago, it yields some of the most popular teas.

Green tea is made from the tea plant, Camellia sinensis, the same plant form which black tea is derived. Lightly steaming fresh cut leaves produce green tea. This process prevents oxidation which occurs in black tea production - a process that inactivates compounds known as polyphenols that are consequently found in higher concentrations in green tea.

The polyphenolic flavonoids present in green tea of interest are:
- Catechin
- Epicatechin (EC)
- Epicatechin gallate (ECG)
- Epigallocatechin gallate (EGCG)
- Proanthocyanidins

A typical cup of green tea contains 50 to 100mg of polyphenols, with EGCG having the highest concentration.

DBM PROTOCOL – ADJUNCT THERAPY - PRESCRIBING CONSIDERATIONS
- The recommended dosages vary based on age and health status.
- Typical dosage recommendations are between 3 and 10 cups per day.
- Cancer preventative doses are at the higher end of this range.
- Green tea extracts are standardized to polyphenol content and average dosage is between 500-1500mg per day (the equivalent of 5 to 15 cups).
Safety
Green tea is considered safe and non-toxic when consumed regularly. It is important to note that a cup of green tea generally contains between 10-50mg of caffeine and over consumption of caffeine may cause irritability, insomnia, nervousness, and tachycardia.

- Children - Green tea and green tea extracts should not be ingested by infants as doses above 250ml/day may affect iron metabolism and cause microcytic anemia.

Contraindications:
- End Stage Renal Disease - Due to its high potassium content patients with end stage renal disease should avoid consumption of green tea.

Drug Interactions
- No reported drug interactions. Although there are theoretical concerns due to caffeine's antiplatelet activity when co-administered with anticoagulants.

Nutrient Interactions
- None reported.

- See also – Tisanes & Healing Teas
Candida Test
Home Test

Whilst not considered totally accurate, patients can do this home-test, which provides the DBM Physician/Practitioner valuable insight into their condition.

DBM PROTOCOL – CANDIDA HOME TEST

Patient Information
Candida begins in the intestinal tract, where it sets up its ongoing production. As time goes by the yeast migrates along the mucous membranes of the digestive tract into the stomach, then up the oesophagus and finally into the mouth. Often, depending on how thick the yeast becomes, it can be seen in the mouth and on the tongue as a white film. The fungal yeast mixes into the saliva and has certain properties (heavier than water) when put into water; and that’s why the saliva test is a reliable, but only a preliminary candida test.

Up to 85% of people May Have Candida

Instructions
• When you awake in the morning, before you put anything into your mouth, work up some saliva and spit it into a clear glass of water.
• Within 1-3 minutes, look in the glass. If there are strings coming down from your saliva, or if the water turned cloudy, or if your saliva sank to the bottom, YOU MAY HAVE A CANDIDA CONCERN!
• Healthy saliva will simply float on the top! (You may want to put out a glass of water in the bathroom or on the nightstand the night before you wish to do the home Candida Saliva test, just to remind yourself not to brush your teeth prior to spitting into the glass.)
Papain is a powerful digestive enzyme commonly found and extracted from the papaya fruit (*Carica papaya*), it is also referred to as papaya proteinase. The papaya-enzyme papain plays a key role in digestive processes involving breaking down tough protein fibers. For this reason, it has been commonly used in its native South America as a digestive support for meat eating.

Science is catching up with the wisdom of traditional healers in South America. Papain can play a significant role in the breakdown of toxins and is a powerful digestive aid and antioxidant.

While eating fruit after a meal isn't generally recommended as it can have a negative effect on your digestion, papaya is one of the few exceptions. Papaya fruit is a rich source of valuable proteolytic enzymes, such as papain, chymopapain, caricain and glycyl endopeptidase, that can greatly aid in the digestive process. This is especially true of meals that contain meat or other concentrated forms of protein. But, papaya enzyme can have many other health benefits and may have an even more important role to play when taken on an empty stomach.

**The Health Benefits of Papain**

1. **Boosts Digestion**
   
   One of the key areas in which papain serves the body, is in the realm of its protein-digestive properties. The University of Michigan supports its use as an enzymatic support for the intestines, stomach, and the pancreas.
2. Skin and Wound Care
Due to papain’s beneficial capacities, it is currently being studied for topical applications on burns, irritations, and wounds. It has also been used for ulcers and bedsores. Traditional cultures in Hawaii and Tahiti made poultices out of the skins of papaya, as this part of the fruit is particularly concentrated in papain. They applied it to the skin to heal wounds, burns, rashes and bug stings.

3. Resistant to Fungus
Studies show that the enzyme papain is also resistant to fungus. A 2010 report from the African Journal of Agricultural Research found that extracts from Carica papaya (papain) could statistically reduce the fungal pathogen causing pawpaw fruit rot.

4. Immune System Support
According to Memorial Sloan-Kettering Cancer Center, papain may act as an immune support system for cancer treatment, as proteolytic enzymes such as papain help to modulate leukocytes in the immune response.

5. Inflammation / Irritation / Swelling
Studies confirm that the papain enzyme may help reduce joint and prostate irritation. One study from the University of Maryland Medical Center, shows that papain was effective in helping the body reduce the swelling associated with prostatitis.

6. Antioxidant
Papain holds compounds that may aid in protecting the body from cellular damage caused by free radicals. One study published in the Journal of Dairy Science found that papain can offer a potential alternative to chemical additives for increased survival of probiotic bacteria in yogurt due to its oxidation properties. Similarly, it is also a powerful agent commonly used in food preservation, as it reduces bacterial infestations and spoilage due to oxidation.

The Surprising Health Benefits of Papaya Seeds
While most people throw them away, papaya seeds are not only edible, small amounts of them in your diet can be surprisingly good for you. Keep in mind though that chewing half a teaspoon of the seeds is not like eating papaya fruit. They have a strong flavor, more like a cross between mustard and black peppercorns.

If you can handle that, ahead are some of the main health benefits of papaya seeds, followed by some interesting ways to add them to your diet.

Papaya Seeds, Worms, and Other Parasitic Infections
Like green papaya, the seeds contain high levels of proteolytic enzymes like papain which can help rid your body of parasites.

Good levels of digestive enzymes in your diet are also believed to help normalize the environment in your intestinal tract, making it less hospitable to worms and other parasites. Enzyme rich green papaya capsules are a simple alternative if you don’t have the fresh fruit available.

The seeds from papaya also contain a unique anthelmintic alkaloid called carpaine that has been shown to be very effective at killing parasitic worms and amoebas. There is much more detail on the human parasite problem and a great tasting smoothie treatment to get rid of them in using papaya seeds for parasites and intestinal worms.

See Parasite Cleanse
Castor Oil

From Health Facts

Castor Oil is extracted from castor seeds (Ricinus Communis). It is a very pale yellow liquid that has a thick, sticky feel. Castor oil is an anti-inflammatory and antioxidant oil which has been used for centuries for its therapeutic and medicinal benefits. It is believed that most of castor oil's healing abilities are derived from its high concentration of unsaturated fatty acids especially ricinoleic acid. Although it has a strong and rather unpleasant taste, castor oil is used in cosmetics, soaps, textiles, medicines, massage oils and many other everyday products.

Benefits of Castor Oil

Castor oil has been used both internally and externally for thousands of years. Castor oil has been shown to increase circulation and promote elimination and healing of tissues and organs underneath the skin. It is particularly effective in being absorbed into lymph circulation which can improve digestion, immune function (increases mobility and effectiveness of white blood cells) and reduce swelling in injured muscles, joints, and extremities. It has also been specifically used in cases of menstrual irregularities, uterine fibroids, and ovarian cysts.

Other Conditions Which Respond Well Include:

- headaches
- liver disorders
- constipation
- intestinal disorders
- gallbladder inflammation or stones
- conditions with poor elimination
- night time urinary frequency

- arthritis and inflamed joints

DBM PROTOCOL - ADJUNCT TREATMENT - CASTOR OIL PACK

Materials Needed:
- Castor Oil (can be found at any health food store)
- Flannel or cotton cloth large enough to cover the affected area
- Plastic large enough to cover the flannel cloth (Saran Wrap works well)
- Heating pad with a low setting or a hot water bottle

Procedure:
- Fold the flannel to a size that fits over the affected area.
- Pour a small quantity of the castor oil into a glass dish or pan. Soak the flannel with the castor oil (you want it to be saturated but not dripping).
- Lie down somewhere comfortable and place the castor oil soaked flannel over the affected area.
- Cover the flannel with a piece of plastic to prevent staining of clothes or furniture and place the heating pad/hot water bottle on top.
- Leave the pack in place for 45-60 minutes. Use this time to relax (practice visualization, meditation, or relaxing breathing).
- When finished store the pack in an airtight storage container or zip-lock bag.
- You can re-use the pack several times adding more oil only when necessary. Replace the pack with it begins to change colour.

For maximum effectiveness, it is necessary to apply the pack as often as possible. Patients who use the pack daily will receive the most beneficial effects.

Direct Application The easiest way to use castor oil is to massage it onto the body on the problem spot, along the spinal cord, the abdomen, or following the lymph drainage pattern (above breast line to pubic line and around each side of body). For superficial problems, direct topical application without the use of a heating pad is typically sufficient.
- Alternatively, put castor oil directly on the skin or area of concern. Cover it and leave it on overnight (take heat away after allotted time). Cover with old clothing/towels as the oil stains clothing and sheets.
- Dip a cotton ball into castor oil and apply it onto the affected skin in the morning and at night.
- Alternatively, for larger skin areas, soak an appropriately large piece of unbleached cotton cloth in castor oil and wrap the affected area overnight.
- If the area is very small, soak a Band-Aid in castor oil and cover the infected skin overnight.
- To clean off any oil residue, wash off with soap and water.

Side Effects
Castor oil is normally safe if used in moderation. However, pregnant, and lactating women and people with intestinal blockage, acute inflammatory intestinal disease, appendicitis, or abdominal pain should not take castor oil without their doctor’s approval.

**Note that precautions must be taken when recommending the oil internally. Instructions on the packaging should be adhered to. Internal ingestion of castor oil may result in diarrhea, nausea and/or vomiting, abdominal pain or cramping.**

Castor oil has been shown to:
- increase circulation and promote elimination and healing to tissues and organs under the skin.
- it is absorbed into lymph circulation, which can improve digestion, immune function, and reduce swelling in injured joints and extremities.
- Castor oil packs have been shown to increase white blood cell count when used for 4 consecutive days.
For in-depth instructions on how to make a Castor Oil Pack – see Castor Oil Packs
Castor Oil Packs

No drug exists that can improve lymphatic flow; however, the process can be more easily handled through the topical application of Castor oil. The procedure is very simple – apply the castor oil directly onto the different parts of the skin where there are lymph nodes.

For additional lymphatic stimulation (for advanced cases of oedema etc.) Apply a castor oil pack to the lower abdomen. This pack can be left overnight to help stimulate the circulation of lymphatic fluids, reduce inflammation, and helps also to improve digestion.

**DBM PROTOCOL – ADJUNCT TREATMENT - CASTOR OIL PACKS**
Castor Oil was recommended by Edgar Cayce for treating many ailments that resist traditional therapies. It can be applied as a balm for skin problems, a soothing tonic for alleviating allergies, and as a "castor oil pack." Known to conventional medicine only as a strong laxative, this extract of the castor bean is a safe, gentle, easy-to-use remedy for virtually any illness when it is used externally.

A castor oil pack is an external application of castor oil to the body. A piece of wool (or cotton) flannel is saturated with castor oil and applied to a specified area with, or without, heat. The Cayce readings recommend castor oil packs in general to improve assimilations, eliminations, and circulation (especially of the lymphatic system) and in particular to breakup adhesions of the lacteal glands. Although this therapy may seem unusual, it is one of the best documented. It was recommended, as part of a holistic approach, for epilepsy, gallstones, scleroderma, constipation (and other intestinal conditions)—just to name a few.
How to Make the Pack

Materials needed: castor oil (preferably cold pressed/processed), unbleached wool or cotton flannel (3-4 pieces or layers about 12" x 14" each), a 13-gallon trash bag (cut along the edges that seal it thus giving you two identical rectangular pieces), a standard or extra-large electric heating pad or hot water bottle, a large plastic sheet (such as an inexpensive shower curtain liner), an old sheet, paper towels, baking soda, and a wash cloth or sponge.

The readings say that it is important to heat the pack before placing it on the body. The easiest way to do this is to put the flannel on top of the heating pad (the heating pad is first covered by one of the pieces of the 13-gallon trash bag) and turn the heat on. Saturate the flannel with castor oil (the first time the flannel is used, it will require a large amount of castor oil to saturate it.) This will warm up in about 15 minutes. Additional amounts of castor oil will need to be added to the pack before each use. Note, Heat is not recommended with active infections, bleeding, excessive gas, or a recent injury (less than 48 hours old). Please do not heat the pack in a microwave oven.

Note: This method is one of the most efficient ways of making a pack. The easier and neater it is, the more likely it will be used. Saturate the flannel, but not to dripping.

Where to Place the Pack

The pack's placement depends on the issue being addressed. For general use (and in epilepsy), it should be placed over the liver on the right side of the body, extending, top to bottom, from about the sternum (breastbone) to about 4 inches below the navel or to the groin or pubic bone. From left to right, it extends at least from the navel, around the body as far as it will go, covering as much of the right side as possible. A larger pack, consisting of a king-size heating pad (12" x 24") and matching sized flannel, will cover the liver and abdominal area more easily and is highly recommended.

Using the Pack

If possible, use the pack in the evening, when you are best able to rest. This is an ideal time to pray, meditate, read spiritually uplifting material, or listen to relaxing music. Decide where in your home you will be doing the pack. Set it up so you will be comfortable, with a pillow under your head and another under your knees. Oil always drips from the pack so it is important to protect bedding, cushions, or pillows (some people prefer to use the pack undressed to avoid soiling their clothes).

Here are the steps for a mess-free pack:
1. Place the large piece of plastic over the area where you will be laying.
2. Place an old sheet over the plastic.
3. Take the second piece of the 13-gallon trash bag and position it across the sheet, under your lower back and beneath the area of your abdomen.
4. Lie down on your back on the plastic bag.
5. Place the saturated pack on your abdomen, with the oiled flannel against your skin and the plastic-covered heating pad on top.
6. Adjust the heating pad control to the warmest setting you can tolerate comfortably. It should be very warm ("as hot as the body can stand"), but not so hot it burns you.

Please note that it's easy to fall asleep with the pack in place so if you find that happening, be doubly careful of the temperature setting on your heating pad and lower it if necessary. With a sleeping child, you might want to shut it off completely and allow body heat to keep it warm.

Keep the pack on for at least 1 to 1½ hours; this is one treatment where more may be better. It can even be used overnight. Abdominal binders/supports (available from a medical supply store) or a wide bodybuilder's midriff support with Velcro fasteners are useful in holding a pack in place if you wish to sleep with the pack. A large bath towel, folded lengthwise, placed around the entire torso and fastened with safety pins, can also be used.

When You Are Finished
Turn off the heating pad and put it aside. Take-off the pack with the trash bag and fold it in on itself and store it in a leak-proof container. Wipe off excess oil (keep paper towels near). Cleanse the skin with a solution containing a pint of warm water and a teaspoon of baking soda. Now is the best time for an abdominal and spinal massage if you are using the packs as a remedy for epilepsy.

Persistence and consistency are called for with many chronic conditions. Use the pack for 3 days in a row. Then take a break for 4 days, and then repeat. This is a typical series of castor oil packs but other variations were given, too (4 days on with 3 days off, or 5 days on with 2 days off, every other day, etc.).

The flannel pack can be used repeatedly and be kept in the refrigerator between usages, although this is usually not necessary as castor oil is very resistant to spoilage even at room temperature. Replace the pack only if it smells rancid or discours from toxins being released from the body.

If despite all precautions, oil gets on the bedding or clothing, launder with an extra amount of your usual detergent and a couple of cups of baking soda.

After A Series of Packs
On the evening of the final day, Mr. Cayce would generally suggest taking olive oil (not castor oil!) by mouth-typically up to two tablespoons. This was recommended especially for conditions of the gall bladder, liver, and colon. A good time to have a colonic is after a series of packs.

An instructional video on how to make a castor oil pack based http://youtu.be/sVaCT8oTzlY
Cinnamomum verum
C. zeylanicum, C. cassica – Cinnamon Bark

The use of cinnamon dates back thousands of years to at least 2700 B.C. Chinese herbals from that time mentioned it as a treatment for fever, diarrhoea, and menstrual problems. Indian Ayurvedic healers used it in a similar manner. Cinnamon was introduced around 500 B.C. to the Egyptians, who then added it to their embalming mixtures. Hebrews, Greeks, and Romans used it as a spice, perfume, and for indigestion. Moses included cinnamon in an anointing oil that he used. By the seventeenth century, cinnamon was considered a culinary spice by Europeans.

American nineteenth century physicians prescribed cinnamon as a treatment for stomach cramps, nausea, vomiting, diarrhoea, colic, and uterine problems.

General use
Cinnamon bark is a common ingredient in many products such as toothpaste, mouthwash, perfume, soap, lipstick, chewing gum, cough syrup, nasal sprays, and cola drinks. A popular food flavouring, it is valued as one of the world’s most important spices. It is also valuable in the treatment of various ailments. Modern herbalists prescribe cinnamon bark as a remedy for nausea, vomiting, diarrhoea, and indigestion. Chinese herbalists recommend it for asthma brought on by cold, some digestive problems, backache, and menstrual problems.

The medicinal value of the herb is attributed to the oil extracted from the inner bark and leaves. The cinnamon bark harvested from the young branches is primarily used for culinary purposes. In fact, the cinnamon sticks commonly used in cooking are pieces of rolled outer bark.

The active ingredients of the bark contain antibacterial, antiseptic, antiviral, antispasmodic, and antifungal
properties. A study published in 2002 indicates that oil from cinnamon bark inhibits the production of listeriolysin, a protein released by Listeria bacteria that destroys healthy cells. Japanese research has shown cinnamaldehyde, one of the constituents of cinnamon bark, to be sedative and analgesic. Eugenol, another component, contains pain-relieving qualities.

Cinnamon bark is helpful in strengthening and supporting a weak digestive system. Research reports that cinnamon bark breaks down fats in the digestive system, making it a valuable digestive aid. It is used to treat nausea, vomiting, diarrhoea, stomach ulcers, acid indigestion, heartburn, lack of appetite, and abdominal disorders.

A traditional stimulant in Chinese medicine, cinnamon bark has a warming effect on the body and is used for conditions caused by coldness. The twigs of cinnamon enhance circulation, especially to the fingers and toes.

Cinnamon bark contains antiseptic properties that help to prevent infection by killing decay-causing bacteria, fungi, and viruses. One German study showed that the use of cinnamon bark suppressed the cause of most urinary tract infections and the fungus responsible for vaginal yeast infections. It is also helpful in relieving athlete’s foot.

Cinnamon bark is a frequent ingredient in toothpaste, mouthwash, and other oral hygiene products because it helps kill the bacteria that causes tooth decay and gum disease. Inflammations of the throat and pharynx may be relieved through its use.

Cinnamon bark is also known to control blood sugar levels in diabetics. United States Department of Agriculture (USDA) researchers have found that cinnamon bark may reduce the amount of insulin required for glucose metabolism.

Cinnamon bark promotes menstruation. It has been used to treat menstrual pain and infertility. Women in India take it as a contraceptive after childbirth.

Other conditions in which cinnamon bark may be helpful include fevers and colds, coughs, and bronchitis, infection and wound healing, some forms of asthma, and blood pressure reduction.

More recently, cinnamon bark has been shown to be an effective natural snake repellent that is safer to use than synthetic pest management chemicals.

DBM PROTOCOL – ADJUNCT THERAPY – CINNAMON / CINNAMON BARK

Preparations
Cinnamon bark is available in several forms from Chinese pharmacists, Asian grocery stores, and health food stores: fresh or dried bulk, pill, tincture, and as an essential oil.

Dosage
Below are some typical dosages for cinnamon alone.

- Tincture: Take up to 4 ml with water three times daily.
- Tea: Take 1 cup 2–3 times daily at mealtimes.
- Crushed: Take 1/2 tsp (2–4 g) daily.
- A dose of 1/8 to 1/4 tsp of ground cinnamon per meal for diabetic patients may help to regulate their blood sugar levels

Precautions
- Cinnamon bark may cause an allergic reaction in some individuals.
- Cinnamon bark is not recommended for pregnant or nursing women.
- Do not take essential oil of cinnamon bark internally unless under professional supervision. Internal ingestion may cause nausea, vomiting, and possible kidney damage.
- Essential oil of cinnamon bark is one of the most hazardous essential oils and should not be used on the skin. External application of the oil may cause redness and burning of skin.
- Cinnamon bark should not be given to children under two years of age.
Cinnamon bark is considered toxic if taken in excess.
Cinnamon bark should not be given to persons with inflammatory liver disease; in large quantities, it can irritate the liver.

**Side effects**
- Mild side effects include stomach upset, sweating, and diarrhoea.
- Large doses can cause changes in breathing, dilation of blood vessels, sleepiness, depression, or convulsions.
- Excessive use of cinnamon bark may cause red, tender gums; mouth ulcers; inflamed taste buds; and a severe burning sensation in the mouth.

**Interactions**
Some interactions with other medications have been reported. Cinnamon oil may cause skin irritation if applied to the skin together with acne medications that contain retinoic acid. Cinnamon bark has also been reported to intensify the effects of medications given to lower blood pressure. Persons taking cinnamon bark should discontinue its use two weeks before any surgery requiring general anaesthesia because of the herb’s tendency to lower blood pressure.
Advantages of Cinnamon & Honey

It is found that a mixture of honey and cinnamon influences many health imbalances. Honey is produced in most of the countries of the world. Scientists of today also accept honey as a "Ram Ban" (very effective) medicine for all kinds of diseases. Honey can be used without any side effects for any kind of diseases.

Today's science says that even though honey is sweet, if taken in the right dosage as a medicine, it does not harm diabetic patients. Weekly World News, a magazine in Canada, on its issue dated 17 January, 1995 has given the following list of diseases that can be cured by honey and cinnamon as researched by western scientists:

Heart Diseases:
Make a paste of honey and cinnamon powder, apply on bread, instead of jelly and jam, and eat it regularly for breakfast. It reduces the cholesterol in the arteries and saves the patient from heart attack. Also, those who have already had an attack, if they do this process daily, they are kept miles away from the next attack. Regular use of the above process relieves loss of breath and strengthens the heartbeat. In America and Canada, various nursing homes have treated patients successfully and have found that as you age, the arteries and veins lose their flexibility and get clogged; honey and cinnamon revitalize the arteries and veins.

Arthritis:
Arthritis patients may take daily, morning, and night, one cup of hot water with two spoons of honey and one small teaspoon of cinnamon powder. If taken regularly even chronic arthritis can be cured. In a recent research conducted at the Copenhagen University, it was found that when the doctors treated their patients with a mixture of one tablespoon Honey and half teaspoon Cinnamon powder before breakfast, they found that within a week, out of the 200 people so treated, practically 73 patients were relieved of pain, and within a month, mostly all the patients who could not walk or move around because of arthritis started walking without pain.
Bladder Infections:
Take two tablespoons of cinnamon powder and one teaspoon of honey in a glass of lukewarm water and drink it. It destroys the germs in the bladder.

Toothache:
Make a paste of one teaspoon of cinnamon powder and five teaspoons of honey and apply on the aching tooth. This may be applied three times a day until the tooth stops aching.

Cholesterol:
Two tablespoons of honey and three teaspoons of Cinnamon Powder mixed in 16 ounces of tea water, given to a cholesterol patient were found to reduce the level of cholesterol in the blood by 10 percent within two hours. As mentioned for arthritic patients, if taken three times a day, any chronic cholesterol is cured. According to information received in the said journal, pure honey taken with food daily relieves complaints of cholesterol. (By the way, if you're taking cholesterol medicine STOP! They all contain STATIN which weaken your muscles...including YOUR HEART and none has been shown to stop heart attacks or strokes!!!!

Colds:
Those suffering from common or severe colds should take one tablespoon lukewarm honey with 1/4 spoon cinnamon powder daily for three days. This process will cure most chronic cough, cold, and clear the sinuses.

Upset Stomach:
Honey taken with cinnamon powder cures stomach ache and clears stomach ulcers from the root.

Gas:
According to the studies done in India and Japan, it is revealed that if honey is taken with cinnamon powder the stomach is relieved of gas.

Immune System:
Daily use of honey and cinnamon powder strengthens the immune system and protects the body from bacterial and viral attacks. Scientists have found that honey has various vitamins and iron in large amounts. Constant use of honey strengthens the white blood corpuscles to fight bacterial and viral diseases.

Indigestion:
Cinnamon powder sprinkled on two tablespoons of honey taken before food relieves acidity and digests the heaviest of meals.

Influenza:
A scientist in Spain has proved that honey contains a natural Ingredient which kills the influenza germs and saves the patient from flu.

Longevity:
Tea made with honey and cinnamon powder, when taken regularly, arrests the ravages of old age. Take four spoons of honey, one spoon of cinnamon powder and three cups of water and boil to make like tea. Drink 1/4 cup, three to four times a day. It keeps the skin fresh and soft and arrests old age. Life spans also increases and even a 100 year old, starts performing the chores of a 20-year-old.

Pimples:
Three tablespoons of honey and one teaspoon of cinnamon powder paste. Apply this paste on the pimples before sleeping and wash it next morning with warm water. If done daily for two weeks, it removes pimples from the root.

Skin Infections:
Applying honey and cinnamon powder in equal parts on the affected parts cures eczema, ringworm and all types of skin infections.
Weight Loss:
Daily in the morning one half hour before breakfast on an empty stomach and at night before sleeping, drink honey and cinnamon powder boiled in one cup of water. If taken regularly, it reduces the weight of even the most obese person. Also, drinking this mixture regularly does not allow the fat to accumulate in the body even though the person may eat a high calorie diet.

Cancer:
Recent research in Japan and Australia has revealed that advanced cancer of the stomach and bones have been cured successfully. Patients suffering from these kinds of cancer should daily take one tablespoon of honey with one teaspoon of cinnamon powder for one month three times a day.

Fatigue:
Recent studies have shown that the sugar content of honey is more helpful rather than being detrimental to the strength of the body. Senior citizens, who take honey and cinnamon powder in equal parts, are more alert and flexible. Dr. Milton, who has done research, says that a half tablespoon of honey taken in a glass of water and sprinkled with cinnamon powder, taken daily after brushing and in the afternoon at about 3:00 p.m. when the vitality of the body starts to decrease, increases the vitality of the body within a week.

Bad Breath:
People of South America, first thing in the morning, gargle with one teaspoon of honey and cinnamon powder mixed in hot water, so their breath stays fresh throughout the day.

Hearing Loss:
Daily morning and night honey and cinnamon powder, taken in equal parts restore hearing. Remember when we were kids? We had toast with real butter and cinnamon sprinkled on it!

DBM PROTOCOL – ADJUNCT THERAPY - CINNAMON HONEY
- Mix a container of honey well with a packet/container of ground cinnamon.
- Take a teaspoon of the mixture daily
Coffee Enema
Liver Cleanse - Coffee Enema

LIVER CLEANSE – THROUGH COFFEE ENEMAS

An enema is the injection of liquid through the anus to motivate evacuation. Enemas are a valuable tool for cleansing your Liver and Colon and provide many additional benefits. But how can you perform an enema at home? Realistically, they are safe and easy when done correctly. If you want a quick, simple, and effective way of cleansing your liver. Below are the instructions on how to perform a cleansing retention enema.

The Liver and Colon is a part of the digestive system and are responsible for extracting the water and salt to maintain body’s electrolyte balance, from waste, prior to release. The colon can be clogged due to waste clinging to its walls. This can cause: headaches, low energy level, vomiting, weight gain, skin allergies, constipation, joint pains, indigestion, fatigue, diarrhoea, vision problems, loss of memory, stress, bloating, etc. It can also lead to various diseases such as heart problems, asthma, gall bladder stones, skin allergies, kidney, and liver ailments as well as cancer.

LIVER CLEANSE
BENEFITS OF THE COFFEE ENEMA

The major benefit of the coffee enema is to enhance elimination of toxins through the liver. Indeed, endoscopic studies confirm they increase bile output. A patient was given a coffee enema while an endoscope monitored the entrance to the common bile duct. Within minutes of administering the enema, bile flow increased.

Other benefits are:

- Increased bile flow alkalinizes the small intestine and promotes improved digestion.

- Coffee acts as an astringent in the large intestine, helping clean the colon walls. A common contributor to ill health is the production and absorption of toxins within the small and large intestines. If food is not digested properly, sugars ferment and protein putrefies or rots. Both processes generate toxic chemicals which are then absorbed into the liver.

- By stimulating the large and small intestines somewhat, coffee enemas help enhance liver activity. This is a process understood in acupuncture. Technically, introducing water and coffee into the colon weakens the large intestine meridian somewhat. This is usually helpful, as this meridian is often overstressed by the presence of toxins in the large bowel. Even if it is not overstressed, the effect in terms of acupuncture meridians is to enhance the energy of the liver/gall bladder meridian to some degree.

- Coffee contains some selenium, a mineral needed by most people. Taking the selenium by rectum apparently works better than taking it by mouth.

- Coffee also contains some toxic metals such as lead and cadmium. However, it appears from our experience that when taken by rectum, these are not absorbed nearly as much as they are when coffee is taken through the mouth.

- Retaining the enema for 15 minutes or so forces one to move one’s attention downward toward the pelvic area. This may have a subtle and powerful healing effect.

- Coffee enemas cause relaxation of the sympathetic nervous system. This may seem odd, since they contain caffeine which is a stimulant. Possible reasons for relaxation of the sympathetic nervous system include: 1) they affect two important parasympathetic organs, the liver, and the large intestine, 2) they remove irritating toxins from the body rapidly and thoroughly, 3) more subtle mechanisms that affect the nerve feedback in a way that inhibits sympathetic nerves.

- The compounds kahweol and cafestol found in coffee enhance glutathione S-transferase activity in the liver. This enzyme assists liver detoxification that neutralizes and helps remove a large variety of toxic compounds.

People who choose to use coffee enemas to enhance liver detoxification and/or reduce pain should take the same precautions as in any enema: use an enema bag with appropriate lubricated nozzle to avoid damaging the rectum or bowel; thoroughly clean the equipment after each enema to avoid reintroducing pathogens to the colon; and do not perform too many enemas within a short time.
STEP 1
Gather your supplies. Spurring an evacuation with the help of an enema is easy, yet you will need a few essential supplies:

- A couple of large, old towels
- A teaspoon of organic almond oil, olive oil, or coconut oil for lubrication
- One litre boiled spring water which will be cooled down to body temperature once coffee steeped
- A clean enema kit. Various types of enema kits exist on the market.

STEP 2
A private bathroom is the best location to perform this activity.
- There should be a place for your enema bag or bucket to sit or hang from. It should be connected about 1.5 meter above the floor while you are lying down on the ground.
- Make sure your resting area is close to the toilet.
- Once you injected the enema content, you may only have a few moments before the body needs to evacuate.
- Being near the toilet, keeps you comfortable.

STEP 3
Assemble the enema kit you as per the instructions included with the kit. An enema kit usually comes with:
- A bag for the liquid
- A hook to hang the bag up
- A hose
- A plug
- A rectal tip

STEP 4
Fold any towels on the bathroom floor close to the toilet to lie on. Make it a comfortable experience.

STEP 5
- Use some coconut or olive oil to lubricate your anus as well as the insertion tip on the end of the enema tube.
STEP 6
Understand what a cleansing enema is. A cleansing enema is what most people think of when they hear the word "enema": designed to be quick and easy, this enema is supposed to cause quick evacuation and help clean the colon. There are several different kinds of cleansing enemas.
- Salted water
- Chamomile tea. Very soothing and effective
- DBM prefer to use the Coffee enema.

STEP 7
Allow the coffee to stand for a while to cool, then:
- Fill your bucket or bag with a litre of filtered coffee.
- The coffee temperature should be just above body temperature point - lukewarm. It should not burn your fingers when testing it.
- Hold the insertion end of the tube over the bathtub or toilet.
- Open the clamp to let the liquid travel through the tube until it comes out steadily.
- Be sure that there aren’t any air pockets in the tube.
- Once you are sure of this, clamp the tube to stop the flow.

STEP 8
- Lie on your back, with your knees drawn towards your chest. Depending on your comfort level or size, it is advantageous to lie down on your left side with your knees drawn so that your upper legs form a 90° angle with your body.
- Some people find it easier to take in more liquid while resting on their side.

STEP 9
- After you are comfortable, insert the nozzle about 5-7 cm into the rectum.
- Stop if you feel any resistance and adjust the angle slightly until you can easily insert the tube.
STEP 10

- Slowly release the clamp OR open the tap OR squirt in the liquid depending on the equipment to start the flow of coffee.
- Go slowly, as going too quickly can create the need to evacuate immediately.
- The key to a successful enema is to take in and hold in the liquid until the body's natural peristaltic movements begin. If you experience cramping, clamp the tube, and take a deep breath before continuing. Lightly massaging the abdomen will also help.

STEP 11

- After you have taken as at least 250ml but preferably 500ml coffee, gently remove the nozzle.
- You can put in up to 1 litre at a time (if your bowel has moved prior to doing the enema.
- Continue lying on the floor on your left side.
- Work your way up to retaining the enema for 15 minutes, lying first on your left side for 5 minutes, then 5 minutes on your back, then 5 minutes on your right side before evacuating into the toilet. Having a bowel movement prior to doing the enema (like in the mornings), will enable you to easier hold the fluid and allow you to take in the whole litre at once.

STEP 12

Understand what a retention enema is.
- Retention enemas are exactly what the name suggests they are: Instead of introducing the fluid and quickly expelling it and any other waste matter, you're supposed to hold it in for anywhere from 5 to 15 minutes.
- Coffee enemas are reputed to stimulate the colon and the gallbladder.
- Choose an organic medium roast brand.

STEP 13

- After you have retained the liquid for several minutes, sit on the toilet and relax.
- Wait until you can expel all that you are urged to release.
**STEP 14**
You're done! Repeat this process as many times as recommended by your practitioner.
- Clean your equipment by rinsing with warm water and white vinegar
- Allow it to air-dry before storing.
- Wash your hands well after you have finished.

**SUMMARY OF COFFEE ENEMA**

**STEP 1** Gather your supplies
**STEP 2** Private bathroom to perform this activity
**STEP 3** Assemble the enema kit
**STEP 4** Make yourself comfortable
**STEP 5** Lubricate the nozzle tip
**STEP 6** Prepare coffee for enema liquid
**STEP 7** Pour luke warm coffee into enema bag
**STEP 8** Position yourself
**STEP 9** Insert the nozzle tip anally
**STEP 10** Open and let the coffee liquid run in
**STEP 11** Let the coffee run in completely
**STEP 12** Wait a few minutes
**STEP 13** Expel into the toilet
Turmeric (Curcuma longa) is best known for its use in inflammatory conditions such as osteoarthritis and rheumatoid arthritis and in the treatment of liver diseases. To explore the characteristics, medicinal uses, and prescribing considerations of this herb in more detail, check out the references indicated.

**Characteristics**

**AKA** Crocus indicus
- **Common Names:** Turmeric, Indian saffron, Haldi, Jiang huang
- **Family:** Zingiberaceae
- **Habitat:** Curcuma longa is native to Southeast Asia. It prefers humid conditions and rich loamy soils.
- **Parts Used:** Tuber, rhizome
- **Constituents:** volatile oil (curcumin)
- **Medicinal Actions:** cholagogue, hepatic, hypolipidaemic, anti-inflammatory, antibacterial (topical, internal), and antiviral, anticancer, antioxidant, cytotoxic (topical), carminative and stomachic, antimicrobial, antitumour.

**Historical Uses:**
Historically, Curcuma longa has been valued as highly as ginger. It's been used for purulent ophthalmia, bruising (topically), blood disorders, catarrh, and inflammatory and liver disorders.

**Medicinal Uses:**
- Liver Conditions
  - jaundice and liver disorders
- Digestive Conditions
  - gastritis, acidity, ulcerative colitis
- Arthritis
  - osteoarthritis and rheumatoid arthritis, asthma
- Cardiovascular Conditions
  - prevention of stroke and myocardial infarction, treatment of cardiovascular degeneration
- Memory Loss
  - Dementia, Alzheimer's Disease, and other forms of memory loss
Skin Conditions
- eczema, psoriasis, topical cancerous lesions, athlete's foot

**DBM PROTOCOL – ADJUNCT TREATMENT - TURMERIC**

**Prescribing Considerations**

Infusions and decoctions are rarely done because of low solubility of the essential oil and curcumin in water. Take the powder in the form of “Golden Paste or Golden Milk”, to improve absorption. Traditional Indian cooking may be equivalent to a therapeutic dose.

**Formulations and Preparation**

- Culinary herb - used in many Indian dishes
- Dried root - 1.5-3g daily; or 3-9g daily
- Standardized extract - 250-500mg curcumin three times daily
- Powdered root - 0.5-1g several times daily between meals; or 4g (1 heaped tsp) daily or twice daily

**Safety**

The safety and prescribing considerations for this herb include:

- Generally regarded as safe.
- Side-effects may include rare allergic reactions, and rare and usually mild gastrointestinal effects.
- Contraindications: bile duct obstruction (because it’s a cholangue, empirical); gallstones without physician consult (speculative); stomach ulcers or excess stomach acid (speculative) but prevents ulcers from NSAIDs; pregnancy (because of its emmenagogue and abortifacient action, empirical); women attempting conception (speculative); allergic hypersensitivity; excessive sunlight with topical use (speculative)
Dehydration

From Health Facts

A Review
Dehydration is the term used to describe a deficiency of water. A mere 2% drop in your body's water supply can trigger signs of dehydration. It is estimated that most people are mildly or chronically dehydrated. Mild dehydration is one the most common causes of daytime fatigue.

Many people believe that thirst is the first sign of dehydration. Yet, typically if you are thirsty you needed water long before that. The older you are or the less healthy you are, the less you're able to sense that you're thirsty. On the other hand, excessive thirst and increased urination can be signs of a more serious medical condition.

The following are the common signs and symptoms of dehydration.

1. Fatigue
2. Lack of energy
3. Headache
4. Dry mouth
5. Chronic pains in joints and muscles
6. Lower back pain
7. Constipation
8. Little or no urination
9. Muscle weakness
10. Excessive thirst
11. Dizziness
12. Light-headedness

Causes of Dehydration
1. Decreased consumption of water
2. Foods and drinks high in sugar or caffeine
3. Excessive alcohol
4. Diets low in fruits and vegetables
5. Excessive exercise
6. Extreme temperatures – whether hot or cold
7. Diuretics such as caffeine pills and prescription diuretics
8. **Specific diseases**

Dehydration may be associated with any age, yet it appears to be more common in older adults.

**Associated Diseases**
- Pain, whether headache, digestive, joint or muscle pain, is often due to acute or chronic dehydration. As a general recommendation – at the first onset of pain (if not due to injury or infection) drink water.
- Heartburn
- Arthritis or Rheumatoid joint pain
- Lower back pain
- High blood pressure.
- Angina
- High cholesterol
- Migraines and headaches
- Diabetes
- Ulcerative Colitis
- Depression, loss of sex drive (libido), chronic fatigue syndrome, lupus, muscular dystrophy, and multiple sclerosis are all associated with prolonged dehydration.
- Cancer
- Decreased cognitive performance.

**DBM PROTOCOL – ADJUNCT THERAPY - DEHYDRATION**

Prevention and Treatment
To ward off dehydration and make sure the body has the fluids it needs, ensure water becomes your patient’s beverage of choice.

**Recommendations**
- Drink 1/2 your body weight in ounces of water per day.
- Drink fluids slowly by constantly sipping throughout the day.
- Don’t drink caffeinated drinks or alcoholic beverages, which can have a dehydrating effect.
- When flying in an airplane, drink plenty of water and avoid alcohol.
- Drink water before, during, and after exercise—slowly!
- Call your doctor if you have a temperature over 102 degrees Fahrenheit, or severe cramps.
- Carry a water bottle whenever possible, especially when participating in outdoor activities in warm weather.
- Remember that fluids can be lost through sweat as well as from diarrhea.
- Check with your naturopathic doctor to see if your symptoms or conditions alter your need for water.

**Tips**
- Choose drinks or food with electrolytes (such as vegetable juice or broth soup) to replenish the fluids lost from diarrhea.
- Fruit juices can make diarrhea worse, so dilute them with water.
- Don't hesitate to call a doctor if you are concerned about severe dehydration.
**Note**

- Riboflavin, a B Vitamin, will make your urine bright yellow.
- Although uncommon, it is possible to drink too much water. When your kidneys are unable to excrete excess water or when the daily consumption of water is too high, the electrolyte (mineral) content of the blood is diluted, resulting in low sodium levels in the blood, a condition called hyponatremia.
- Endurance athletes, such as marathon runners, who drink large amounts of water, are at higher risk of hyponatremia. In general, though, drinking too much water is rare.

See - Water, Electrolytes, Lemon water, Hydration Water, and Broths on this website
Detox Baths

Hydrogen Peroxide Bath and Detox Baths and Foot Baths

What’s in Magnesium Sulphate / Epsom salt and how it works
Most people know about the importance of calcium and vitamin D, but many people are also magnesium deficient. Research says it stems largely from the increasing prevalence of processed foods in our diets.

Today, 68 percent of U.S. adults consume less than the recommended daily allowance (RDA) of magnesium, according to a recent study, and 19 percent consume less than half the RDA.

Epsom salt is made of naturally occurring minerals magnesium and sulfate, ingredients which can help improve health in numerous ways. A lack of magnesium—which helps regulate the activity of more than 300 enzymes in the body—can contribute to high blood pressure, hyperactivity, heart problems and other health issues, doctors warn. Sulfate is essential for many biological processes, helping to flush toxins and helping form proteins in joints, brain tissue and mucin proteins.

The health benefits of absorbing magnesium, sulfate through the skin
The benefits of Epsom salt aren’t just folklore. In fact, numerous studies have demonstrated the profound and wide-ranging benefits of magnesium and sulfate. Doctors and researchers say that when you soak in an Epsom salt bath, magnesium and sulfate can be absorbed through the skin. They recommend an Epsom salt bath as a safe, easy way to increase the body’s levels of both magnesium and sulfate.

Source: Epsom Salt Council

Epsom Salt Baths for Children with Autism
Some research has shown that children with autism might benefit from Epsom salt. One study found that people with autism have a deficient detoxification pathway that uses sulphate to get rid of toxins, and the pathway can get clogged when there is not enough sulphate [source: DeFelice]. Bathing in
Epsom salt helps raise sulphate levels in the body, which can get the detoxification pathway flowing again.

**DBM PROTOCOL – ADJUNCT THERAPY - DETOX / CELL OXYGENATION BATHS**

**General Precaution**

Certain precautions are necessary while taking these therapeutic baths. Full baths should be avoided within three hours after a meal and one hour before it. Local baths like the hip bath and foot bath may, however, be taken two hours after a meal. Clean and pure water must be used for baths and water once used should not be used again. While taking baths, temperature and duration should be strictly observed to obtain the desired effects. A thermometer should always be used to measure the temperature of the body. Women should not take any of the baths during menstruation. They can take only hip baths during pregnancy upon the completion of the third month.

**Cell Oxygenation Bath #1: Hydrogen Peroxide Bath**

**Ingredients**

1 – 4 cups 35% food grade hydrogen peroxide

**Directions**

- Add 1 cup of 35% food grade peroxide to a bath—tub—full of water. Then get in and soak, preferably for 30 minutes or longer for an oxygenating soak. (Soaping is not required when bathing as the oxygen oxidises the bacteria responsible for body odour.)

- When you start taking peroxide baths increase quantity by 1 cup per week to manage side effects like raised energy levels or dizziness due to increased oxygen levels to the brain. Do not exceed 4 cups per bath.

**Detox Bath #1: Bicarbonate of Soda (aluminum free)**

**Ingredients**

Dissolve 4 cups of aluminum free bicarbonate of soda in a standard size bath of water as hot as you can tolerate.

**Directions**

- Use more as needed if your bath is oversized. Stay in the bath until the water has cooled which will take approximately 45 minutes.
- Do not rinse after the bath – simply towel dry.
- This bath is beneficial for exposure to irradiated food, swollen glands, sore throat or soreness of the gums and mouth. It is also beneficial for those with digestive impairment such as the inability to hold food in the stomach comfortably.

**Detox Bath #2: Epsom Salts Detox**

**Ingredients**

Dissolve 2 cups of Epsom Salts in a standard size bath.

**Directions**

- Use more as needed if your bath is oversized.
- The temperature should be comfortably warm but not overly hot.
- Soak for at least 12 minutes and up to 20-30 minutes. Rinse and towel dry.
- The scientific name for Epsom salt is magnesium sulfate. Magnesium and sulfur are both critical nutrients but surprisingly can be poorly absorbed from our food. Soaking in Epsom Salts overcomes this problem as these minerals both absorb readily via the skin.
According to the Epsom Salt Industry Council, a simple soak is beneficial to heart and circulatory health, can lower blood pressure, helps ease muscle pain and eliminates harmful substances from the body. It also improves nerve function by encouraging proper regulation of electrolytes.

Soak in Epsom Salts 2-3 times weekly for general health maintenance or to alleviate the discomfort of bruising and sprains. An Epsom salts soak also encourages detoxification of drugs remaining in the body after surgery.

**Detox Bath #3 - Epsom Salt Bath – High Level Detox**
- The immersion bath tub should be filled with about 135 litres of hot water at 40°C. One to 1 ½ kg. of Epsom salt, should be dissolved in this water.
- The patient should drink a glass of cold water, cover the head with a cold towel and then lie down in the tub, completely immersing the trunk, thighs, and legs for 15 to 20 minutes.
- The best time to take this bath is just before retiring to bed.
- This is useful in cases of sciatica, lumbago, rheumatism, diabetes, neuritis, cold and catarrh, kidney disorders and other uric acid and skin affections.

**Detox Bath #3: Sea Salt and Bicarbonate of Soda**
**Ingredients**
Dissolve 2 cups of sea salt or rock salt (non-iodised salt) and 2 cups of bicarbonate of soda to a standard size bath of water (more if the tub is large) as hot as you can stand it.

**Directions**
- Stay in the bath until the water has cooled which will be about 45 minutes.
- If the bath is too hot, you can add some cold water if this is the only way you can manage to stay in for at least 30 minutes. Don’t ever add more hot water after entering the bath, however.
- Do not rinse or shower but simply towel dry after the bath is complete.
- This bath will likely make you tired so do it in the evening before bed if possible.
- This bath is therapeutic for any exposure to environmental radiation, x-rays, plane flights or airport screenings by TSA.

**Detox Bath #4: Apple Cider Vinegar (ACV)**
**Ingredients**
Add 2 cups of pure apple cider vinegar to a standard size bath of water as hot as tolerated. Use more as needed if your bath is oversized.

**Directions**
- Stay in the bath until the water has cooled which will be about 45 minutes.
- Towel dry and don’t shower for at least 8 hours.
- This bath is a great overall detoxifier and for muscle aches and pains brought on by physical exertion.
- It is also helpful and the best detox bath choice for those with candida issues that affect the skin as it returns the skin to an optimal, slightly acidic pH which is a difficult environment for candida to thrive.
- An ACV bath draws excess uric acid out of the body. Uric acid is created when the body breaks down substances called purines in certain foods and drinks. Most uric acid is eliminated via the kidneys in the urine, but for those with gout can have issues with excess levels. An ACV cleansing bath can provide welcome relief for those with joint problems, arthritis, gout, bursitis, or tendonitis.
- It also is very helpful for those with excessive body odor problems.

**Detox Bath #5: Mustard**
**Ingredients**
This bath can help soothe the skin, in some cases, and remove certain toxins, including toxic chemicals such as trichloroethylene.
Prepare the bath by adding about 2 tablespoons of ground mustard seeds in the warm bath water.

**Directions**
- Stay in the bath until the water has cooled which will be about 40 minutes.
- If the bath is too hot, you can add some cold water if this is the only way you can manage to stay in for at least 30 minutes. Don’t ever add more hot water after entering the bath, however.

**Contraindications**
Be sure to only do one bathing formula per day. Do not mix ingredients from different bath recipes. It is not recommended that patients are pregnant take detox baths or undergo any form of detox regime without a full consultation and assessment.

**Detox Bath #6 – Boric Acid Sitzbath**
For Vaginal Yeast Infection (Vaginal Thrush Treatment)

Borax Sitzbath (or Bathtub) – proven and safe remedy for yeast infection. Boric Acid has antifungal and antiviral properties, and helps to restore acidic pH of the vagina which is unfriendly to yeast.

**Ingredients**
- ¼ cup boric acid [60g] or 30g Borax
- Witch hazel

**Instructions**
- Using warm water, fill a sitz bath (or put 5 – 10cm warm water in a bathtub).
- Dissolve boric acid or the borax in a cup of boiling water – add it to the bath water.
- Optionally add ⅓ cup witch hazel to sitz bath.
- Sit for 10-15 minutes.
- Repeat every night for about a week - until infection is gone.
- **DO NOT USE BORIC ACID INSIDE THE VAGINA IF YOU ARE PREGNANT**

**Restorative Bath #1 – Magnesium Deficiency**
Bathtub Soak

**Economical to Use Magnesium Chloride Flakes**
- For a severe magnesium deficiency - consider a relaxing soak in a magnesium chloride solution in the bathtub (and also add baking soda for extra alkalizing).
- It is counter-productive if your water is chlorinated - in which case you will need to use a filter at the supply. Chlorine filters can be found online.
- The size of a bathtub warrants the more economical use of magnesium chloride flakes / crystals (instead of oil).

**How much magnesium chloride flakes / crystals per bath?**
Use 1-2 pounds [453g to 900g] magnesium chloride flakes / crystals considering that the more you fill the tub, the more diluted your solution will be. So essential that you do not overfill the bath. If you prefer a deep bath double the amount of crystals added.
Utilizing the principles of balneotherapy, enough magnesium chloride must be added to bath water to make a hypertonic solution (i.e. bath has a higher salt concentration than the body). This is an excellent way to both deliver needed trace minerals directly into the body, and to help the body cleanse itself.

**The temperature** of the magnesium bath should be warm (101 – 105 °F) [38 - 40°C] - rather than hot, for efficient absorption of the magnesium.
How long? – 25-30 minutes is suggested; longer bath times can increase the amount of magnesium absorbed, but you don’t want to be sitting in cold water;

How often? – for four weeks, take no more than 2 bathtub soaks per week. This is a powerful way to improve your magnesium levels, but be aware that you can have too much of a good thing. Too much magnesium becomes unbalanced with the body’s calcium and can result in muscle weakness—take note of sensations while in the tub, or muscle weakness outside the tub. If this occurs take some good calcium to counteract the magnesium overdose.

DBM PROTOCOL – ADJUNCT THERAPY - DETOX / CELL OXYGENATION FOOTBATHS

FOOTBATHS
How often should you take a footbath?
If you are trying to remedy a magnesium deficiency, you should take a daily footbath for a week and then 3 times/week for a couple months to increase your body’s magnesium levels.

Add in ¼ cup of baking soda for an extra alkalising therapy – sodium bicarbonate is used to counter acidity in the body, which is present in most of today’s degenerative health problems. Cancer cannot survive in an alkaline environment, making this additional alkalinizing therapy a must.

Using Mco or Magnesium Chloride Flakes
Using a footbath is a relaxing way to raise body’s magnesium levels. Also, this is the preferred method of application for any health issues with the lower extremities such as the feet, ankles and legs

Instructions:
• Pour 4 ounces of Magnesium Oil or 1-2 Cups magnesium chloride flakes into a heated footbath – if using flakes allow time for them to dissolve. Massaging and/or vibrating option may enhance your experience.
• Add just enough warm (101 – 105 °F) [38 - 40°C] water to cover your feet - Do not use water at a temperature of >105 °F / 40°C, which encourages general excretion rather than absorption.
• Soak clean washed feet for 20-25 minutes
• Dry feet.
• Don’t throw out the water - to economize, you can reuse it several times - just top it up with some hot water and a little extra oil (it’s important to wash your feet first).
Detoxification is the process of eliminating toxins from the body. Detoxification is one of the key pillars of each of our programs. To prevent disease or to recover from chronic illness or addiction all require a thorough medical detoxification. Detoxification is a natural process for the body, but our modern lifestyles make this natural detoxification increasingly challenging for the body to accomplish. Detoxification from tobacco, alcohol, pharmaceuticals and drugs can entail a more complicated process than general detoxification from common toxins that everyone gets exposed to on a daily basis. Programs need to be customized for different levels of toxic exposure and medical history (chemotherapy, heavy metal exposure, long term pharmaceutical use, alcohol, drugs, parasites, candida, etc.).

Why The Body Needs Detoxification
Toxins build up in the tissues as a result of a backup in the elimination process. The organs of elimination (liver, kidneys, bowel, lungs and skin) either have too many toxins to deal with and/or are not working properly at doing their job. An overburdened liver will become sluggish and as a result the process of detoxification from harmful medications, alcohol, foodstuff, air pollutants, chemical cleaners, chemicals and heavy metals in our environment will slow down.

When the liver, kidneys, bowel, lungs and skin become burdened by toxic overload they do not function optimally and toxic material build up in the tissues and accumulates in the blood.

As clean as our diet can be and as conscious as we can be about our environment, we all breathe the same pollutants carried by the wind far away from their source, rivers move toxic material from mountains to oceans. We cannot avoid eating some processed or genetically engineered food, drinking some chlorinated water, sometimes showering/bathing in unfiltered chlorinated water, or absorbing mercury from the fish we are eating.
As time goes by, the organs of elimination become overloaded and toxins build up in the tissues. Natural Detox Programs are designed to support proper detoxification allowing 10 days or longer providing the necessary break for the body to –

- eliminate accumulated toxins
- rejuvenate the tissues and
- optimize the function of the organs of elimination

A Review
The Body's Toxin Elimination Pathways

- The liver,
- the kidneys,
- the bowel,
- the lungs, and
- the skin.

Kidneys
Water-soluble toxins are eliminated through the kidneys, fat-soluble toxins are eliminated through the bile and the faeces, the lungs eliminate carbon dioxide. The kidneys filter the blood and eliminate the end product of protein metabolism in the form of urine. The kidneys regulate the concentration of ions such as sodium, potassium, phosphate and hydrogen. They have the important task of conserving the acid-alkaline balance of the blood. These functions may be disturbed when the kidneys are overloaded and cannot detoxify the blood efficiently.

Liver
The liver detoxifies the blood, secretes bile and excretes bilirubin and other waste materials made elsewhere in the body.

Intestines
The small intestine completes the process of digestion and through absorption provides the body with nutrients, water and electrolytes. The principal functions of the colon are absorption of water and electrolytes from the chyme and storage of fecal matter until it can be expelled.

Lungs
The lungs provide oxygen to the blood and the tissues and remove carbon dioxide.

Skin
The skin assists the kidneys in their elimination function. The pores of the skin eliminate waste material in the sweat.

Numerous animal studies have linked many of the more than 24,000 toxins that exist in our environment to negative health effects on the following systems:

- Cardiovascular system
- Nervous system
- Endocrine system
- Respiratory system
- Reproductive system
- Immune system

An example of a DBM program could contain the following elements:

- Counseling Therapies (for emotional and mind detoxification)
- Hydrotherapy Techniques
- Castor Oil Packs (liver detoxifier)
- Coffee Enemas (liver detoxifier)
• Colon Hydrotherapy (only in instances of chronic constipation)
• Fasting (Water Fast, Juice Fast)
• Nutritional Detoxification (Raw Food Detox, Detox Teas)
• Infrared Sauna (supports toxic elimination through the skin)
• Lymphatic System: Dry Skin Brushing, Rebounding, Walking, Running, Lymphatic Drainage Massage
• Exercise Therapy: Supports Elimination Through Lungs, Blood Circulation, Lymph
Dimethylsulphoxide
DMSO (Dimethylsulfoxide)

A Review
DMSO kills viruses and fungi and works marvellously against cataracts, sports injuries, scleroderma, myasthenia gravis and tuberculosis. In persons with Down's syndrome, the mental retardation has been considerably lessened. It has been popularly prescribed by vets for arthritic conditions and injuries in animals.

Summary Of Its General Medical Uses
- DMSO has at least forty major therapeutic properties which act beneficially in the process of healing traumas to the body and brain. Here are sixteen of the more common ones:
- It blocks the transfer of pain messages, from the site of injury to the brain, by interrupting conduction in the small non-myelinated nerve fibres. Thus, it is one of the finest topically-applied pain killers known to man.
- It is potently anti-inflammatory and marvellous as an anti-arthritic remedy.
- Since it is bacteriostatic, fungi static and virostatic it inhibits the growth of pathogenic micro-organisms.
- It transports numerous pharmaceuticals across body membranes, thereby administering them topically without resorting to injections.
- It reduces the incidence of platelet thrombi in blood vessels thus preventing or reducing the formation of blood clots.
- It has a specific effect on cardiac contractility by holding back calcium from muscle fibre absorption, thus reducing the workload of the heart.
- It acts as a tranquilizer, producing brain sedation, even when simply rubbed into the skin.
- It enhances the actions of anti-fungal and antibacterial agents when combined with them for internal or external application.
- It is a vasodilator, probably related to histamine release in the cells and to prostaglandin inhibition.
- It stops the release of cholinesterase, an enzyme that causes the breakdown of acetylcholine, which is one of the B complex vitamin forms necessary for healthy neuronal functions.
- It tends to soften collagen as a means of preventing or reducing scars and keloids by its peculiar cross-linking effects.
- It scavenges the hydroxyl free radical so as to reduce tissue deterioration in ageing.
- It stimulates various types of immunity, especially the blood’s natural killer cells that are derived from lymphocytes.
- It is a potent diuretic, particularly when administered intravenously.
- It brings about interferon formation in the organism as an express means of boosting immunological response.
- It stimulates the healing of wounds of all types, both external and internal.
DMSO has the widest range and greatest number of therapeutic actions ever shown for any single chemical. It also has the ability to grow cumulative in its effects. Since it attacks the disease itself rather than just the symptoms, it has been observed that lesser amounts of DMSO are needed to achieve results with the passage of time. This is truly the unique and different quality of this chemical, since most other drugs generally require increasingly heavier dosages over time to maintain therapeutic levels. There is absolutely no doubt that it has proved to have interesting and valuable biological properties.

Used only under supervision of a DBM Physician in conjunction with IMMUNOClean Protocols
The word "douche" means to wash or soak. Douching is washing or cleaning out the inside of the vagina with water or other mixtures of fluids.

- **Most douches are sold in stores as pre-packaged mixes of water and vinegar, baking soda, or iodine.** The mixtures usually come in a bottle or bag.
- You squirt the douche upward through a tube or nozzle into your vagina. The water mixture then comes back out through your vagina.
- Douching is different from washing the outside of your vagina during a bath or shower. Rinsing the outside of your vagina with warm water will not harm your vagina. But, douching can lead to many different health problems.
- Most doctors recommend that women do not douche, as studies have shown that douching can lead to Bacterial vaginosis (BV), problems during pregnancy as well as vaginal irritation or dryness.
THERE ARE HOWEVER EXCEPTIONS TO THE RULE.
As opposed to cleaning the vagina with DBM douches, the aim of our protocol is to replenish healthy vaginal bacteria. Our douches are NOT intended to ‘clean’ the vagina of mucous, sperm or post-menstrual blood. They have a purpose – for those that already HAVE BV, thrush or cervical cancer. We do not recommend douching as a ‘normal’ part of feminine hygiene.

DBM PROTOCOL – ADJUNCT THERAPY – DOUCHE

Douche for yeast infections #1 – Vaginal
Drink eight ounces of unsweetened cranberry juice daily. Gently douche every few days (or if the infection is severe, each day) with the following formula.

Ingredients
Clean spring / borehole water
2 tablespoons apple cider vinegar,
1/4 cup yogurt,
1 drop of tea tree oil.

Instructions
Mix all of the ingredients together well.
Place in a douche bag, or use a bulb syringe
Very gently, using a slow flow, douche with the mixture.

Douche for Yeast Infections and to Restore Balance of Good Bacteria #2 – Vaginal and Anal
To restore the balance of healthy bacteria in the vagina and the anus after FAITH™ Drops Douches or if a bacterial infection is present in the vagina.

Ingredients
2 Tablespoons of plain, natural goat’s yogurt,
Tiny bit of clean spring water (optional – if yogurt too thick)

Instructions
Mix all of the ingredients together well.
Place in a douche bag or use a bulb syringe
Very gently, using a slow flow, douche with the mixture into either the anus or the vagina
Dry Brushing

Detoxification is performed by a number of organs, glands, and transportation systems, including the skin, gut, kidneys, liver, lungs, lymphatic system, and mucous membranes. The dry brushing technique deals with detoxification of the skin.

- The skin is the largest most important eliminative organ in the body and is responsible for one quarter of the body’s detoxification each day?
- The skin eliminates over one pound of waste acids each day in the average adult, most of it through the sweat glands?
- That the skin is known also as our third kidney?
- That the skin receives one third of all the blood circulated in the body?
- That the skin is the last to receive nutrients in the body, yet the first to show signs of imbalance or deficiency?
- **Dry brushing** is a way to stimulate all the above organs of detoxification because it provides a gentle internal massage.

- **Dry Brushing** was recommended by the Finnish Dr. Paavo Airola for his patients 30 years ago and is still popular in European spas and many cancer treatment centres today. The Russians, Turks and Scandinavians have used this treatment for centuries. Dry brushing is promoted as a preventative for dry skin and a way to exfoliate the skin, thus stimulating skin renewal that is super soft to the touch, but there are many other benefits as well:

**Benefits of Dry Skin Brushing**

1. Removes cellulite
2. Cleanses the lymphatic system
3. Removes dead skin layers
4. Strengthens the immune system
5. Stimulates the hormone and oil-producing glands
6. Tightens the skin preventing premature aging
7. Tones the muscles
8. Stimulates circulation
9. Improves the function of the nervous system
10. Helps digestion

1. **Dry brushing removes cellulite.**
   Cellulite is a non-scientific term defined as toxic deposits of subcutaneous fat material and fibrous tissue that are not able to be eliminated and which cause a dimpling effect on the overlying skin. These deposits most commonly occur on the thighs and hips of women. Cellulite can affect men and women of any body weight or size. What causes the toxins? It is suggested that we store the breakdown product of cells as toxins in this subcutaneous tissue.

2. **Dry brushing cleans the lymphatic system.**
   Lymph is considered part of our immune system – consisting of lymphocytes and the interstitial fluid that bathe our cells, bringing our cells nutrients and removing their waste. All detoxification occurs first and foremost through the lymph. Our bodies contain far more lymph than blood, so you can see how important this might be. Dr. Paavo Airola maintains that dry brushing is an essential part of any intestinal cleansing and healing program.

   **Dry brushing** literally moves the lymph containing large proteins and particulate matter that cannot be transported in any other way back into circulatory system. If these proteins stayed in our systems outside the blood vessels, it would attract other fluid. The result would be swollen ankles, limbs and eventually lymphedema and is why most health programs include some type of exercise and body work.

   The lymph vessels have their own pumping mechanism sensing when the vessels have more fluid in them or in the interstitial fluids. Lymph flows in one direction due to the many one-way valves on the insides of each lymph vessel. The one way-valve system allows the lymph to be pumped back to the heart. Removal of proteins from the interstitial spaces is an essential function. Without this we would die within 24 hours. We can help speed this process up when we dry brush or massage toward the heart, contract our muscles and move our bodies (as when we walk or exercise.) Increased lymph flow can also be caused by high blood pressure.

3. **Dry brushing removes dead skin layers.**
   Dry skin brushing helps shed dead skin cells, which can help improve skin texture and cell renewal. Dry skin is a sign of detoxification. Therefore, it's important to allow the process to continue by removing the dead skin daily. If this does not occur, the result could be eczema, psoriasis, and dandruff.

4. **Dry brushing strengthens the immune system.**
Dry skin brushing may reduce duration of infection and accelerate the clearing of toxins. It helps support the immune system during cancer and other chronic illness treatment. By stimulating the lymph vessels to drain toxic mucoid matter into organs of detoxification we can purify the entire system. After several days of dry brushing, sometimes you may notice a gelatinous mucoid material in your stools. This is a normal sign that the intestinal tract is renewing itself.

5. Dry brushing stimulates the hormone and oil glands
   Thus helping all of the body systems perform at peak efficiency. The skin is your body's largest organ. When improperly maintained, the elimination duties of the skin are forced upon the kidneys. Chemical analysis of sweat shows that it has almost the same constituents as urine. If the skin becomes inactive, its pores choke with millions of dead cells, uric acid and other impurities which will remain in the body putting extra stress on the liver and kidneys. People with big hips and thighs usually have low-grade bladder infections. Another sign of this is that the body gives off a distinct sickening odour. When the bladder and kidney are really sick, the calves are often swollen as well and the feet have a distinct strong odour. Bathe daily and do a dry brushing before the bath to help stimulate blood flow to the surface so that toxins can more easily escape.

6. Dry Brushing tightens the skin
   By increasing the flow of blood which, in turn moves toxins and lessens the appearance of cellulite. Our bodies make a new top layer of skin every 24 hours – skin brushing removes the old top layer, allowing the clean new layer to come to the surface, resulting in softer, smoother skin.

7. Dry Brushing tones the muscles.
   Dry skin brushing helps muscle tone by stimulating the nerve endings which causes the individual muscle fibres to activate and move. It also helps mobilize fat and helps to even distribution of fat deposits. This is a great technique for invalids who can’t exercise.

8. Dry brushing stimulates circulation.
   Our skin breathes! And yet, in most people, this vital route of detoxification is operating far below its capacity, because it is clogged with dead skin cells and the un-removed waste excreted through perspiration. Dry skin brushing increases circulation to skin, encouraging your body's discharge of metabolic wastes. Increased blood flow begins entering the areas brushed and you will experience an increase in electromagnetic energy that permits you to feel energized and invigorated. By activating the circulation, you can also prevent varicose veins.

9. Dry brushing improves the function of the nervous system.
   Dry skin brushing rejuvenates the nervous system by stimulating nerve endings in the skin.

    Dry skin brushing helps your skin to absorb nutrients by eliminating clogged pores. Healthy, breathing skin contributes to overall body health. When you brush, the pores of your skin open allowing your skin to absorb nutrients and eliminate toxins. Clogged pores are not just a cosmetic concern. Healthy, breathing skin contributes to overall body health.

What You Need to Do Dry Brushing:
To dry brush, use a soft natural fibre brush with a long handle, so that you are able to reach all areas of your body. One with a removable head with a strap for your hand is a good choice.

A loofah sponge or a rough towel can also be used.
Most nylon and synthetic fibre brushes are too sharp and may damage skin although I found a softer bath brush with nylon bristles that seems to do the trick. The important thing is to find something that is just right for your skin. Once your skin becomes “seasoned,” you can switch to a coarser brush.

**Tips to Recommend to Patients When Dry Brushing:**

1. Always dry brush your **dry and naked body** before you shower or bathe because you will want to wash off the impurities from the skin as a result from the brushing action.
2. **You can do the brushing head-to-toe or toe-to-head.** It really doesn’t matter as long as the entire body is brushed. Long sweeping strokes starting from the bottom of your feet upwards, and from the hands towards the shoulders, and on the torso in an upward direction help drain the lymph back to your heart.
3. **Note:** Stroking away from your heart puts extra pressure on the valves within the veins and lymph vessels and can cause ruptured vessels and varicose veins.
4. **Use light pressure** in areas where the skin is thin and harder pressure on places like the soles of the feet.
5. **Skin brushing should be performed once a day,** preferably first thing in the morning. A thorough skin brushing takes about 15 minutes, but any time spent brushing prior to bathing will benefit the body. **If you are feeling ill,** increasing the treatments to twice a day is good. You can also dry brush **areas of cellulite** five to 10 minutes twice a day to achieve cellulite dissolving but the technique needs to be done consistently for a minimum of five months.
6. **Avoid sensitive areas and anywhere the skin is broken** such as areas of skin rash, wounds, cuts, and infections. Also, never brush an area affected by poison oak or poison ivy.
7. **Finish up with your regular shower and ending with three hot and cold cycles.** That means turning on the water as hot as you can take it for several seconds, then as cold as you can handle it, then hot, then cold for three cycles. End with either hot or cold. This will further invigorate the skin and stimulate blood circulation, bringing more blood to the outer layers of the skin.
8. **After getting out of the shower,** dry off vigorously and massage your skin with pure plant oils such as olive, avocado, apricot, almond, sesame, coconut or cocoa butter. Add a little Castor oil to the mix if you have arthritis. Edgar Cayce says this works to take out some of the pain, and we’ve found that to be true over the years.
9. **Clean your skin brush using soap and water** once a week. After rinsing, dry your skin brush in an open, sunny spot to prevent mildew.
10. Any well designed program will take about **30 days** to see and experience the changes. Please be patient and keep up the program!
11. **For a thorough lymphatic cleansing,** perform skin brushing daily for a minimum of three months.

**DRY BRUSHING**

**Special Equipment**
Soft bristle body brush

**Directions**

- Brush your dry body before you shower or bathe, preferably in the morning.
- Start at your feet and always brush toward your heart. Use brisk circular motions or long, even strokes.
- Brush all the way up your legs, then over your abdomen, buttocks, and back. If you have cellulite on your hips and thighs, concentrate there a little longer.
- (For resolving cellulite, brush for 10 minutes daily for several months).
- Brush lightly on sensitive areas like breasts and more firmly on areas like soles of the feet.
- When you reach your arms, begin at your fingers and brush up your arms, toward your heart.
- Brush your shoulders and chest down, always toward your heart.
- Avoid brushing anywhere the skin is broken or where you have a rash, infection, cut or wound.
- Finish by taking a shower and if you choose, use cold/hot therapy to further stimulate the lymphatic system and improve circulation.
- Dry off vigorously and massage pure plant oils into your skin such as almond, sesame, avocado, coconut, olive or cacao butter.
- Wash your brush every few weeks in water and allow it dry.

**Detailed Information On How to Dry Brush:**

1. **Here are verbose directions** (You will do most steps 7-14 times. Hang in there—it’s not as complicated as it sounds and doesn’t take as long as it seems once you get the flow of it.)
2. Using your right hand, gently slide the brush along your right jaw line starting from your earlobe to the underside of your chin 7 times.
3. Place the brush at the hairline on your neck and gently pull around the right side of your neck to the Adam’s apple 7 times.
4. Hold the brush with your right hand at the bottom of your neck (where it joins the top of your back) and bring it around your neck to the right and down along your right collar bone and end up between your collar bones 7 times.
5. Stroke your breastbone in a circular fashion to stimulate the thymus gland 7 times.
6. Carefully brush the breast in a circular motion 7 times.
7. Repeat the above steps for your left side holding the brush with your left hand.
8. To stimulate the pituitary gland, hold the brush on the back of your head near the base of your neck and rock the brush up and down, then side to side, both sides 14 times.
9. Hold the brush in your left armpit with your right hand and rotate it counter clockwise 7 times, then clockwise 7 times.
10. Repeat on your right armpit with your left hand.
11. Brush upward 7 times from your upper right thigh to your right armpit.
12. Repeat process on your left side. Women may need to hold their breast out of the way with their free hand.
13. Brush **back and forth** over your belly button and around your waistline 14 times (like passing a basketball behind your back).
14. Brush in a **circular motion** over your belly-button, counter-clockwise 7 times then clockwise 7 times.
15. Finish brushing the front of your body in any direction starting at the bottom and brushing all the way up 14 times. Very little pressure needs to be applied to the genitals and women’s breasts because the skin is sensitive and will redden if irritated.
16. Brush up and down your spine from the base of your neck and down as far as you can 14 times.
17. Finish your upper back by stroking it around toward your sides.
18. Brush your spine from tailbone up as high as you can reach 14 times, holding the brush with two hands or with the detachable wooden handle.
19. Finish your lower back by stroking it around toward your sides.
20. Brush up from right ankle to right knee and work all the way around your leg, brushing up towards your heart.
21. Hold the brush in the right groin with both hands and rotate it 7 times counter-clockwise, then 7 times clockwise.
22. Repeat with the left groin.
23. Brush from right knee to right hip 7 times.
24. Work all the way around your leg continuing to brush upwards (towards the heart).
25. Brush up from right ankle to right knee and work all the way around your leg, brushing up towards your heart.
26. Brush around your right ankle 7 times.
27. Brush back and forth over the top of your right foot from toes to ankle.
28. Brush across your right toes on top and underneath 7 times.
29. Brush the bottom of your right foot heel to toe 7 times.
30. Now do the same with for the left foot, leg and thigh.
31. Brush upward from right elbow to your armpit and shoulder 7 times.
32. Brush from your right wrist to the elbow in the same manner 7 times.
33. Repeat steps on your left arm.
34. Lightly brush the webbing (or junction) between your left thumb and index or pointer finger on the palm side 14 times, then on the non-palm side 14 times.
35. Brush your left palm from wrist to fingertips and back 7 times.
36. Brush the back of your left hand the same way 7 times.
37. Brush each left hand finger individually back and forth 7 times on the areas that have not been brushed yet.
38. Repeat the steps for your right hand.
39. After brushing, take a hot shower with soap (about three minutes in duration), followed by a 10-20 second cold rinse. Repeat this procedure three times. If the hot/cold showers are too extreme, a warm shower can be used. Follow the shower with a rubdown with either a sponge or towel to remove dead skin.

The Hot Towel Alternative
A hot towel scrub is an easy and absolutely free way to support your detox plan and experience similar benefits to dry skin brushing. All you need is a sink, hot water and a washcloth. Daily hot towel scrubbing helps to open your pores, promote circulation and release stored toxins. This simple technique also encourages fat, mucous, cellulite and toxins to discharge through your skin rather than accumulating around deeper vital organs.

Special Equipment
Hot Towel

Directions
- Wipe your skin first with a dry towel to remove dead cells, and then use the hot wet towel to stimulate and rejuvenate your skin and organs.
- Scrubbing your underarms and groin will especially activate your lymphatic system.

How to Dry Brush
(SEE PIC OVER PAGE)
Earthing
Healing from the Ground Up & Vitamin D

Earthing or Grounding
Earthing means walking barefoot on soil, grass or sand (any natural surface). The planet has its own natural charge, and we seem to do better when we’re in direct contact with it.

Connection with the Earth restores a lost electrical signal to the body that seems to stabilize the complicated circuitry of our essentially-electrical body. Our built-in self-regulating and self-healing mechanisms become more effective. There are head-to-toe improvements. Better blood flow. Less pain and inflammation. More energy. Deeper sleep. When you ground to the electron-enriched earth, an improved balance of the sympathetic and parasympathetic nervous system occurs.

Early studies are showing that the health benefits such as number of remarkable health advantages, such as increasing antioxidants, reducing inflammation, and improving sleep, come from the relationship between our bodies and the electrons in the earth.

Grounding—An Underused Anti-Inflammatory Lifestyle Strategy
Another simple lifestyle strategy that can help prevent chronic inflammation is grounding or Earthing. Stated in the simplest terms possible, earthing is simply walking barefoot; grounding your body to the Earth. Your skin in general is a very good conductor, so you can connect any part of your skin to the Earth, but if you compare various parts there is one that is especially potent, and that’s right in the middle of the ball of your foot; a point known to acupuncturists as Kidney 1 (K1). It’s a well-known point that conductively connects to all of the acupuncture meridians and essentially connects to every nook and cranny of your body.
By looking at what happens during grounding, the answer to why chronic inflammation is so prevalent, and what is needed to prevent it, is becoming better understood. When you're grounded there's a transfer of free electrons from the Earth into your body. And these free electrons are probably the most potent antioxidants known to man. These antioxidants are responsible for the clinical observations from grounding experiments, such as beneficial changes in heart rate and blood pressure, decreased skin resistance, and decreased levels of inflammation. Furthermore, researchers have also discovered that grounding actually thins your blood, making it less viscous.

This discovery can have a profound impact on cardiovascular disease, which is now the number one killer in the world. Virtually every aspect of cardiovascular disease has been correlated with elevated blood viscosity. It turns out that when you ground to the earth, your zeta potential quickly rises, which means your red blood cells have more charge on their surface, which forces them apart from each other. This action causes your blood to thin and flow easier. It also causes your blood pressure to drop.

By repelling each other, your red blood cells are also less inclined to stick together and form a clot. Additionally, if your zeta potential is high, which grounding can facilitate, you not only decrease your heart disease risk but also your risk of multi-infarct dementias, where you start losing brain tissue due to micro-clotting in your brain.

**The Benefits from Earthing as Summarised in The Book "Earthing" Are as Follows:**
- Defuses the cause of inflammation, and improves or eliminates the symptoms of many inflammation related disorders
- Reduces or eliminates chronic pain
- Improves sleep in most cases
- Increases energy
- Lowers stress and promotes calmness in the body by cooling down the nervous system and stress hormones
- Normalises the body's biological rhythms
- Thins blood and improves blood pressure and flow
- Relieves muscle tension and headaches
- Lessens hormonal and menstrual symptoms
- Dramatically speeds healing and helps prevent bedsores
- Reduces or eliminates jet lag
- Protects the body against potentially health-disturbing environmental electromagnetic fields (EMFs)
- Accelerates recovery from intense athletic activity

**DBM PROTOCOL – ADJUNCT THERAPY - EARTHING / GROUNDING**
As part of DBM Introduction / Follow-on / 28-day / Extended Programs

Patient is required to walk barefoot daily and/or sit barefoot on the lawn outside every day. This can be done at the same time as their breathing exercises, meditation and daily 'intake' of Vitamin D.

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**For More Information On Earthing - See The Body Electric on this website**
Electrolyte Regulation

A Review
Electrolytes are minerals in your body that have an electric charge. They are present in blood, urine, body fluids and every cell of the body. Maintaining the right balance of electrolytes is key to homeostasis and overall health. Every biological chemical process involves a balance between water and the electrolytes in the intracellular fluid (ICF) and the extracellular fluid (ECF). Electrolytes come from the foods you eat and the fluids you drink. Overall electrolyte regulation is dependent on what and how much you eat and drink and the level of functioning of the kidneys.

Causes of Electrolyte Imbalance
From a physiological perspective kidney disease is the primary reason for electrolyte imbalance, yet the levels of electrolytes in your body can become too low or too high for the following reasons:

Lifestyle
• Dehydration is a major cause of electrolyte imbalance.
• Overhydration can also cause a problem.

Medical Interventions
• Many prescription medications disrupt electrolyte balance.

Associated Symptoms and Conditions
The following symptoms and conditions are associated with disrupting electrolyte balance.
• Kidney disease, especially chronic kidney disease can disrupt electrolyte balance slowly over time.
• Any condition that causes acute vomiting will result in electrolyte imbalance.
Any conditions that cause acute diarrhea will result in electrolyte imbalance, especially if prolonged or severe.
- Extreme or constant sweating
- Electrolyte imbalances can also manifest as acid-base imbalances.

**Assessment**

No test can accurately gauge pH due the many buffering mechanisms of the body.
- Most measurements of electrolyte concentration are of the extracellular fluid such as blood or urine.
- Rise in serum potassium is a sign of high acidity. This can occur when a large number of cells are severely injured or die.
- Primary metabolic acid-base disorders are determined by measuring bicarbonate and serum electrolytes.
- A faster pulse rate at rest is typically associated with more acidic.

**Urine pH assessment is affected by:**
- Body stores
- Recent diet
- Alkalizing steps such as herbs, homeopathics or other supplements
- Health status
- Hydration status
- Activity level
- Stress levels
- Medications

**DBM PROTOCOL – ELECTROLYTE BALANCING FLUIDS**

See these recipes under Nutrition – Food for Life – Hydration

- **Hydration /Electrolyte Water Recipe #1 – Vegetable Electrolyte Water**
- **Hydration /Electrolyte Water Recipe #2 – Ultimate Hydration**
- **Hydration /Electrolyte Water Recipe #3 – Apple Cider Vinegar**
Elimination of Toxins

A Review
Toxins are defined as any substance or element that is toxic to the body. The environment today and normal cellular metabolism exposes the body to toxins. In order to maintain health, it is imperative that the body be able to handle the toxins and be able to adequately eliminate them. The body possesses primary and secondary routes of elimination which must be working optimally in order to avoid storage of toxins and prevent disease.

Routes of Elimination
Some toxins are able to be directly excreted through the primary routes of elimination, others must first be transformed by the liver. Through a series of reaction, the liver is able to convert some toxins to a more water soluble form which will aid excretion in the urine, breathe or sweat. Other toxins are combined with bile to a fat soluble form to aid excretion via the bowels. Therefore, the liver plays a large role in conversion and detoxification of toxins and is a vital organ in the eliminatory process.

Primary Routes
The primary routes of elimination all have direct access to the outside of the body. They are a transition point between normal bodily processing and excretion. Ensuring optimal function of all six primary routes is essential to health.

- **Bowels** This is a major route of elimination of toxins from the body. As food is ingested, it passes through the digestive tract and is continually broken down and nutrients are absorbed along the way. What the body cannot utilize is then eliminated in the stool. Toxins and waste are eliminated in the stool, thus protecting the body from toxic accumulation.

- **Bladder** The main function of the bladder is to store and release urine. The complex urinary system filters blood through the kidneys as a means of maintaining homeostasis and physiological pH within the body. The urinary system is the primary system responsible for excretion of metabolic waste.
Uric acid, from nucleic acid metabolism, and nitrogen, from protein breakdown, are the major metabolic bi-products excreted in the urine.

- **Skin** Elimination of toxins from the skin is achieved through sweating. Sweat stimulated by exercise, fever, environment (i.e. summer weather, saunas, steam room etc.) is a way for the body to rid itself of toxins which are stored in adipose or fat tissues.

- **Breathing** the lungs are responsible for the elimination of carbon dioxide with every breath. Carbon dioxide in a naturally occurring toxin in the body. Breathe is a major way for the body to maintain homeostasis. pH balance in the body is achieved through breathing and optimal kidney function.

- **Voice** the voice is an important way for the body to eliminate emotional toxins. The expression of true emotions and organic feelings through voice allows the body the opportunity to express and release emotions. The proper release of emotions whether positive or negative is an important part of detoxification and elimination for the body.

- **Menses** is a primary route of elimination for women. Monthly, women are awarded an additional opportunity to detoxify and eliminate toxins from the body. As blood and uterine lining are shed the body can eliminate unwanted waste. Dark, heavy painful menstruation is a sign of excess toxins in the system. Menstruation should be a natural, pain-free process that the body cycles through every 28 days.

### Secondary Routes
Secondary routes of elimination are utilized when the primary routes are overburdened with toxins. The body attempts to shed unwanted toxins from the system by utilizing the secondary routes. Optimal functioning of all primary routes and minimal exposure will prevent the body from utilizing the secondary routes of elimination. Secondary routes of elimination include nasal discharge, coughing, ear wax, tears, hair, leucorrhea (excess vaginal secretions), phlegm, mucus or blood in stool, gas and flatulence and sneezing.

### Importance

- **Remove wastes and toxins**
  - The elimination of toxins allows the body the opportunity to rid itself of waste and unnecessary harmful compounds. If toxins are left in the body they begin to accumulate and overtime disrupt the body's natural physiological functioning and lead to disease.
  - Toxin accumulation can also lead to the generation of free radicals. Free radicals are naturally occurring in the body, yet with the addition of toxins there is more generated which overtime can lead to harm. Free radicals are a highly reactive, extremely unstable chemical compound that cause tissue destruction by attacking protein, DNA and cell membranes. Excessive free radical damage leads to numerous degenerative conditions, advance aging and contribute to the development of cancer.
  - Toxin build-up leads to inflammation in the body. This is an attempt from the body to rid itself of the unwanted toxin. Although inflammation can be protective for the body, chronic inflammation is quite destructive and leads to various degenerative conditions.

- **Prevent chronic disease**
  - Health is maintained by ingestion and exposure to what is required for health and proper removal of what is not. If removal of toxins is impaired there is an increased risk for the development of chronic disease.
  - As removal of toxins is impaired the body’s toxic burden increases. The higher the burden the more likely chronic disease is to set in.
  - Toxins are typically acidic. A buildup of acid in the body can contribute to chronic disease.

### Support organ function
The organ systems of the body are designed to handle some naturally occurring metabolic and environmental toxins. The body however, is not prepared to handle the excess toxins that are present in today’s world. The need to support and encourage removal of toxins on an ongoing basis is necessary due to the increased number of toxins that each person is now exposed to in food, water, personal care
products and our environment. For example, chronic exposure to airborne toxins can overburden the lungs and impede breathing causing increased mucus production from the nasal cavity. Chronic nasal discharge over time disrupts the ability of the nose to capture and eliminate inhaled toxins on an ongoing basis, thus decreasing the integrity and protective functioning of the mucous membranes.

**Influences**

**Nutrition:**
- **Diet** - plays a large role in the body’s ability to eliminate toxins as well as minimizing exposure to toxins.
- **Whole foods diet** - Eating a diet high in fruits, vegetables and dietary fiber promotes decreased transit time in the colon which is essential to assist in the elimination of toxins through the bowels. Whole foods have a low toxin concentration and are better for all systems in the body. Processed, packaged foods contain more chemical compounds and substances that are difficult for the body to eliminate.
- **Organic food** - decreases your exposure to toxins and put less stress on the body. If organic food is not an option, washing fruits and vegetables with water and a scrubbing brush can minimize exposure to pesticides, thus decreasing toxin exposure.
- **Avoid canned goods** - canned goods unnecessarily expose the body to chemicals and heavy metals. By decreasing the consumption of canned foods you can decrease the need to detoxify. Use only in the event no other foodstuff is available.

**Water**

Adequate good quality water intake is integral to optimal health.
- **Quantity** water is a necessary component of every bodily function: digestion, absorption, circulation, lubrication, regulation, elimination and detoxification. Adequate water intake allows toxins to be taken away from the cells and transported to the kidneys to be excreted.
- **Quality** of the water you drink is also important for proper elimination. By reducing exposure to toxins which are ingested through water one can take the stress off the organs of elimination. Properly filtered or spring water is important to decreased exposure. Having pipes tested by the city and replacing lead piping if they do exist is crucial as well.

**Breathing**

Toxins are naturally produced through breath, in the form of carbon dioxide, which needs to be balanced with adequate oxygenation to maintain homeostasis in the body. Breathing high in the chest does not allow for optimal oxygenation of the lungs, which further will translate to lack of oxygenation to the tissues. Learning to breathe deeply into the lower lungs through diaphragmatic breathing is an essential part of proper oxygenation of tissues and toxin elimination.

**Air quality**

Although it may be difficult to minimize exposure to polluted air from urban centers, trying to decrease exposure time is important. Listening to ‘smog advisories’ on the news and minimizing time spent outdoors on days when air quality is poor is an essential component of minimizing exposure to toxins.

**Movement**

An important part of eliminating toxins in the body.
- The lymph system, a unique system in the body, is the primary defense against pathogens and foreign bodies. The lymphatic system, unlike the arterial system, does not have a pump to move fluid. Movement or muscle contractions are needed to stimulate the movement of lymphatic fluid. By engaging in movement the body is able to move lymph and allow for circulation within the body which will eventually find itself to the elimination organs. As the lymphatic system main role is to protect the body and remove bacteria and toxins, adequate movement is essential to its proper functioning. By not engaging in adequate movement the lymphatic fluid becomes stagnation and proper elimination cannot occur.
As one engages in movement the circulatory system is forced to keep up with the demands on the body. This creates internal movement within the body which allows for mobilization and movement of toxins towards the organs of elimination.

**Lifestyle**

Living a health promoting lifestyle can help decrease exposure to toxins and help the body with elimination. Cigarettes, drugs and alcohol all put additional toxins in the body forcing the body to increase toxin elimination. Cigarette smoking increases oxidative stress increasing the number of free radicals in the system. This will burden the system forcing the body to use secondary elimination pathways. Alcohol and drugs are neutralized by the liver and eliminated via the stool which inevitable will put stress on these systems forcing the body to find alternate routes of elimination. Avoiding these behaviors will decrease the body's exposure and help to support the natural elimination of toxins from the body.

**Mood**

Mood and emotional state can play a large part in the ability to eliminate toxins. Pent up emotions can lead to feelings of toxicity, which is negatively impact the way the body detoxifies. Leading a stressful life with negative emotions predisposes the body to stagnation. Stagnation refers to the lack of internal movement. As internal movement is essential for elimination of toxins, negative emotions will negatively interfere with the body's process of elimination. Holding onto emotions or not letting go of emotions will directly impact the function of the intestines. In Chinese medicine, the intestines are related to 'mentally letting go'. If one is unable to release and express emotions the function of the intestines will be altered and the body will not be able to eliminate toxins. When trying to improve elimination it is imperative to calm the mind, let go of emotions and create a space for healing.

**Health status**

The presence of disease and one's health status will affect the body's ability to eliminate toxins. If any primary organs of elimination are diseased or not functioning optimally there will be impairment in the body's ability to eliminate toxins. This will lead to excretion of toxins through the secondary organs of elimination. If the liver is impaired there will be a decrease in the conversion of toxins and an inability for them to be excreted. By addressing and treating the underlying cause of disease and eliminating any obstacles to cure the body will regain its normal function and be able to adequately process toxins.

**Personal care products**

Personal care products, such as cosmetics, perfumes, soaps etc. all contain a great deal of synthetic chemicals which can be toxic to the system. These toxins accumulate overtime in the body and put stress on the body. This added stress and amount of toxins can hinder the body's ability to eliminate and detoxify. Using natural, chemical free personal care products can greatly decrease exposure and not overburden the routes of elimination.

**Environment**

The environment one lives in can play a large role in the ability to eliminate toxins. Living in a house with lead paint increases your exposure to toxins, thus stressing the system. Asbestos in the house can negatively impact lung functioning and impact elimination. Urban air quality can increase exposure and burden the lungs. Taking measures to minimize exposure in one’s direct environment is a beneficial way to decrease toxin burden. When it comes to toxin avoidance, every little bit helps.

**Drugs**

Prescription medications influence the body’s routes of elimination. As most drugs are converted to their active form by the liver, this requires adequate liver function to ensure that the drug is metabolized optimally. Upon conversion of the drug, elimination must occur either by the kidneys or the bowels. Prescription drugs add more toxins to the system which then need to be converted and eliminated, adding more stress to the body. In addition to the added stress, prescription drugs utilize some of the body’s defences to metabolize the drug. Glutathione the body's most powerful antioxidant can become depleted by long-term prescription meds. As anti-oxidants are imperative to neutralizing free radicals,
taking only the necessary prescription drugs and avoiding them whenever possible is a beneficial way to decrease exposure to toxins.

Supplements
In order to eliminate toxins from the system, the body needs certain vitamins and minerals. Vitamins and minerals are used as co-factors for many chemical reactions and processes the body uses to eliminate and convert toxins. Unfortunately, eating a diet rich in fruits and vegetables does not ensure adequate nutrient and vitamin absorption. Much of the soils have been depleted of nutrients, therefore there is less absorbed in the fruits and vegetables one consumes. Adequate supplementation is necessary to ensure the body has the right vitamins and minerals necessary to adequately eliminate toxins from the system. However, the selection of supplements needs to be a primary factor when prescribing for patients. Often the quality of supplements are not of a very good standard as they are often contain an assortment of fillers. **DBM prescribes supplements only in cases of chronic deficiency.**

Impact
If the body is unable or not allowed to adequately eliminate toxins disease can result. The progression of how the body eliminates toxins and how disease can result is as follows:

1. **Excretion phase** This is the first phase in which the body’s elimination pathways are working well and the body will increase its elimination pathways to rid itself of toxins. Examples of excretion include: diarrhea, runny nose, sweating, tears, joint pain, heartburn, difficulty concentrating, increased urination etc.

2. **Inflammation phase** if excretion was not enough in phase one or phase one was suppressed the body will mount an inflammatory reaction to help neutralize the toxins. Examples of inflammatory reactions include a fever, acne, meningitis, bronchitis, endocarditis, urinary tract infection, inflammation of the thyroid, acute infection, epicondylitis etc.

3. **Deposition phase** if phase 1 and 2 were suppressed or not enough to eliminate all of the toxins or toxins continue to flow into the body deposition of toxins will occur in the extracellular space. This phase often occurs without symptoms.

4. **Impregnation phase** once toxins have entered into the extracellular matrix of cells they become part of the connective tissue and matrix. Increasingly severe symptoms are typical in the stage and indicate organ damage. Examples of symptoms include: allergies, migraines, ringing in the ears, chronic rheumatoid arthritis, chronic bronchitis, heart failure, chronic urinary tract infection, metabolic syndrome, hyperthyroid, glucose intolerance, auto-immune disease, chronic infections etc.

5. **Degeneration phase** Abundant toxins in the system destroy large groups of cells within an organ, leading to significant organ damage. Example of symptoms include: scleroderma, Alzheimer’s, macular degeneration, anemia, fibrosis, type 1 diabetes, menopausal symptoms etc.

6. **Dedifferentiation phase** This is the final and most destructive phase that will occur if toxins have not been able to be adequately eliminated. Illness results in undifferentiated cells. Cancers and malignant disease are characterized by this phase. Examples of disease include: leukemia, melanoma, bronchial carcinoma, thyroid cancer, stomach cancer, colon cancer etc.

DBM PROTOCOL – ADJUNCT THERAPY - TOXIN ELIMINATION
The most important thing before beginning any treatment plan is to find the cause of imbalance. Once the root cause has been identified individualized care can follow which addresses an individual’s unique needs.

- **Colon support:** colonics/ coffee enemas, bowel cleansing, fibre and hydrotherapy
- **Skin support:** sweating, dry skin brushing, rebounding, castor oil packs and poultices.
- **Lung support:** steam inhalations, deep breathing and poultices over the lungs.
- **Urinary support:** Can be achieved with increased hydration and teas.
• **Avoidance**: Avoid exposure to all known toxins. Chemical, environmental, alcohol, tobacco can all unnecessarily add toxins to the system.

• **Nutrition**: Eating a whole foods plant based diet can help decrease toxin exposure to the system. Avoid processed foods which contain unnecessary toxins. Also, eating a diet which is more alkalizing in nature can help decrease acid production in the system, decrease toxin load in the body.

• **Exercise**: is essential for adequate elimination. Sweating, lymphatic movement and increased metabolism all facilitate toxin removal.

• **FIR**: regular saunas can help with the excretion of toxins from fat cells.

• **Rest**: relaxation and adequate sleep are essential for proper organ function which is necessary for adequate removal of toxins.

• **Emotional reconciliation**: many imbalances/diseases have been shown by research to have an emotional foundation, reconciling emotional imbalances are included in our programs.

• **IMMUNOCLEAN Protocols**
Enemas
Colon Cleansing

This section is a general discussion on the protocols for enemas. These same instructions are applicable when one performs a Coffee Enema.

There are a variety of enemas that one can recommend to patients for a wide array of health problems.

An effective home enema program (intestinal cleanse) occurs when you are able to infuse enough filtered water into your colon to stimulate peristalsis throughout the full length of the colon, thus cleansing the entire colon — not just the rectal or sigmoid areas reached by Fleet® enemas and other disposable chemical enemas.

Once enough water is in the colon, you then expel it, along with the resulting waste, into the toilet. You then repeat the process one or two more times.

**Peristalsis:** The involuntary constriction and relaxation of the muscles of the intestine or another canal, creating wavelike movements that push the contents of the canal forward.

1. Where to Take an Enema

Find a comfortable, warm area where you can lie down to take your enema yet from which you can easily get up and reach the toilet. The bathroom floor can be ideal due to the proximity of the toilet. Many prefer to take an enema series right in a hot bathtub. In this way, you are more comfortable and relaxed as your body is slightly lifted off the ground. Others prefer to take their enema bag, a rubber mat, and their IV stand into their bedroom or sunny living room. Taking an enema in a sunny location is quite therapeutic, especially during the winter months. Try different locations until you find what works for you.
2. Enema Solutions
Prepare your first enema solution. Before you fill the bag, make sure the tubing clamp is shut tightly so that no water spills out as you are filling the bag. The essential oils peppermint, frankincense, fennel, and lavender (1-3 drops of each) stimulate peristalsis and immune function. You can try them together or individually. I recommend them over soap, but if you want to use soap, use one teaspoon to one tablespoon of Pure Castile Soap. This will promote a positive musculature response, without chemical exposure, and move your bowels well. A water temperature of 98°F to 103°F is ideal. Hang the enema bag at least two feet above your body. Some people find that preparing two to three enemas using two to three different enema bags at the start of the enema series works most easily. For this purpose, it is an excellent idea to own an IV stand.

3. Enema Lubricants
Use a non-petroleum-based lubricant on your enema nozzle. Petroleum-based products always take a toll on your liver. Use instead a plant-based lubricant such as Coconut, Olive or Vitamin E oil. Lie on your right side or your back, whichever makes insertion easier for you. Insert the lubricated nozzle.

4. Enema Flow Control
Make sure you are comfortable, and then open the clamp. Keep the clamp in your hand or nearby so you can, without difficulty, control the flow of water into your body. Go slowly! The skill needed for successful colon cleansing is to let only a small amount of water enter your colon at a time. If you add water too quickly, you will stimulate peristaltic action in the sigmoid and the rectum, making it nearly impossible to get water into the transverse and ascending colon. If a hint of cramping occurs, immediately stop the flow and relax. Take a big breath and slowly let it out. When there is no more cramping, or 30 to 60 seconds have passed, resume filling your colon with small amounts of the enema solution until you have taken in 1 to 3 quarts [1000 to 3000cc], or you can no longer tolerate the amount of cramping that is occurring. You do not need to force yourself to withstand any pain. If you were only able to take a 1000cc of solution before you experience consistent cramping, sit on the toilet, and let your bowel empty.

5. Abdominal Massage During the Enema
It can be helpful to gently massage your abdomen to assist the flow of the enema solution into the entire colon. Massage your colon from the bottom left corner of your abdomen toward your chest, moving the water up the descending colon, then across toward the right, moving the water through the transverse colon and finally down the right side into the ascending colon and the cecum area. Reverse the direction of massage when eliminating the enema solution. At our health centre, we use a massage tool called a percussion massager. It works wonders. If you have difficulty holding water or eliminating during an enema, you may also want to try a massager.

6. Enema Position
Some people find that being on their left or their right side at some point during an enema session can make a big difference. Give it a try. Turn over onto your left side and, while gently massaging the abdomen, take in more water. This will facilitate filling the entire colon. Others find that lifting the buttocks off the ground with the body propped up on a pillow or using the yoga position of a full shoulder stand (not recommended if you haven’t tried this before) will further move the liquid into your colon. Try to retain the enema for about 5 to 15 minutes. Sit on the toilet and evacuate whenever you need to.

7. Enema Water Volume
If you can’t take all 2 quarts of water, that’s okay. Take only what you can hold comfortably. On the first enema, you are most likely very full in the sigmoid and rectal area. This is where the nerve endings that stimulate peristalsis are, so it is very common to only be able to take a small amount of liquid on this first fill. Take the enema nozzle out and sit on the toilet. Make sure you have first closed the hose clamp.

8. Enema Comfort Level
After you have expelled your first enema and most of the fecal matter on the toilet, you will want to repeat the procedure. This time follow the same procedure, but now try to increase the volume of water. With your colon now empty, you will have room for more water. Taking into your colon 1 to 3 quarts of water is key to an effective enema series. Take only as much as you can comfortably hold. Do not put yourself in pain that lasts for more than a couple of passing seconds. Use pain as a guide to what your colon is comfortable with. Again, go slowly. Repeat the enema again if you have time and are still passing faeces.

9. Enema Safety
With all of this in mind, remember that colon cleansing is a very important tool in health maintenance. I recommend that you start with a program that is easy for you as soon as possible. I think that you will be pleased!

How Often to Take Enemas?
Enemas should become part of a colon cleansing routine for all patients. Of course, there is no single prescription for everyone. A full assessment on the patient needs to be done before recommending the number of coffee enemas the patient should undergo daily.

A hair tissue mineral analysis (HTMA) can one a picture of what toxins are stored in the patient’s body and what toxins need to be removed. However, as a standard approach to repairing the gut and to detoxing the liver, DBM applies coffee enemas daily throughout their programs.

It is this renewed vitality that is should be your guide. Keep it in mind. As soon as this sense of well-being begins to diminish in the patient, encourage a series of enemas. Often a patient will feel better instantly, but, other than in cases of chronic disease, if the patient does not experience renewed vitality from the coffee enemas, allow them to take a break for a short period of time.

Because colonic peristalsis occurs only intermittently (one to three times per day), unlike the continual rhythmic contractions of the small intestine, the colon cleanse can be used safely and with regularity without disrupting a healthy peristaltic rhythm.

Most people benefit greatly from cleansing their colon at least one time per month, if they are not dealing with any health imbalances or chronic disease. If the patient is chronically ill or working through a therapeutic program which involves a lifestyle change, an enema series at least once a day is important.

Why Enemas or Colonics?
Research increasingly shows that colon health promotes overall well-being.

The Wall Street Journal reported that a growing body of research points to the world of the gut — its bacterial populations and its neurotransmitter levels — as a key factor in health and well-being.

Consider these excerpts from the article:
"A bacterium unique to the intestines of those with autism called Sutterella was discovered... which suggests Sutterella may be important in understanding the link between autism and digestive ailments."

"About 95% of the serotonin in the body is made in the gut, not in the brain... which helps the digestive tract push food through the gut... Serotonin is necessary for the repair of cells in the liver and lungs, and plays a role in normal heart development and bone-mass accumulation."

"Studying the neurons in the gut also may also help shed light on Parkinson’s disease..."

"Disruptions to the stomach or intestinal bacteria can prompt depression and anxiety..."
Science points to what many people’s personal and clinical experiences are: **taking special care of your gut promotes overall well-being.**

There is a great deal of debate about whether regular colon cleansing (enemas or colonics) optimizes gut health. What follows are three theories as to why people feel better as a result of taking regular enemas or having regular colon hydrotherapy sessions:

1. **Regular enemas or colon hydrotherapy sessions reduce the disease-causing microbial load.**
   
   When a colon is in a state of dysbiosis—the condition of having microbial imbalances or parasites—regular colon cleansing may reduce the number of unhealthy microbes and increase the volume of healthy bacteria. As gastrointestinal health panels show, dysbiosis is all too common. *Blastocystis hominis*, *Cryptosporidium*, and *Clostridium difficile* are common in people who are ill. Clinically, after regular colon cleansing, people recover their health, reducing unhealthy microbial levels.

   To determine if your body is struggling with a parasitic overload, use a gastrointestinal health panel.

2. **Regular enemas or colon hydrotherapy sessions assist the body in dealing with external toxins.**
   
   Our bodies are continually assaulted by toxic substances from our environment. Disinfectants to deodorizers, fragrances to fossil fuels, and pesticides to paints are all full of harmful chemicals. Our bodies have evolved with a very sophisticated detoxification system, but our bodies can’t always keep up as many of the toxins are, evolutionarily speaking, brand new. Well-placed enemas and colonics can play a crucial role in good health because when we cleanse the colon, toxins are diminished. With assistance to purge toxins, the body as a whole functions better.

   A hair tissue mineral analysis can assist you to determine your toxic load and how using enemas or colonics can help clear out those toxins.

3. **Assisting the body to fully empty the colon on a regular basis with enemas or colon hydrotherapy reduces stress.**
   
   Just think about how your stomach feels when you have eaten more than you should have. If you’ve ever had a gut full of stool (and most of us have), you know that the effect is anything but pleasant and can often provoke anxiety.

   Regular colon cleansing using enemas or colonics versus laxatives: Which is the gentler and more effective approach toward gut health?

   It’s not surprising that laxatives and stool softeners have become a multi-billion-dollar industry. We live fast-paced, stressful lives and it’s easy to promote and capitalize on the convenience of taking pills rather than doing an enema or having a colonic. However, laxatives act on the central nervous system as well as the colonic musculature and can easily create a biochemical imbalance in the body. Overuse of some laxatives does cause damage to the nerves, muscles, and tissues of the gut. In contrast, regular enemas or colonics gently and effectively cleanse the colon without any of the damage.

**Mood & Healthy Gut Flora: Nurture Your Microbiota!**

What is the cause of anxiety, depression, insomnia and lack of restorative sleep?

Mounting evidence indicates that gut health, particularly the diversity and amount of intestinal microbiota, may be the single largest factor contributing to the prevalence of these issues in Western society.

Enemas support the body to relieve anxiety, lessen depression, and even to sleep deeper, partially by promoting healthy gut flora. Enemas cleanse the colon of the type of bacteria that fuel anxiety, throw hormonal levels out of balance, intensify food cravings, contribute to adrenal fatigue, and more.

According to scientific research, mood and anxiety disorders are on the upswing, and this has been connected to unhealthy gut microbiota. About 1 in 4 adults in the U.S. suffer from a diagnosable mental disorder. About 1 in 10 adults in the U.S. suffer from depression. And it’s our high-stress society, full of processed foods and antibiotics that create these conditions.
Note that we aren’t against antibiotics, but think they should be used sparingly, with measures taken to restore healthy gut bacteria during and after their use, for they do have their place in medicine.

The amount of colon cleansing needed to optimize the microbiome depends on where the patient lives, whether they were breastfed, the state of their current health, what they eat, the amount of pharmaceuticals they have taken throughout their life, the quality of water they drink, the amount of stress they are under, and NOT whether they are constipated!

**We recommend you take an enema series at least once a week to optimize the microbiome, as part of on-going maintenance.**

**ENEMA HISTORY**

“The Egyptians learned the art,” wrote the Roman historian Pliny the Elder, “from the long-beaked ibis, who washes the inside of its body by introducing water with its beak into the channel by which the residue of our food should leave.”

**The history of the enema points to key safety issues:**

The early enema, or clyster, utilized a metal nozzle. Using a metal nozzle to take an enema always increases one’s chance of perforating the colon. The metal nozzle is no longer in use for taking an enema.

The popular enema used today, the chemical enema, works by drawing water out of the bloodstream and into the colon. The chemical enema is not as safe as the warm water enema. By dehydrating the bowel lining, a chemical enema such as a Fleet® enema can cause a loss of electrolytes.

Mineral oil has traditionally been used as a stool softener in enemas to promote a bowel movement. However, mineral oil is a petroleum product which is toxic to the human body.

**The history of the enema points to a long-used and successful healing tool:**

*Enemas have been one of the most important tools used in medical hospitals for the care of patients.*

Although there has been little scientific documentation of enema use in the hospital setting, nurses have observed very few complications.

Enemas have been so vital to quality patient care because *medical doctors and nurses know that a patient cannot make solid progress without regular bowel movements.*

On every patient’s chart is a list of characteristics to manage. On this patient management list is the bowel movement. If a patient doesn’t move the bowels, and is at risk for a bowel obstruction, treatment is administered to empty the bowels. Historically, this colon cleansing treatment was the warm water enema.

**To learn more about the history of enema use, go to:**

*Townsend Letter for Doctors and Patients*

*Gerson Institute*

*Intestinal autointoxication: a medical leitmotif*
Easy and Reliable Ways to Improve the Effectiveness of the Enema

Research increasingly shows that colon health promotes overall well-being

It is commonly thought that taking an enema can clear out only the lower colon. This is absolutely not true! You can cleanse the entire colon using an enema.

To take an enema, you will need the right enema equipment, enough water and enough time, and the proper additives for your filtered or distilled water. In other words, for a complete colon cleanse, you should **not** use a commercially prepared enema; you should **not** use a small enema bag lacking the proper tubing, clamp, and nozzle; you should **not** use an enema solution lacking therapeutic additives; and you should **not** take your enema quickly.

To cleanse the entire colon with an enema, deliver the enema solution into the first half, or beginning, of the colon, the ascending and transverse colon, where "stool" is still liquid.

**In Order to Deliver the Enema Solution to These Parts of the Colon:**

Use a 5-quart enema bag or a 4-quart enema bucket [5000cc or 4000cc]. Three to four quarts [3000cc or 4000cc] of solution may be necessary to reach the upper colon. Because of this, you will want a large-capacity enema system for easy access to this amount of enema solution. (Not everybody can hold this amount, so patients should not force it, causing pain!)

Use a silicone smooth flow system. This pump fluid delivery system helps to bypass the lower part of the colon by pulsing enema solution deeper into the colon. For many this is an invaluable part of their enema system.

**Use a ramp clamp.** This is the easiest-to-use tubing clamp for best control of water flow. Instruct patients to proceed slowly as they deliver the enema solution into the colon. Try as little as a 1/4 cup of water every
20-30 seconds, or less. If you add water too quickly, you will stimulate peristaltic action in the sigmoid and the rectum, making it nearly impossible to get water into the deeper colon.

**Use a hands-free nozzle.** Any of the *inflatable nozzles* or *silicone colon tubes* work well hands-free. Having your hands free from the work of holding your nozzle to ensure that it doesn’t fall out of the anus gives one the capacity to easily work with the enema clamp and to massage the belly while taking the enema. Massaging the colon in a backwards motion can help move the enema solution deeper into the colon.

Use additives in the enema water. These include *sea salt* and *essential oils*. Sea salt, used in the first enema, helps to match the enema solution with the colon’s electrolyte levels, making it easier for the colon to take in all the enema solution without stimulating the colon to expel the added contents. Essential oils, used in the second enema, help to soothe and heal the colon. Essential oils to use are frankincense and the citrus oils.

To learn more about using the essential oils in the colon, watch this Open Source Link video: *Essential Oils and Colon Cleanse.* [https://www.youtube.com/watch?v=QCalRtGzA0k](https://www.youtube.com/watch?v=QCalRtGzA0k)

For your third fill, take a *coffee enema*. When you deliver coffee to the colon, you increase blood flow. Increased blood flow to the intestinal tract improves the elimination processes within the colon. And, given that all of our blood passes through the liver every three minutes, the 12-to-15-minute coffee retention enema results in a form of dialysis and a uniquely effective detoxification.

**More colon cleanse tips:**
- Make sure your enema solution is quite warm: 98° to 100°F (36° to 38°C) is best. Cold enema solution prematurely stimulates the colon to try to expel its contents.
- Give yourself 30 to 60 minutes for this entire colon cleanse process.
- Once you “feel full enough,” or have pain for more than a few seconds, or simply must let go of the enema solution, sit on the toilet as long as you feel you need and empty the contents of your colon.
- Take 2-3 enemas in a row or an enema series. Once your body tells you that it has taken enough enema solution, sit on the toilet, empty the contents of your colon, and repeat the process.

**Large Volume Enema**

[Open Source Link](https://www.youtube.com/watch?v=zLYtWkaXzPo)

Experts from the Colorectal Clinic at Primary Children’s Hospital created this video to help parents and other caregivers give large volume enemas at home. This video will teach you what equipment you will need, how to give large volume enemas, and how these enemas can benefit your child.

[Open Source Link: Enema Instructions Video – Position 1](https://www.youtube.com/watch?v=L96EPJ99Hoo)

[Open Source Link: Enema Instructions video – Position 2](https://www.youtube.com/watch?v=1lecweQoSFk)

**Using Enemas Safely**

**Safe Colon Tube Usage**

Once your enema bag is full, hang the bag from a towel rack, showerhead, shower curtain, or IV stand. Lubricate your colon tube. Lie down on your left side in a comfortable location and insert the colon tube. (How the colon tube is inserted varies between individuals.)
The preferred way to insert a colon tube is to begin a flow of the enema to create a channel of water then insert the tube in stages, gradually.

It is not really necessary to get the entire colon tube into your colon in order to accomplish a "high" enema. Use time, patience, and gravity to your benefit. Unless your colon is congenitally abnormal or something similar, the enema should be able to reach the "high" areas of the colon.

The recommended way to take a "deep" colon tube insertion is to start out on your left side. Take some tube and water and then, after the tube is "in" about 10 inches or more, turn over on your back, with hips elevated on a pillow.

Remember that it’s not necessarily how deep the colon tube goes in, but rather how deep the water goes in that really counts. This takes time, relaxation, and listening to one’s own body.

Slowly take the water from the enema over 5 to 15 minutes. (Hold a coffee enema at least 5 minutes longer, if not 20 minutes.)

Once you have taken the entire solution and have retained it for some time, sit on the toilet and let your colon and your body empty itself.

Unsafe Colon Tube Usage
Above all, NEVER force a colon tube.
Each person reacts differently to a colon tube, even when a channel of enema water or solution is created. You might never get the tube all the way in, and you should never force it.

Thin colon tubes actually can be dangerous. You run a higher risk of puncturing the colon when using thin colon tubes.

Thus, we recommend a medium-diameter colon tube, about French 30 to 34.

Safe Enema Equipment
The enema nozzle, because it is inserted into the colon, is a key component in keeping your enema safe. The enema nozzle should be gently inserted into the rectum, pointing toward the belly button. Be sure that the nozzle is well lubricated with a viscous and nutritious lubricant.

Once the tip is inserted, gently release the hose clamp to allow the enema solution to flow into the colon.

There are many enema bags and enema nozzles available that are latex-free. Some of the latex-free enema equipment is made of silicone and some is made of plastic or vinyl. You can also purchase latex-free gloves.

Please note that most people are not latex-sensitive and do just fine with latex enema equipment.

An excellent protocol to use in cleaning your enema equipment is to first wash your equipment with Castile Soap and then to soak your enema equipment in grapefruit seed extract. Grapefruit seed extract (GSE) is a natural compound synthesized from the seed and pulp of certified organically grown grapefruit. The manufacturing process converts grapefruit bioflavonoid (polyphenolics) into an extremely potent compound that has been proven to be antibacterial and antifungal. It is safe, effective (unlike most antibacterial cleaners), and used by healthcare professionals worldwide.

Alternatively, wash equipment with Castille soap and soak in a hydrogen peroxide solution, ensuring the entire tube is submerged in the water.

Open-topped enema bags, enema bags that are clear, and enema cans are the easiest to clean.
After you have thoroughly washed, soaked, and towel-dried your equipment, hang your enema bag in a well-ventilated location to dry for a day or two. This will allow the enema bag to fully air out to avoid mould growth.

By following these enema equipment guidelines, you will experience a safe enema.
Unsafe Enema Equipment

Enema Bags and Enema Nozzles.

Much of the enema equipment that is used in homes for colon cleansing is made out of latex (rubber). This latex comes from the rubber tree (Hevea brasiliensis). Most hospitals have switched from latex enema equipment to plastic, vinyl, and silicone enema equipment because some patients have severe latex sensitivities.

Additionally, health care workers can have, or develop with use, a sensitivity to latex. In 1992, the Food and Drug Administration and the Centres for Disease Control sponsored a conference entitled International Latex Conference: Sensitivity to Latex in Medical Devices.

The focus of the conference was that "reports of allergic reactions to latex devices such as surgical gloves and catheters have increased in recent years. These reactions occur in latex-sensitive people and appear to result from numerous exposures to latex proteins that are natural elements of the rubber. The reactions range from minor skin irritation to anaphylactic shock that can lead to death."

There are many references in scientific articles regarding the potential problems of latex use.

One area of concern that is not well-researched is the health effects of latex use with people who have multiple chemical sensitivities. Chemically sensitive people tend to do better if they avoid latex enema equipment.

Some chemically sensitive people need to avoid plastic enema equipment also. Silicone enema equipment is most likely preferred for the chemically sensitive person.

Gloves. There are many different brands of gloves available that are made of latex. Additionally, many gloves that can be used to take or give an enema are powdered. This corn-starch powder can cause allergic reactions and is associated with latex sensitivities.

Cleaning Your Enema Bag. Time and again, I work with people who do not take proper care of their enema equipment. If you clean your enema bag with a toxic cleaner, you can get sick by using your enema bag. Most cleansing agents that people tend to use, like bleach, rubbing alcohol, and commercial soaps, are toxic; their residue often stays on the enema equipment and ends up in your body.

Additionally, many cleaners are not anti-fungal. You need to clean your enema equipment with an anti-fungal compound in order to avoid mould inside of your enema bag. Not properly drying your enema equipment can also cause mould to grow inside of it. Mould from your enema equipment can cause you to get sick.

Safe Enema Procedures

Your most important safety measure while taking an enema, as well as your most effective tool for a complete colon cleanse, starts and ends with taking your time.

By taking their time while taking an enema, most people can safely take 1 to 3 quarts of water into their colon. The only way to safely experience a complete colon cleanse is to add the water very slowly, one-half to one cup per 30 to 90 seconds. By using this method, one does not need to insert an excessively long colon tube into the colon. Also, one will be able to avoid undo pain and cramping and irritation to the colon, and not develop an unnecessary fear of enemas.

The following excerpt has been taken from the book, Kristina Amelong’s Ten Days to Optimal Health:
"Open the enema tubing clamp. Five to twenty seconds later, completely close the clamp. This is the most important technique in a safe enema that is also a deep cleansing enema, without inserting a long and hazardous tube. The opening and closing of the enema tubing clamp keeps you in control of how much pressure you will build up in your colon. Additionally, the opening and closing of the enema tubing clamp offers you the most opportunity for fully cleaning out your entire colon. Keep the clamp in your hand so that you can, without difficulty, control the flow of water into your body by frequently opening and closing the clamp. Go slowly! The skill needed for a successful and safe enema is to let only a small amount of enema solution enter your colon at a time.

By a small amount of enema solution, I mean one-half to one cup of solution per fill or opening and closing of the enema tubing clamp. If you add the enema solution too quickly, you are more likely to harm yourself. Additionally, if you add the enema solution into your colon too quickly, you will stimulate peristaltic action in the sigmoid and in the rectum, making it nearly impossible to get the enema solution all the way into the transverse and the ascending colon.

If a hint of cramping occurs, immediately stop the flow and relax. Take a big breath and slowly let it out. Before your session, dab a drop of peppermint essential oil on your hand or chest. Use the oil to relax by smelling the oil and taking deep breaths. I would always have a bottle of peppermint essential oil around while taking enemas to relax and to increase the therapeutic value of your enema experience. When there is no more cramping, or when 30 to 60 seconds have passed, resume filling your colon with small amounts of enema solution until you have taken in 2 to 4 quarts, or until you can no longer tolerate the fullness of your colon."

Unsafe Enema Procedures
Enemas can cleanse the entire colon, rectum to cecum. However, the effort to get the water deep into the colon has led people to try unsafe enema measures.

Historically, the procedure of using an enema to cleanse the entire colon to the cecum was attempted by using tubes that were 40-60 inches in length. Inserting long colon tubes into the colon dramatically increases one’s chance of perforating the wall of the colon.

Another unsafe practice is a common mistake for those taking an enema. Most enema users attempt to compel the entire content of their enema bag into the colon in one fill. Trying to fill the colon with their enema solution by opening the enema tubing clamp and not quickly closing the clamp is unsafe. This "one-shot fill" enema practice has caused pain, cramping, irritation to the colon, and a fear of enemas for millions of people.

Enemas which utilize the enema tubing clamp appropriately need not cause pain and cramping or irritation to the colon, and will hopefully relieve an unnecessary fear of enemas. Both of the above methods have the same healthy goal behind them: thoroughly cleansing the colon. However, they can be unsafe and do not work well.

Safe Enema Solutions
**Warm Water Enema.** Water is very important in the therapeutic enema because it is your main tool for cleansing your colon. A good enema program consists of being able to infuse high-quality water deep into your colon to stimulate peristalsis throughout the entire colon, thus cleansing the entire colon and not just the rectal or sigmoid areas.

There are many sources of quality water. **Do not use tap water,** even if it has been filtered. **Instead,** clean spring water or distilled water is safer.

The temperature of the water is important. If the water is too cold, you are more likely to cause yourself unnecessary pain. If the water is too hot, you could damage the sensitive tissues of the colon. The water you take into your body should be **96° to 103° F (36° to 38° C).**
As far as quantity of water, here is a rough guide:

- **Infant:** 250 cc (approximately one cup) or less
- **Toddler and pre-schooler:** 500 cc (two cups) or less
- **School-aged child:** 500 to 1,000 cc (between a pint and a quart)
- **Adult:** 1,000 to 3,000 cc (between one and three quarts)

### DBM PROTOCOL – ADJUNCT TREATMENT - THERAPEUTIC ENEMA SOLUTIONS

#### 1. Soap Suds Enema:
Soap suds enemas prove to be more effective at emptying the bowels for some people than water alone. Start your enema program without soap. If you want to experiment with your enema effectiveness, or don’t find that your bowels empty well, add soap to your water. Always use a therapeutic plant-based or food-based soap such as castile soap. **Do not use ordinary household soaps.** They contain too many toxic chemicals. Use this protocol only when advised to by a DBM Physician, as it can be quite irritating to the tissues, but is often quite effective for relieving impacted stools and constipation.

**Soap in The Enema Solution – side effects**
Traditionally, soap suds enemas have been used to cause a small amount of irritation to the bowel wall, which promotes an excellent release of stool. This irritation, paired with distention caused by the volume of fluid instilled, causes bowel contractions and stimulation that usually will lead to expelling faeces from the colon. Today, soap often contains **antibacterial agents or chemicals** that kill the health bacteria (gut flora). Soap-based products often contain the additive **sodium laureth sulphate**, which research has found to be harsh on the oral mucin layer. Use only pure Castille Soap for enemas, if that is your selected therapy.

*This is not a standard practice of DBM, but this therapeutic enema is often used in hospitals to stimulate peristalsis for constipation.*

#### 2. Essential Oil Enema / Implant:
Use essential oils as part of your enema solution instead of soap. Peppermint and lavender essential oils work well to stimulate and nourish the colon.

#### 3. Salt Enema.
In order to nourish your colon with electrolytes, use 1 teaspoon of **Celtic sea salt** or **Himalayan (Pink) Salt** per quart [1000cc] of water.

**Effects:** Mostly lubricating, very mild laxative effect when taken rectally. The components in Castor Oil first act to stimulate the walls of both the small and large intestines. It is this purgative action of the colon walls which work to move impacted fecal matter through and relieve symptoms Castor Oil is most well-known for its ability to act as a stimulant laxative to ease constipation.

Castor Oil also has the ability to prevent the absorption of liquids from the intestinal tract. The helps the bowel retain more moisture, allowing for easier passage of fecal matter. What makes Castor Oil different from most other stimulant laxatives is its ability to affect both the entire length of the bowel. Instead of just emptying just the lower bowel or the large intestines; Castor Oil empties both the small and large intestine.

It is important to note that because of this ability after using Castor Oil a person may not have another bowel movement for 2–3 days.

#### 5. Castor Oil Enema / Implant
**Ingredients:**
2 oz. castor oil [60cc]
2 qts. warm filtered water [approx. 2L]
Temperature 103° Fahrenheit [39.4 - 40°C]

A better way of taking a castor oil enema:
- Fill enema bag with warm filtered water.
- Take a 3 or 4oz. [88-120cc] bulb syringe and fill it with warm of Castor oil.
- Inject the bulb syringe with the Castor oil into the rectum.
- Follow with a warm water enema as per standard enema instructions.

6. Coconut Oil Enema / Implant:
If the bowel is not clean most people will find it difficult to retain an Oil Enema for more than a few minutes. The peristaltic action of the colon will push against the fecal masses and produce intense pressure. This will frequently happen with your first Oil Enema. Not much to do but expel the oil and try again.

Coconut oil Enema / Implant
8 oz. Extra Virgin Coconut Oil (extra virgin = oil that is lowest in acidity and highest in quality) [236cc]
1½ quarts of warm filtered water [1.5L]
Temperature 103° Fahrenheit [39.4 - 40°C]
Coconut oil needs to stay above 75° Fahrenheit [23.8° C] to remain in a liquid state.

Instructions - Coconut oil enema / Implant – as per the Castor Oil Instructions:
- Lubricate the nozzle with some of the coconut oil
- Fill bulb syringe with coconut oil [236cc] and inject it into the rectum.
- Follow with a warm water enema as per standard enema instructions.

7. Flaxseed Oil Enema / Implant:
A problem noted about using ground flaxseed versus flaxseed oil as an implant enema is that the ground flaxseed mixed with filtered or distilled water has a tendency to cause minor gas build up in the colon. Therefore, Flaxseed oil is recommended. Flaxseed enemas relieve inflammation in the bowel, it is advantageous in dysentery, haemorrhoids and anal fissures. Flaxseed oil is more directed towards eliminating candida infestations.

Flaxseed Enema / Implant
Mix 16 oz. of warm Flaxseed oil [473cc]
1½ quarts of warm filtered water [1.5L]
Temperature 103° Fahrenheit [39.4 - 40°C]

Instructions - Flaxseed oil enema / Implant – as per the Castor Oil Instructions:
- Lubricate the nozzle with some of the coconut oil
- Fill bulb syringe with flaxseed oil [473cc] and inject it into the rectum.
- Follow with a warm water enema as per standard enema instructions.

8. Olive Oil Enema / Implant:
8 oz. Extra Virgin Oil (extra virgin = oil that is lowest in acidity and highest in quality) [236cc]
1½ quarts of warm filtered water [1.5L]
Temperature 103° Fahrenheit [39.4 - 40°C]
Coconut oil needs to stay above 75° Fahrenheit [23.8° C] to remain in a liquid state.

Instructions - Olive oil enema / Implant – as per the Castor Oil Instructions:
- Lubricate the nozzle with some of the coconut oil
- Fill bulb syringe with coconut oil [236cc] and inject it into the rectum.
Follow with a warm water enema as per standard enema instructions.

**Potentially Unsafe Enema Solutions**
The enema solution, the liquid used in the enema container, is one of the more controversial issues regarding enema use. For the purposes of using enemas to promote health, we will define a potentially unsafe enema solution as an enema solution that has potential side effects and is not therapeutic to the human body. In other words, the potentially unsafe enema solution is limited in its scope of only encouraging a bowel movement, and does not promote overall healing of the body.

### DBM PROTOCOL – ADJUNCT THERAPY – ENEMA IMPLANT AFTER COFFEE ENEMAS
**Preferred Alternative Protocol (internal cavity only) used by DBM after Coffee enemas**

1 tablespoon of pure virgin olive oil  
50ml of Luke-warm water  
Insert mixture into rectum using a bulb syringe

### DBM PROTOCOL – ADJUNCT THERAPY – BICARB ENEMA IMPLANT FOR CANCER
**Preferred Alternative Protocol (internal cavity only) use ONLY under guidance of your DBM Physician / Practitioner**

1 tablespoon of Bicarbonate of Soda  
50ml of Luke-warm water  
Dissolve and insert into rectum using a bulb syringe

**Side effects:**
- Irritation and some bleeding might occur.  
- Should this happen, take 1-2 days break.  
- Make use of an enema with 1 tablespoon of salt in 1 litre water, for two days, instead.

### Chemical Enema.
Unfortunately, due to the influence of pharmaceutical companies, chemical laxative enemas and mineral oil enemas are currently the enemas of choice for most people. These unhealthy enema solutions cause health problems due to electrolyte imbalances, vitamin imbalances, and liver strain.

Warm water enemas were used by medical doctors and nurses for many years. Under the Workup Section in the article entitled “Constipation” by Dave Holson, MD, MPH, we see one reason why the medical profession has turned away from the warm water enema to the use of chemical enemas: “Warm water enemas usually are unpopular among the nursing staff and probably are not necessary.” Chemical enemas and oral laxatives are much less time-consuming than warm water enemas and involve much less physical and emotional effort on the part of the health care provider than are warm water enemas.

The goal of the chemical enema solution, sodium biphosphate and sodium phosphate, is to draw water out of the colonic tissue. The risk with these enemas is that they can deplete your mineral and electrolyte levels. On the drug guide for this product it states, “Using more than the recommended dose in 24 hours can be harmful. If there is no bowel movement after the maximum dosage, contact your doctor. Also, do not use sodium biphosphate and sodium phosphate for longer than 1 week except under the direction of your doctor.”

On the labels of these chemical enemas, it states, “Since FLEET® Enema contains sodium phosphates, there is a risk of elevated serum levels of sodium and phosphate and decreased levels of calcium and potassium, and consequently hypernatremia, hyperphosphatemia, hypocalcaemia, hypokalaemia, and acidosis may occur.”
Additionally, in 1998 the FDA requested a reduction in the size of the packaging for the sodium phosphate enema and a modification in its labelling. The FDA initiated these changes because of numerous reported side effects and overdosing when people were using the sodium biphosphate and sodium phosphate enemas.

Currently the FDA states that the chemical enema must include a warning statement regarding use with patients with a colostomy, congenital mega colon, imperforate anus, impaired renal function, heart disease, congestive heart failure, pre-existing electrolyte disturbances, or in patients using diuretics that may affect electrolyte levels.

### Rulemaking History for OTC Laxative Drug Products

If you have used chemical enemas, you can monitor your electrolyte levels through a hair tissue mineral analysis (HTMA).

### Public Water Supplies.

Most people use their drinking water or tap water for their enema solutions. The tap water that we use is treated. This treated water contains elements that are detrimental to the colon. For instance, city water contains chlorine as well as fluoride, not to mention that the cleansing process of city water does not remove the antibiotics, drugs and other toxic elements that people throw down their toilets.

When chlorine enters the colon, it kills health promoting gut flora and damages the lining of the colon. In addition to the ill effects of chlorine, many city water supplies are contaminated due to pollutants, aging municipal water systems, and natural minerals. For instance, Madison, Wisconsin, a city that prides itself on public services, has drinking water problems, according to reports in the Wisconsin State Journal newspaper.

According to the Wisconsin State Journal, “gas stations and other industrial properties often have chemicals that can leak through the soil and eventually contaminate the groundwater.” Madison also has manganese, “a naturally occurring mineral that can cause neurological damage at high levels, at levels as high as 700 parts per billion, well above the recommended federal health standard of 300 parts per billion.”

Additionally, the WSJ searched through five years’ worth of Madison’s drinking water test data, finding dozens of other contaminants in water from the city’s 24 wells. “In one aging well, No. 3, which serves the near East Side and East High School, the levels of cancer-causing carbon tetrachloride exceeded federal health standards in October 2000.”

### SAFE ENEMA IMPLANTS

#### Coffee Enemas.

It is now held by many health practitioners that any program that encourages healing, regenerating, rebuilding, weight loss, and detoxification is a healthier program when coffee enemas are used.

#### Oil Enemas.

There are oils that can be used to lubricate the stool as well as provide nourishment, and thus healing, to the colon. Olive oil and coconut oil are nutritious and promote bowel movements. They cost more than mineral oil, but they offer healing to the colon and not potential harm.

#### Vegetable Glycerine Enemas.

**Vegetable glycerine is derived from coconuts and not to be confused with glycerine suppositories,** which are derived from petroleum. Vegetable glycerine used rectally tends to work in 30 to 60 minutes to increase pressure in the colon and stimulate peristalsis, thus creating a bowel movement.
Enemas, using healthy solutions such as quality water, nourishing soaps, essential oils, and coffee, serve as strengthening exercises for the colon. The enemas stimulate the colon to vigorously exercise while evacuating itself multiple times. The result is a great increase in muscle tone, acceleration of peristalsis, and eventually, after several repetitions, a considerable reduction of transit time. Additionally, colon cleansing done in conjunction with a healthy lifestyle program may bring about overall health.

UNSAFE ENEMA IMPLANTS

Mineral Oil Enemas.
Mineral oil is used in enemas to lubricate the stool, which then often allows the stool to slip out of the colon. Mineral oil is derived from petroleum. Mineral oil enemas are potentially unsafe for enema use because used internally, mineral oil has the ability to be absorbed by the colon. Once in the body, mineral oil goes into the liver, via the colon, as coffee does.

Mineral oil depletes and poisons the liver, pulling out oil-soluble vitamins and minerals which are then excreted into the faeces. Mineral oil enemas, done regularly, will lead to nutritional deficiencies.

Mineral oil is popular with drug companies due to its low production cost. It is the leftover liquid of the distillation of gasoline from crude oil, and because it is abundant, it is very inexpensive. In fact, it is more expensive to dispose of mineral oil than to package it for consumer consumption. Learn more of the sad truth of the way in which drug companies are influencing the medical profession:

SAFE ENEMA NOZZLE LUBRICANTS

Always lubricate your enema nozzle well. Being attentive to lubricating your enema nozzle properly is the most reliable way to tend to the anus and the rectum.

The anus and the rectum need to be treated with utmost care while you are taking an enema so as not to cause any damage to these sensitive tissues or to aggravate haemorrhoids or anal fissures. For this purpose, it is recommended to use a lubricant that is both viscous and nutritious.

A viscous enema nozzle lubricant, meaning a lubricant with a thick and sticky consistency, allows the enema nozzle to move smoothly into the rectal area, without irritating the anus. A nutritious enema nozzle lubricant contains substances that promote a healthy anus and rectum. Enema nozzle lubricants are also food to the colon, providing the colon with needed energy and more ability to repair damaged tissue and grow new tissue.

Coconut oil
is an organic, plant-based lubricant that is anti-bacterial, anti-viral, and anti-fungal. Use this enema lubricant liberally because organic, unrefined coconut oil is a healing and energizing food for the colon. Unrefined organic coconut oil contains lauric acid and other medium-chain fatty acids. These super fatty acids are quickly metabolized and converted into energy in the body.

UNSAFE ENEMA NOZZLE LUBRICANTS

Enema lubricants can cause allergic reactions. Never use a lubricant with fragrance.

Learn more about allergic reactions to fragrances (FDA webpage)

Never use petroleum jelly or other petroleum-based products as an enema lubricant. Petroleum products take a toll on your liver. Enema nozzles that are not well-lubricated can irritate, and sometime even tear, the anus. Some lubricants like aloe vera gel, olive oil, and vitamin E are nutritious to the colon's tissues but often not properly viscous (thick and sticky).
Viscosity is the attribute of an enema nozzle lubricant that allows the most safety to your anus and rectum while taking your enema.

SOME ADDITIONAL ENEMA VIDEOS TO WATCH:

How to Take an enema
https://www.youtube.com/watch?v=FJ4KUTF7znI

How to colon Cleanse: The Enema Series
https://www.youtube.com/watch?v=1ccdVsy96rY

Adapted from information on www.enemabag.com
Sweating is good for you and is one of the body's safest and most natural ways to heal and maintain good health.

Detoxification is important because it strengthens the body's immune system and helps the body's biochemical processes function efficiently so that we are better able to digest the nutrients in our foods. Detoxification has also been shown to be helpful with colitis, chronic fatigue, fibromyalgia, auto-immune disease, immune deficiency states, autism, ADD and ADHD.

-Dr. Rachel West

Sauna detox has been widely embraced as a healthy treatment in alternative medicine. In fact, as the world moves toward more natural and self-directed treatments, sauna detoxification is getting more and more attention.

The leading principle of sauna detoxification states that the build-up of toxic substances can lead to a host of common illnesses. Ridding the body of these toxins through a natural sauna detox may help relieve symptoms, prevent future illness and increase overall health and vitality.

The United States Center for Disease Control estimates that the root causes of more than 80% of all illnesses are found in personal environments or lifestyles. In other words, the world around you can make you sick. It’s in the air we breathe, and in the food we eat. There’s very little we can do to reduce exposure.
We can, however, use sauna detox as a treatment. Sweat the small stuff in an infrared sauna, and sweat yourself to better health and wellness.

Researchers have long told us how the body sweats out toxic substances, including heavy metals. As long as you maintain proper hydration, the more you safely sweat, the more toxins you'll expel from your body. And what is one of the safest and most effective methods for inducing a detoxifying sweat? A sauna, of course. In sauna detox, your body sweats out numerous toxins through pores. But not all sweats are the same; and neither are all saunas.

It is commonly thought that sweat from traditional saunas is 95 to 97% water with salt making up a part of the rest. Dr. Dietrich Klinghardt combining the use of far infrared saunas with the chelating agent DMPS in a heavy metal detox protocol. Far infrared saunas are believed to be more effective in moving toxins through the skin than traditional saunas because in a far infrared sauna only 80 to 85% of the sweat is water with the non-water portion being cholesterol, fat-soluble toxins, toxic heavy metals, sulfuric acid, sodium, ammonia and uric acid.¹

FIR saunas are highly effective detoxification because of some highly-efficient and patented Solocarbon far infrared heating technologies – the only technology proven to raise core body temperature by two-to-three degrees. Rather than simply heating the ambient air to draw out toxins, our sauna detox will heat your core to expel them. As a result, regular usage of a FIR sauna detox will provide a truly deep, productive sweat where toxins reside, at the cellular level.

Recently we have seen a flurry of extremely thorough medical studies which have looked at the chemical burden in our environment and also our bodies. We are being increasingly exposed to a whole range of new chemicals. In the last fifty years it has been estimated that 5 million new chemicals have been created by man, of which 75,000 are in regular everyday use, of which less than 10% have had any sort of toxicity testing. These chemicals are now ubiquitously present in the environment, and are well absorbed through food, water, by inhalation and through our skins. Many of them are very fat-soluble and bio-accumulate in our bodies. It is now becoming very clear that the internal environment of our bodies reflects our external environment. Furthermore, because we are at the top of the food-chain and because we live for many years, chemical burden is increasing each year.

Studies done by the World Wildlife Fund and other such scientific bodies show that we all carry a heavy burden of chemicals. They are present in our fat in mg/kg (this would be similar to the sort of levels in blood if we were taking a therapeutic drug); persist for many years; and their effects are unpredictable. Most of these chemicals are known toxins, cause cancer, birth-defects, damage to nerves and the immune system, to the liver and bone marrow, etc. Furthermore, we now know that cocktails of chemicals have much more serious effects than chemicals in isolation. Low-dose chemicals may be very much more toxic than we ever expected, partly because many of them mimic our own hormones, thereby disrupting the delicate hormonal balance within all of us.

Because we all live in such a polluted world, we should probably sauna once a week to stay healthy! We all carry a chemical load because of our polluted environment - we cannot avoid this; but we can try to keep it as low as possible by a combination of avoiding chemicals where possible, detoxing with good micronutrient supplements, and through heating up.

Getting hot may cause sweating but it is not necessary to sweat for saunaing to be effective. Heat alone is sufficient to "boil off" volatile compounds onto the lipid layer on the surface of the skin, which is then washed off.

In multiple chemical sensitivity (MCS), sufferers' reactions are often triggered by overwhelming exposures to chemicals such as pesticides, volatile organic compounds, heavy metals, toxic gases (carbon monoxide, NOX, SOX) etc.
Chemicals are detoxified through the liver (and this is helped by good micronutrient status); they can also be excreted directly through the skin and by exhalation. These excretions occur when the body gets hot and chemicals are released and passed out through the sweat. The most physiological way of doing this is through exercise, but many patients are not well enough to exercise.

Time-honoured methods of detox include saunas, Turkish baths and spa therapies, and we recommend all these treatments. However, the problem with these treatments is that not only do they warm up the skin and subcutaneous tissues, but the whole body is warmed up. This means that chemicals are mobilised from the fat (which largely speaking lies underneath the skin), and when they get into the blood-stream can cause acute poisoning. Many patients are therefore unable to tolerate these sweating therapies. Furthermore, many sick ME patients cannot tolerate heat because this increases demands on the heart. In severe ME energy delivery to the heart is impaired so it cannot increase its output to cope with the demands of heat.

Far infrared rays constitute the main energy-source that comes from the sun and are responsible for warming our skin when we sit in direct sunshine. The rays penetrate several centimetres through the skin and heat up subcutaneous tissues. With enough sun on the skin, the skin will sweat; chemicals from subcutaneous tissues will be mobilised and pass out through sweat. The sunshine does this without heating up the core temperature (although if you lie in the sun for long enough then the core temperature will eventually rise) therefore chemicals can be mobilised and excreted without causing systemic poisoning. 

Source: DoctorMyhill

How to Use A Far Infrared Sauna Properly

Most chemicals come out in the first few minutes of saunaing; so one does not have to overheat for hours to obtain a result. The best results are achieved from many short sessions (e.g. one daily just to the point of sweating; but start with two sessions a week and build up).

Once the skin has warmed up well, shower off at once! If the patient does not wash off the released chemicals, they will simply be reabsorbed. After 24 hours, chemicals redistribute from deeper tissues into the superficial layers, and the process can be repeated. This way, after some weeks of saunaing, chemicals will gradually be drawn out from even deeper layers. It is very likely that massage will help by physically mobilising chemicals lodged in fat.

Regularly using the sauna to sweat also unfortunately releases ‘good’ minerals as sweat is in fact blood without the protein and cellular content. So it is important to rehydrate with a physiological mix of minerals.

DBM recommends rehydration with one of the hydration liquids or broths in this manual

Far Infrared Saunas does not damage the skin (it is the sun's ultra-violet light which is at the other end of the spectrum which does that).

DBM PROTOCOL – ADJUNCT TREATMENT - FIR SAUNA

- short sessions in the FIR Sauna
- shower after each session
- rehydrate after each session with electrolyte water
There are four types of Fasting that DBM include in their programs:
1. Dry Fasting
2. Intermittent Fasting / Therapeutic Fasting
3. Water Fasting
4. Juice Fasting / Juice Therapy

General Information
Fasting refers to complete abstinence from food for a short or long period for a specific purpose. The word is derived from the old English, ‘feastan’ which means to fast, observe, be strict. Fasting is nature’s oldest, most effective and yet least expensive method of treating disease. It is recognised as the cornerstone of natural healing. Dr. Arnold Eheret, the originator of the mucusless diet healing system, describes it as "nature’s only universal and omnipotent remedy of healing" and "nature’s only fundamental law of all healing and curing."

The practice of fasting is one of the most ancient customs. It is followed in almost every religion. The Muslim, the Buddhists, the Hindus and many others have their periods of strict fasting. The saints of Medieval times laid great stress on this method.

Fasting in disease was advocated by the school of natural philosopher, Asclepiades, more than two thousand years ago. Throughout medical history, it has been regarded as one of the most dependable curative methods. Hippocrates, Galen, Paracelsus and many other great authorities on medicine prescribed it. Many noted modern physicians have successfully employed this system of healing in the treatment of numerous diseases.
The common cause of all diseases is the accumulation of waste and poisonous matter in the body which results from overeating. The majority of persons eat too much and follow sedentary occupations which do not permit sufficient and proper exercise for utilisation of this large quantity of food. This surplus overburdens the digestive and assimilative organs and clogs up the system with impurities or poisons. Digestion and elimination become slow and the functional activity of the whole system gets deranged.

The onset of disease is merely the process of ridding the system of these impurities. Every disease can be healed by only one remedy - by doing just the opposite of what causes it, that is, by reducing the food intake or fasting.

By depriving the body of food for a time, the organs of elimination such as the bowels, kidneys, skin and lungs are given opportunity to expel, unhampered, the overload of accumulated waste from the system. Thus, fasting is merely the process of purification and an effective and quick method of cure. It assists nature in her continuous effort to expel foreign matter and disease producing waste from the body, thereby correcting the faults of improper diet and wrong living. It also leads to regeneration of the blood as well as the repair and regeneration of the various tissues of the body.

Duration
The duration of the fast depends upon the age of the patient, the nature of the disease and the amount and type of drugs previously used. The duration is important, because long periods of fasting can be dangerous if undertaken without competent professional guidance. It is, therefore, advisable to undertake a series of short fasts of two to three days and gradually increase the duration of each succeeding fast by a day or so. The period, however, should not exceed a week of total fasting at a time. This will enable the chronically sick body to gradually and slowly eliminate toxic waste matter without seriously affecting the natural functioning of the body. A correct mode of living and a balanced diet after the fast will restore vigour and vitality to the individual.

Fasting is highly beneficial in practically all kinds of stomach and intestinal disorders and in serious conditions of the kidneys and liver. It is a miracle cure for eczema and other skin diseases and offers the only hope of permanent cure in many cases. The various nervous disorders also respond favourably to this mode of treatment. Fasting should, however, not be restored to in every illness. In cases of diabetes, advanced stages of tuberculosis, and extreme cases of neurasthenia, long fasts will be harmful. In most cases, however, no harm will accrue to fasting patients, provided they take rest, and are under proper professional care.

Methods
The best, safest and most effective method of fasting is juice fasting. Although the old classic form of fasting was a pure water fast, most of the leading authorities on fasting today agree that juice fasting is far superior to a water fast. According to Dr. Rangar Berg, the world famous authority on nutrition, "During fasting the body burns up and excretes huge amounts of accumulated wastes. We can help this cleansing process by drinking alkaline juice instead of water while fasting ... Elimination of uric acid and other inorganic acids will be accelerated. And sugars in juices will strengthen the heart ... juice fasting is, therefore, the best form of fasting."

Vitamins, minerals, enzymes and trace elements in fresh, raw vegetable and fruit juices are extremely beneficial in normalising all the body processes. They supply essential elements for the body’s own healing activity and cell regeneration and thus speeding the recovery. All juices should be prepared from fresh fruit immediately before drinking. Canned or frozen juices should not be used.

A precautionary measure which must be observed in all cases of fasting is the complete emptying of the bowels at the beginning of the fast by enema so that the patient is not bothered by gas or decomposing matter formed from the excrements remaining in the body. Enemas should be administered at least every alternate day during the fasting period. The patient should get as much fresh air as possible and should
drink plain lukewarm water when thirsty. Fresh juices may be diluted with pure water. The total liquid intake should be approximately six to eight glasses.

A lot of energy is spent during the fast in the process of eliminating accumulated poisons and toxic waste materials. It is, therefore, of utmost importance that the patients get as much physical rest and mental relaxation as possible during the fast.

In cases of fasts in which fruit juices are taken, especially when fresh grapes, oranges or grapefruit are used exclusively, the toxic wastes enter the bloodstream rapidly, resulting in an overload of toxic matter, which affects normal bodily functions. This often results in dizzy spells, followed by diarrhoea and vomiting. If this physical reaction persists, it is advisable to discontinue the fast and take cooked vegetables containing adequate roughage such as spinach and beets until the body functioning returns to normal.

The overweight person finds it much easier to go without food. Loss of weight causes no fear and the patient’s attitude makes fasting almost a pleasure. The first day’s hunger pangs are perhaps the most difficult to bear. The craving for food will, however, gradually decrease as the fast progresses.

Seriously sick persons have no desire for food and fasting comes naturally to them. The simples rule is to stop eating until the appetite returns or until one feels completely well.

Only very simple exercises like short walks may be undertaken during the fast. A warm water or neutral bath may be taken during the period. Cold baths are not advisable. Sun and air baths should be taken daily. Fasting sometimes produces a state of sleeplessness which can be overcome by a warm tub bath, hot water bottles at the feet and by drinking one or two glasses of hot water.

1. Dry Fasting

Dry Fasting Phenomenon: From Deprive to Thrive

An Introduction to Dry Fasting
Adapted from an article by Esmée La Fleur and Quantum Eating

A dry fast is an absolute, true fast in which you abstain from both food and water. More than likely, dry fasting has been practiced by many cultures and religious traditions throughout history.

Dry fasting has been practiced by the Russians for a very long time. There is quite a bit of literature available on dry fasting in the Russian language. However, none of these writings has been professionally translated. I was first introduced to the concept of dry fast by Tanya Zavasta (a native Russian speaker) in her book Quantum Eating. I found the information fascinating, but did not really know where to go with it. Then I discovered the web community forum The Fasting Connection where I met Milena Albert (a native Russian speaker) who had been practicing dry fasting and was in contact with Dr. Sergei Filonov, a Russian medical doctor who has been conducting dry fasts with his patients for 20 years. Then, I was referred to a Google translation of his 400-page book Dry Medical Fasting: Myths & Reality. While the translation leaves much to be desired (being computer generated), enough of the essence comes through to make it a very worthwhile read for anyone who in interested in embarking on this path.

There are two kinds of dry fasts: hard and soft. With a hard dry fast, the faster does not allow any water to touch their body, i.e. no washing dishes, no taking baths or shower, no brushing teeth, etc. With a
softer dry fast, the faster can allow their body to come in contact with water. When you go on a dry fast, the pores of your skin develop a greater capacity to absorb water through the skin and in a good clean environment will readily absorb moisture from the air. It is for this reason that Dr. Filonov highly recommends undertaking a long dry fast in the mountains where the air if fresh, moist, and pure. He encourages many of his patients to sleep outside next to a stream of running water during their long dry fasts.

While several of our Biblical forefathers fasted for 40 days, the longest dry fast on record in modern times is 18 days. However, most modern practitioners of dry fasting do not recommend dry fasting for longer than 12 days. Dr. Filonov always recommends doing several water fasts before ever attempting a dry fast. Then he recommends that a person start with very short dry fasts, 36-hours once a week. After doing this for a while, then a person can gradually do longer dry fasts of 2, 3, and 4 days. Finally, to affect deep cleansing of the tissues and healing of serious chronic illnesses, he recommends a protocol known as a “fractionated” dry fast in which the person does a dry fast for 5-7 days, rehydrates for 3 days, then does a second dry fast for 9-11 days. He has found this method to be extremely safe over time.

In order to achieve permanent healing results, a person must traverse two separate “acidotic” crises, the first between 3-5 days and the second between 9-11 days. So, by breaking up the fast, the “fractionated” method allows the person to go through the first crisis during the first fast and the second crisis during the second fast, thus reducing the stress on the body from too many toxins needing to be eliminated at one time. It should be noted that Dr. Filonov never recommend doing a dry fast for longer than 5 days without supervision. The problem with this is that there is are no medical doctors with experience in dry fasting in the United States. So, we are pretty much on our own if we want to use this method of healing.

Another method of dry fasting that Dr. Filonov has found to be extremely safe and beneficial is a protocol he calls “cascade” dry fasting in which the person begins by fasting 1 day and eating 1 day alternately. Then, he has the person fast 2 days and eat 2 days alternately, then fast 3 days and eat 3 days alternately, then fast 4 days and eat 4 days alternately, then fast 5 days and eat 5 days alternately. With this protocol the person is literally fasting one half of every month. In his book, Dr. Filonov says he personally knows a medical doctor who cured himself of a blood cancer by doing 5/5 protocol for a full year.

There was an interesting book published a few years ago called The Alternate Day Diet by Dr. James Johnson which advocates eating every other day for weight management and health maintenance. Although he did not have his patients fast completely on alternate days, but had them restrict their calories to 20% of metabolic requirements, his patient have experienced remarkable benefits and many have overcome severe inflammatory illnesses such as asthma (no longer needing medication). I don’t agree with his protocol of feeding on alternate days, and he even says that the results would be far greater if his patients did not eat anything on alternate days, but he feels that no one would be willing to fast every other day (perhaps he underestimates his patients?). His patients consume as much water as they desire.

I have communicated with a young man through The Fasting Connection who has suffered from severe irritable bowel syndrome (IBS) for a number of years. He decided to start water fasting every other day and has experienced remarkable improvements. After four months of doing this, he says that his IBS symptoms are 70% less than they were prior to instituting alternate day fasting. He has not changed his diet which he tells me is far from optimal. I wonder if he would get even better results if he dry fasted?

In a dry fast, the body does not eliminate toxins in the same manner as it does during a water fast. Instead of removing toxins through the normal channels of elimination, skin, liver, kidneys, urine, and bowels, it actually turns each cell into a tiny incinerator and burns the toxins up inside of the cell. One thing I have noticed since I started dry fasting is that I have almost no body odour or bad breath during a dry fast, while I always experienced this during a water fast. Each day of a dry fast is said to be equivalent to 3 days of a water fast in terms of detoxification, so you accomplish much more in a shorter time. The good thing about this is that a person does not need to take a long absence from their normal life, so it costs less
both for the fast itself (if you are going to a facility to be supervised) and for the time taken off from work. Also, you lose less muscle mass and more body fat with dry fasting, than you do with water fasting, and the recovery time is quicker. Returning to normal function after a 10 day dry fast is much faster than after a 30-day water fast.

Nevertheless, a person should plan for a re-building time of twice the length of the dry fast. So, for example, if you do a 7 day dry fast, you should plan for a 2-week recovery period. After my first 4 day dry fast, I had so much energy on day 2 of re-feeding that I decided to go dig up a garden bed I wanted to plant and ended up pulling a muscle in my forearm because I was not properly re-hydrated. It took a week to heal and I learned my lesson. Do not overestimate your capabilities after a dry fast and make sure you give your body sufficient time to recover before engaging in any strenuous physical activity.

How you exit a dry fast is extremely important. If you do it incorrectly, you can definitely harm yourself. In his book, Dr. Filonov says to drink two litres of pure water very slowly, holding each sip in your mouth as long as possible, over a two-hour period. Then he says to continue drinking water for the next 12 hours a little bit at a time. After that you can start to reintroduce other foods and liquids. Dr. Filonov is not a practitioner of a Zero Carb diet, so he recommends making a fruit compote out of dried figs, prunes, apricots, and raisins (all unsulfured and organic) cooked in water to soften before eating, as well as vegetable soup, fish broth, and raw milk kefir. The way I would come off a dry fast is to rehydrate with water as Dr. Filonov recommends and then introduce bone broth. After that, I would begin eating meat again. My preference is for raw ground beef, but rare steak would be my next choice. The key is to not over eat. Just make sure to hydrate yourself well with plain water before trying to eat anything solid.

Dry fasting itself is not a “cure,” but it provides the right conditions to allow the body to activate all of its own, healing powers. Dr. Filonov has seen many illnesses heal through dry fasting; below is a list of the ones he mentions in his book:

- ankylosing spondylitis
- asthma
- atherosclerosis
- atopic dermatitis
- bacterial infection
- benign tumours
- brain injury
- cholecystitis
- chronic pneumonia
- chronic pyelonephritis
- chronic urticarial
- duodenal ulcer
- eczema
- endometriosis
- gangrene
- gastritis
- haemorrhoids
- herniated disk
- hot flashes
- hypertension
- infertility
- inflammation
- interstitial cystitis
- irritable bowel syndrome
- mastitis
- migraine headaches
- non-insulin dependent diabetes

- osteoarthritis
- ovarian cysts
- pancreatitis
- parasite infection
- prostate adenoma
- prostatitis
- psoriasis
- pulmonary sarcoidosis
- rheumatoid arthritis
- sciatica
- stomach ulcer
- ulcerative colitis
- uterine fibroids
- viral infection
- yeast infection

**Please note: There are a number of conditions for which dry fasting is contraindicated; namely, malignant tumours or blood conditions, tuberculosis, hyperthyroidism and other endocrine diseases, cirrhosis of the liver, heart arrhythmia, circulatory failure degrees II & III, underweight, pregnancy and lactation, being younger than 14 or older than 70 years of age.**

**DO NOT USE DRY FASTING WITHOUT BEING UNDER THE CARE OF A DBM PHYSICIAN**

What is dry fasting?

It’s as simple as the wet-dry distinction. Wet fasting: Drink water, but take no food. Dry fasting: a total abstinence from both food and water for a defined time.

There is one more level of dry fasting called Absolute Dry Fasting. Some suggest to reach the deepest level and realize the full benefits of dry fasting, it’s better not to let any water come in contact with the body through the skin or mucous membranes. You heard that right: no showers, no swimming, no brushing teeth while dry fasting.

Animals commonly use dry fasting for healing. When wounded or very sick, they retreat for rest and refuse to take in food or water until they get better. Humans used to have the same instinct, until the advances of civilization replaced it with readily available food and medicine, and culture took over to dictate when and what we eat.

You may have acquired somewhere the common belief that humans can only survive three days or so without water. If so, you might be surprised to learn that therapeutic dry fasts as long as five, seven, nine, even eleven days are not unheard of. The Guinness Book of Records mentions 18 days as a record for a person surviving without any food or water. With the right intention and some comprehensive information about fasting as a mode of healing, you can go with relative comfort through the experience of a 24-36 hour dry fast and reap the benefits.

The Mechanisms behind dry fasting

The cessation of both external food and water creates a special kind of stress in the body, prompting it urgently to come up with both nutrients and water, initiating the process of making both internally. During a dry fast, the body survives on so-called endogenous or metabolic water, produced internally as a result of metabolizing fat tissue. Unlike any exogenous water, this metabolic water is of superb quality, produced by the hard work of our own cells. It literally erases any negative information imprint which the body had before the fast, allowing cells to experience a kind of a rebirth, as a result.
Under dry fasting conditions, even the skin changes its function, from being an organ of elimination to serving as an organ of absorption, taking in any available water from the air and supplying it to healthy cells. Besides water, the body during a dry fast absorbs atmospheric carbon dioxide and nitrogen to manufacture its own amino acids. Since there is no water to flush out the endogenous toxins, these are eliminated by means of a unique mechanism, dormant during less rigorous modes of fasting: Each cell, in effect, becomes the furnace that burns up its own waste.

**Results seen in dry fasting**

Inflammation cannot exist without water. Microorganisms need water to survive. These facts taken together make dry fasting a highly effective tool to address acute health issues and degenerative conditions. Such a fast stimulates the immune system, activates the body’s anti-inflammatory mechanisms, purifies the blood and clears the blood vessels, as well as cleanses the GI tract and renews its mucosal lining.

Dry fasting also eliminates parasites and promotes regeneration of healthy tissues. And this isn’t even a complete list of benefits. Every cell of the body literally cleans house. Only the strongest and healthiest of cells survive in such extreme conditions, while cysts and benign tumours dissolve as a result of autolysis, a process by which the body sacrifices its sickest cells for its own survival.

**Benefits**

There are several benefit of fasting. During a long fast, the body feeds upon its reserves. Being deprived of needed nutrients, particularly of protein and fats, it will burn and digest its own tissues by the process of autolysis or self-digestion. But it will not do so indiscriminately. The body will first decompose and burn those cells and tissues which are diseased, damaged, aged or dead. The essential tissues and vital organs, the glands, the nervous system and the brain are not damaged or digested in fasting. Here lies the secret of the effectiveness of fasting as a curative and rejuvenative method. During fasting, the building of new and healthy cells is speeded up by the amino acids released from the diseased cells. The capacity of the eliminative organs, that is, lungs, liver, kidneys and the skin is greatly increased as they are relieved of the usual burden of digesting food and eliminating the resultant wastes. They are, therefore, able to quickly expel old accumulated wastes and toxins.

Fasting affords a physiological rest to the digestive, assimilative and protective organs. As a result, the digestion of food and the utilisation of nutrients is greatly improved after fasting. The fast also exerts a normalising, stabilising and rejuvenating effect on all the vital physiological, nervous and mental functions.

**Breaking The Fast**

The success of the fast depends largely on how it is broken. This is the most significant phase. The main rules for breaking the fast are: do not overeat, eat slowly and chew your food thoroughly; and take several days for the gradual change to the normal diet. If the transition to eating solid foods is carefully planned, there will be no discomfort or damage. The patient should also continue to take rest during the transition period. The right food after a fast is as important and decisive for proper results as the fast itself.
2. Intermittent Fasting

What is Intermittent Fasting (IF)?
- Intermittent fasting (IF) is a term for an eating pattern that cycles between periods of fasting and eating.
- It does not say anything about which foods you should eat, but rather when you should eat them.
- In this respect, it is not a “diet” in the conventional sense. It is more accurately described as an “eating pattern.”
- Common intermittent fasting methods involve daily 16 hour fasts, or fasting for 24 hours, twice per week.
- Humans have actually been fasting throughout evolution. Sometimes it was done because food was not available, and it has also been a part of major religions, including Islam, Christianity and Buddhism.
- When you think about it, our hunter-gatherer ancestors didn’t have supermarkets, refrigerators or food available year-round.
- Sometimes we couldn’t find anything to eat, and our bodies evolved to be able to function without food for extended periods of time.
- If anything, fasting from time to time is more “natural” than constantly eating 3-4 (or more) meals per day.

Note: Intermittent fasting (IF) is a term for an eating pattern that cycles between periods of fasting and eating. It is currently very popular in the health and fitness community.

How to do Intermittent Fasting
Intermittent fasting has been very popular for many years and several different methods have been used. All of them involve splitting the day or week into “eating periods” and “fasting periods.” During the fasting periods, you eat either very little or nothing at all.

These are the most popular methods: (note these methods are for weight loss and diabetes)
- The 16/8 Method: Also called the Lean-gains protocol, it involves skipping breakfast and restricting your daily eating period to 8 hours, for example from 1 pm to 9 pm. Then you “fast” for 16 hours in between.
- Eat-Stop-Eat: This involves fasting for 24 hours, once or twice a week, for example by not eating from dinner one day until dinner the next day.
- The 5:2 Diet: On two non-consecutive days of the week, only eat 500-600 calories. Eat normally the other 5 days.

By making you eat fewer calories, all of these methods should make you lose weight as long as you don’t compensate by eating much more during the eating periods. The 16/8 method is the simplest, most sustainable and easiest to stick to.

Note: There are several different ways to do intermittent fasting. All of them split the day or week into “eating periods” and “fasting periods.”

How Intermittent Fasting Affects Your Cells and Hormones
When you fast, several things happen in your body on the cellular and molecular level. For example, your body changes hormone levels to make stored body fat more accessible. Your cells also initiate important repair processes, and change the expression of genes.

Here are some changes that occur in your body when you fast:
• **Human Growth Hormone (HGH):** The levels of growth hormone skyrocket, increasing as much as 5-fold. This has benefits for fat loss and muscle gain, to name a few (4, 5, 6, 7).

• **Insulin:** Insulin sensitivity improves and levels of insulin drop dramatically. Lower insulin levels make stored body fat more accessible (8).

• **Cellular repair:** When fasted, your cells initiate cellular repair processes. This includes autophagy, where cells digest and remove old and dysfunctional proteins that build up inside cells (9, 10).

• **Gene expression:** There are changes in the function of genes related to longevity and protection against disease (11, 12).

These changes in hormone levels, cell function and gene expression are responsible for the health benefits of intermittent fasting.

**Note:** When you fast, human growth hormone levels go up and insulin levels go down. Your body’s cells also change the expression of genes and initiate important cellular repair processes.

### Intermittent Fasting is a Very Powerful Weight Loss Tool

- Weight loss is the most common reason that people try intermittent fasting (13).
- By making you eat fewer meals, intermittent fasting can lead to an automatic reduction in calorie intake.
- Additionally, intermittent fasting changes hormone levels to facilitate weight loss.
- In addition to lower insulin and increased growth hormone levels, it increases release of the fat burning hormone norepinephrine (noradrenaline).
- Because of these changes in hormones, short-term fasting may actually increase your metabolic rate by 3.6-14% (14, 15).
- By helping you eat less (fewer calories in) and helping you burn more (more calories out), intermittent fasting causes weight loss by changing both sides of the calorie equation.
- Studies show that intermittent fasting can be a very powerful weight loss tool. In a review study from 2014, it was shown to cause weight loss of 3-8% over periods of 3-24 weeks (1).

That is actually a very large amount compared to most weight loss studies. According to this study, people also lost 4-7% of their waist circumference (1). This indicates that they lost significant amounts of the harmful belly fat that builds up around the organs and causes disease. There is also one study showing that intermittent fasting causes less muscle loss than the more standard method of continuous calorie restriction (16).

However, keep in mind that the main reason this works, is that it helps you eat fewer calories overall. If you binge and eat massive amounts during the eating periods, then you may not lose any weight at all.

**Note:** Intermittent fasting may boost metabolism slightly, while helping you eat fewer calories. It is a very effective way to lose weight and belly fat.

### Health Benefits of Intermittent Fasting

Many studies have been done on intermittent fasting, in both animals and humans. These studies have shown that it can have powerful benefits for weight control and the health of your body and brain. It may even help you live longer.

**Here are the main health benefits of intermittent fasting:** (I.F.)

- **I.F. changes the function of cells, genes and hormones.** When you don’t eat for a while, several things happen in your body.
  - For example, your body initiates important cellular repair processes and changes hormone levels to make stored body fat more accessible.
  - **Insulin levels:** Blood levels of insulin drop significantly, which facilitates fat burning.
  - **Human growth hormone:** The blood levels of growth hormone may increase as much as
5-fold. Higher levels of this hormone facilitate fat burning and muscle gain, and have numerous other benefits.

- **Cellular repair**: The body induces important cellular repair processes, such as removing waste material from cells.
- **Gene expression**: There are beneficial changes in several genes and molecules related to longevity and protection against disease.

- **Weight Loss**: As mentioned above, intermittent fasting can help you lose weight and belly fat, without having to consciously restrict calories.
- **Insulin resistance**: Intermittent fasting can reduce insulin resistance, lowering blood sugar by 3-6% and fasting insulin levels by 20-31%. This should protect against type 2 diabetes.
- **Inflammation**: Some studies show reductions in markers of inflammation, a key driver of many chronic diseases. Reduces oxidative stress.
- **Heart Health**: Intermittent fasting may reduce LDL cholesterol, blood triglycerides, inflammatory markers, blood sugar and insulin resistance. These are all risk factors for heart disease.
- **Cancer**: Animal studies suggest that intermittent fasting may help prevent cancer.
- **Brain Health**: Intermittent fasting increases a brain hormone called BDNF, and may aid the growth of new nerve cells \(26, 27, 28\). It may also protect against Alzheimer’s disease.
- **Anti-aging**: Intermittent fasting can extend lifespan in rats. Studies showed that fasted rats live as much as 36-83% longer.

Keep in mind that the research is still in its early stages. Many of the studies were small, short in duration or conducted in animals. Many questions have yet to be answered in higher quality human studies.

**Note:** Intermittent fasting can have many benefits for your body and brain. It can cause weight loss, and may protect against type 2 diabetes, heart disease and cancer. It may also help you live longer.

**Some People Should Be Careful with Intermittent Fasting (or Avoid It Altogether)**

Intermittent fasting is certainly not for everyone. If you are underweight, or have a history of eating disorders, then you should not do intermittent fasting without consulting with a health professional first. In these cases, it can be downright harmful.

**Should Women Fast?**

There is some evidence that intermittent fasting may not be as beneficial for women, as it is for men. For example, one study showed that it improved insulin sensitivity in men, but worsened blood sugar control in women. Although there are no human studies on this, studies in rats have shown that intermittent fasting can make female rats emaciated, masculinized, infertile and cause them to miss cycles.

There are plenty of anecdotal reports from women who became amenorrhoeic (their menstrual period stopped) when they started doing IF, then went back to normal when they stopped doing it. For these reasons, women should definitely be careful with intermittent fasting. Ease into it, and if you have any problems like amenorrhea then stop doing it immediately.

If you have problems with fertility and/or are trying to conceive, then consider holding off on intermittent fasting for now. Intermittent fasting is probably a bad idea when pregnant or breastfeeding.

**Note:** People who are underweight or have a history of eating disorders should not fast. There is also some evidence that intermittent fasting may be harmful for some women.

**Safety and Side Effects**

Hunger is the main side effect of intermittent fasting.

You may also feel weak and that your brain isn’t performing as well as you’re used to. This may only be temporary, as it can take some time for your body to adapt to the new meal schedule.
If you have a medical condition, then you should consult with your doctor before trying intermittent fasting.

**This is particularly important if you:**
- Have diabetes.
- Have problems with blood sugar regulation.
- Have low blood pressure.
- Take medications.
- Are underweight.
- Have a history of eating disorders.
- Are a female who is trying to conceive.
- Are a female with a history of amenorrhea.
- Are pregnant or breastfeeding.

All that being said, intermittent fasting does have an outstanding safety profile. There is nothing “dangerous” about not eating for a while if you are healthy and well-nourished overall.

**Note:** The most common side effect of intermittent fasting is hunger. People with certain medical conditions should not fast without supervision by the practitioner.

**Frequently Asked Questions About Intermittent Fasting**

Here are answers to the most common questions about intermittent fasting.

1. **Can I drink liquids during the fast?**
   Yes. Water and/or tea are fine. Do not add sugar to your tea. Small amounts of nut / coconut milk or coconut cream may be added.

2. **Isn’t it unhealthy to skip breakfast?**
   No. The problem is that most stereotypical breakfast skippers have unhealthy lifestyles. If you make sure to eat healthy food for the rest of the day, then it should pose no problem.

3. **Will fasting slow down my metabolism?**
   No. Studies show that short-term fasts actually boost metabolism. However, longer fasts (3 days or more) can suppress metabolism.

**How to Start**

Chances are that you’ve already done many “intermittent fasts” in your life.
- If you’ve ever eaten dinner, then slept late and not eaten until lunch the next day, then you’ve probably already done a 16+ hour fast.
- Many people actually instinctively eat this way. They simply don’t feel hungry in the morning.
- I personally find that the 16/8 method is the simplest and most sustainable way to do intermittent fasting. I recommend that you try that one first.
- If you find that it is easy and you feel good during the fast, then you can try moving on to more advanced fasts like 24-hour fasts 1-2 times per week (Eat-Stop-Eat) or only eating 500-600 calories 1-2 days per week (the 5:2 diet).
- Another approach is to simply fast whenever it is convenient. As in, skip meals from time to time when you’re not hungry or don’t have time to cook.
- There is no need to follow a structured intermittent fasting plan to derive at least some of the benefits.

Experiment with the different approaches and find something that you enjoy and suits your schedule. Intermittent fasting is an eating pattern where you cycle between periods of eating and fasting. Numerous studies show that it can have powerful benefits for your body and brain.
Here are 10 evidence-based health benefits of intermittent fasting.

1. Intermittent Fasting Changes the Function of Cells, Genes and Hormones
When you don’t eat for a while, several things happen in your body. For example, your body initiates important cellular repair processes and changes hormone levels to make stored body fat more accessible. Here are some of the changes that occur in your body during fasting:

- **Insulin levels**: Blood levels of insulin drop significantly, which facilitates fat burning (1).
- **Human growth hormone**: The blood levels of growth hormone may increase as much as 5-fold (2, 3). Higher levels of this hormone facilitate fat burning and muscle gain, and have numerous other benefits (4, 5).
- **Cellular repair**: The body induces important cellular repair processes, such as removing waste material from cells (6).
- **Gene expression**: There are beneficial changes in several genes and molecules related to longevity and protection against disease (7, 8).

Many of the benefits of intermittent fasting are related to these changes in hormones, gene expression and function of cells.

**Bottom Line**: When you fast, insulin levels drop and human growth hormone increases. Your cells also initiate important cellular repair processes and change which genes they express.

2. Intermittent Fasting Can Help You Lose Weight and Belly Fat
- Many of those who try intermittent fasting are doing it in order to lose weight.
- Generally speaking, intermittent fasting will make you eat fewer meals.
- Unless if you compensate by eating much more during the other meals, you will end up taking in fewer calories.
- Additionally, intermittent fasting enhances hormone function to facilitate weight loss.
- Lower insulin levels, higher growth hormone levels and increased amounts of norepinephrine (noradrenaline) all increase the breakdown of body fat and facilitate its use for energy.
- For this reason, short-term fasting actually increases your metabolic rate by 3.6-14%, helping you burn even more calories.
- In other words, intermittent fasting works on both sides of the calorie equation. It boosts your metabolic rate (increases calories out) and reduces the amount of food you eat (reduces calories in).
- According to a 2014 review of the scientific literature, intermittent fasting can cause weight loss of 3-8% over 3-24 weeks. This is a huge amount.
- The people also lost 4-7% of their waist circumference, which indicates that they lost lots of belly fat, the harmful fat in the abdominal cavity that causes disease.
- One review study also showed that intermittent fasting caused less muscle loss than continuous calorie restriction.

All things considered, intermittent fasting can be an incredibly powerful weight loss tool. More details here: How Intermittent Fasting Can Help You Lose Weight.

**Note**: Intermittent fasting helps you eat fewer calories, while boosting metabolism slightly. It is a very effective tool to lose weight and belly fat.

3. Intermittent Fasting Can Reduce Insulin Resistance, Lowering Your Risk of Type 2 Diabetes
- Type 2 diabetes has become incredibly common in recent decades.
- Its main feature is high blood sugar levels in the context of insulin resistance.
- Anything that reduces insulin resistance should help lower blood sugar levels and protect against type 2 diabetes.
- Interestingly, intermittent fasting has been shown to have major benefits for insulin resistance and lead to an impressive reduction in blood sugar levels.
- In human studies on intermittent fasting, fasting blood sugar has been reduced by 3-6%, while fasting insulin has been reduced by 20-31%.
- One study in diabetic rats also showed that intermittent fasting protected against kidney damage, one of the most severe complications of diabetes.
- What this implies, is that intermittent fasting may be highly protective for people who are at risk of developing type 2 diabetes.

However, there may be some differences between genders. One study, women showed that blood sugar control actually worsened after a 22-day long intermittent fasting protocol.

**Note:** Intermittent fasting can reduce insulin resistance and lower blood sugar levels, at least in men.

4. Intermittent Fasting Can Reduce Oxidative Stress and Inflammation in The Body
- Oxidative stress is one of the steps towards aging and many chronic diseases.
- It involves unstable molecules called free radicals, which react with other important molecules (like protein and DNA) and damage them.
- Several studies show that intermittent fasting may enhance the body’s resistance to oxidative stress.
- Additionally, studies show that intermittent fasting can help fight inflammation, another key driver of all sorts of common diseases.

**Note:** Studies show that intermittent fasting can reduce oxidative damage and inflammation in the body. This should have benefits against aging and development of numerous diseases.

5. Intermittent Fasting May be Beneficial for Heart Health
- Heart disease is currently the world’s biggest killer.
- It is known that various health markers (so-called “risk factors”) are associated with either an increased or decreased risk of heart disease.
- Intermittent fasting has been shown to improve numerous different risk factors, including blood pressure, total and LDL cholesterol, blood triglycerides, inflammatory markers and blood sugar levels.
- However, a lot of this is based on animal studies. The effects on heart health need to be studied a lot further in humans before recommendations can be made.

**Note:** Studies show that intermittent fasting can improve numerous risk factors for heart disease such as blood pressure, cholesterol levels, triglycerides and inflammatory markers.

6. Intermittent Fasting Induces Various Cellular Repair Processes
- When we fast, the cells in the body initiate a cellular “waste removal” process called autophagy.
- This involves the cells breaking down and metabolizing broken and dysfunctional proteins that build up inside cells over time.
- Increased autophagy may provide protection against several diseases, including cancer and Alzheimer’s disease.

**Note:** Fasting triggers a metabolic pathway called autophagy, which removes waste material from cells.

7. Intermittent Fasting May Help Prevent Cancer
- Cancer is a disease, characterized by uncontrolled growth of cells.
- Fasting has been shown to have several beneficial effects on metabolism that may lead to reduced risk of cancer.
- Although human studies are needed, evidence from animal studies indicates that intermittent fasting may help prevent cancer.
- There is also some evidence on human cancer patients, showing that fasting reduced various side effects of chemotherapy.

**Note:** Intermittent fasting has been shown to help prevent cancer in animal studies. One paper in humans showed that it can reduce side effects caused by chemotherapy.

8. Intermittent Fasting is Good for Your Brain
What is good for the body is often good for the brain as well.
Intermittent fasting improves various metabolic features known to be important for brain.
This includes reduced oxidative stress, reduced inflammation and a reduction in blood sugar levels and insulin resistance.
Several studies in rats have shown that intermittent fasting may increase the growth of new nerve cells, which should have benefits for brain function.
It also increases levels of a brain hormone called brain-derived neurotrophic factor (BDNF), a deficiency of which has been implicated in depression and various other brain problems (36).
Animal studies have also shown that intermittent fasting protects against brain damage due to strokes.

**Note:** Intermittent fasting may have important benefits for brain health. It may increase growth of new neurons and protect the brain from damage.

### 9. Intermittent Fasting May Help Prevent Alzheimer’s Disease

- Alzheimer’s disease is the world’s most common neurodegenerative disease.
- There is no cure available for Alzheimer’s, so preventing it from showing up in the first place is critical.
- A study in rats shows that intermittent fasting may delay the onset of Alzheimer’s disease or reduce its severity (38).
- In a series of case reports, a lifestyle intervention that included daily short-term fasts was able to significantly improve Alzheimer’s symptoms in 9 out of 10 patients (39).
- Animal studies also suggest that fasting may protect against other neurodegenerative diseases, including Parkinson’s and Huntington’s disease (40, 41).
- However, more research in humans is needed.

**Note:** Studies in animals suggest that intermittent fasting may be protective against neurodegenerative diseases like Alzheimer’s disease.

### 10. Intermittent Fasting May Extend Your Lifespan, Helping You Live Longer

- One of the most exciting applications of intermittent fasting may be its ability to extend lifespan.
- Studies in rats have shown that intermittent fasting extends lifespan in a similar way as continuous calorie restriction (42, 43).
- In some of these studies, the effects were quite dramatic. In one of them, rats that fasted every other day lived 83% longer than rats who weren’t fasted (44).
- Although this is far from being proven in humans, intermittent fasting has become very popular among the anti-aging crowd.
- Given the known benefits for metabolism and all sorts of health markers, it makes sense that intermittent fasting could help you live a longer and healthier life.
3. Water Fasting

By Stephen Harrod Buhner

Fasting is an exceptionally ancient, and powerful, approach to healing many common disease conditions. It allows the body to rest, detoxify, and to heal. During fasting the body moves into the same kind of detoxification cycle that it normally enters during sleep. It uses its energy during a fast, not for digesting food, but for cleansing the body of accumulated toxins and healing any parts of it that are ill. As a fast progresses the body consumes everything that it can that is not essential to bodily functioning. This includes bacteria, viruses, fibroid tumours, waste products in the blood, any build up around the joints, and stored fat. The historical record indicates that human beings are evolutionarily designed to fast. It is an incredibly safe approach to healing and the body knows how to do it very well.

The Physiological Changes of Fasting

Many of the most dramatic changes that occur in the body during fasting take place on the first three days of the fast. These occur as the body switches from one fuel source to another. Normally, the primary form of energy the body uses for energy is glucose, a type of sugar. Most of this is extracted or converted from the food we eat. Throughout the day, the liver stores excess sugar in a special form called glycogen that it can call on as energy levels fall between meals. There is enough of this sugar source for 8-12 hours of energy and usually, it is completely exhausted within the first 24 hours of fasting. (However, once the body shifts over to ketosis or fat as fuel, this new fuel is used to also restore the body's glycogen reserves.)

Once the liver's stores of glycogen are gone, the body begins to shift over to what is called ketosis or ketone production - the use of fatty acids as fuel instead of glucose. This shift generally begins on the second day of fasting and completed by the third. In this interim period there is no glucose available and energy from fat conversion is insufficient but the body still needs fuel. So it accesses glucose from two sources. It first converts glycerol, available in the body's fat stores, to glucose but this is still insufficient. So it makes the rest that it needs from catabolizing, or breaking down, the amino acids in muscle tissue, using them in the liver for gluconeogenesis, or the making of glucose. Between 60 and 84 grams of protein are used on this second day, 2-3 ounces of muscle tissue. By the third day ketone production is sufficient to provide nearly all the energy the body needs and the body's protein begins to be strongly conserved. The body still needs a tiny amount of glucose for some functions, however, so a very small amount of protein, 18-24 grams, is still catabolized to supply it - from 1/2 to 1 ounce of muscle tissue per day. Over a 30-day water fast a person generally loses a maximum of 1-2 pounds of muscle mass. This conservation of the body's protein is an evolutionary development that exists to protect muscle tissue and vital organs from damage during periods of insufficient food availability.

From the third day onward the rate of the breakdown of fatty acids from adipose or fat tissue continues to increase, hitting its peak on the tenth day. This seven-day period, after the body has shifted completely over to ketosis, is where the maximum breakdown of fat tissue occurs. As part of protein conservation, the body also begins seeking out all non-body-protein sources of fuel: nonessential cellular masses such as fibroid tumours and degenerative tissues, bacteria, viruses, or any other compounds in the body that can be used for fuel. This is part of the reason that fasting produces the kind of health effects it does. Also, during this period of heightened ketosis the body is in a similar state as the one that occurs during sleep - a rest and detoxification cycle. It begins to focus on the removal of toxins from the body and the healing and regeneration of damaged tissues and organs.

Fasting and Healing

Fasting has been found to help a number of disease conditions, often permanently. There have been a number of intriguing clinical trials and studies treating numerous disease conditions with fasting. Here are some of those findings.
In one clinical trial of hypertension and fasting, 174 people with hypertension were pre-fasted for 2-3 days by eating only fruits and vegetables. They then participated in a 10-11 day water only fast, followed by a 6-7 day post fast in which they ate only a low-fat, low-sodium vegan diet. Initial blood pressure in the participants was either in excess of 140 millimetres of mercury (mm HG) systolic or 90 diastolic or both. Ninety percent of the participants achieved blood pressure less than 140/90 by the end of the trial. The higher their initial blood pressure the more their readings dropped. The average drop for all participants was 37/13. Those with stage 3 hypertension (over 180/110) had an average reduction of 60/17. All those taking blood pressure medication prior to fasting were able to discontinue it. Fasting has been shown in a number of trials like this one to be one of the most effective methods for lowering blood pressure and normalizing cardiovascular function. Blood pressure tends to remain low in all those using fasting for cardiovascular disease once fasting is completed.

Fasting is exceptionally beneficial in chronic cardiovascular disease and congestive heart failure, reducing triglycerides, atheromas, total cholesterol, and increasing HDL levels.

Fasting has been found effective in the treatment of type II diabetes, often reversing the condition permanently.

Because of its long term effects on metabolism, fat stores in the body, leptin, and disease conditions associated with obesity, fasting has been found to be one of the most effective treatments for obesity.

A number of studies have found that fasting is beneficial in epilepsy, reducing the length, number, and severity of seizures. Fasting is especially effective for helping alleviate or cure childhood epilepsy.

In a 1988 trial of 88 people with acute pancreatitis, fasting was found better than any other medical intervention. Neither nasogastric suction or cimetidine were found to produce as beneficial effects as those from fasting. Symptoms were relieved irrespective of the etiology of the disease.

A number of studies have found that fasting is effective for treating both osteoarthritis and rheumatoid arthritis. Fasting induces significant anti-inflammatory actions in the body and researchers found decreased ESR, arthralgia, pain, stiffness, and need for medication.

Autoimmune diseases such as lupus, rosacea, chronic urticaria, and acute glomerulonephritis have all responded well to fasting.

Severe toxic contamination has been shown to be significantly helped with fasting. Clinical trials have found that people poisoned with PCB experienced "dramatic" relief after 7-10 day fasts.

Poor immune function improves during fasting. Studies have found that there is increased macrophage activity, increased cell-mediated immunity, decreased complement factors, decreased antigen-antibody complexes, increased immunoglobulin levels, increased neutrophil bactericidal activity, depressed lymphocyte blastogenesis, heightened monocyte killing and bactericidal function, and enhanced natural killer cell activity.

Other diseases that have responded to fasting are: psychosomatic disease, neurogenic bladder, psoriasis, eczema, thrombophlebitis, varicose ulcers, fibromyalgia, neurocirculatory disease, irritable bowel syndrome, inflammatory bowel disease, bronchial asthma, lumbago, depression, neurosis, schizophrenia, duodenal ulcers, uterine fibroids, intestinal parasites, gout, allergies, hay fever, hives, multiple sclerosis, and insomnia.

The historically lengthy claim that fasting increases life span is beginning to garner some support in research literature. Regularly repeated 4-day fasting has been found to increase the life span in normal and immunocompromised mice.
Although the use of fasting in the treatment of cancer is controversial, there is some emerging data showing that fasting helps prevent cancer. Intermittent fasting (2 days weekly) has shown an inhibitory effect on the development of liver cancer in rats.

**People who should not Water Fast**

Although most people can fast, there are a few who, because of special conditions, should not.

- People who are extremely emaciated or in a state of starvation
- Those who are anorexic or bulimic
- Pregnant, diabetic women
- Nursing mothers
- Those who have severe anaemia
- Those with an extreme fear of fasting
- Those with porphyria. Porphyria refers to a genetic metabolic defect that affects the body's ability to manage porphyrins. Porphyrins are a group of compounds that combine with iron to produce blood, are involved in the control of electron transport systems, and, within mitochondria, are intricately involved in the production, accumulation, and utilization of energy. Porphyria can cause malfunctions in the liver, bone marrow, and red blood cells and produces a wide range of symptoms including seizures.
- People with a rare, genetic, fatty acid deficiency which prevents the initiation of ketosis. This is a deficiency involving the enzyme Acetyl-CoA, a mitochondrial fatty acid oxidation enzyme, that is essential to ketosis. Those with this deficiency who do fast can experience severe side effects, including hepatic steatosis, myocardial lipid accumulation, and severe hypoglycaemia.

**A Note on Pregnancy, Children, and Fasting**

Although many fasting texts suggest that pregnant women not fast, those that have been found to suffer side effects were also diabetic. Ketosis during pregnancy can seriously harm the foetus if the mother is diabetic. Fasting during pregnancy if a woman is not diabetic has not been found harmful to either mother or foetus. However, fasts for nondiabetic pregnant women should be no longer than 2-3 weeks duration and be monitored by a health care provider. Children, even infants, can also fast without complications if the fasts are of relatively short duration. For infants 2-3 days, children 1-2 weeks depending on age. These fasts should also be monitored by a health care provider unless of short duration. The need for infants and young children to fast is rare.

**Those Who Should Fast Under Health Care Supervision**

While most people can fast safely there are some that should do so only under the supervision of a health professional experienced in fasting for healing.

- Those with serious disease conditions
- Pregnant women
- Infants and young children
- Type I diabetics
- Those with insufficient kidney function
- Those who are extremely afraid of fasting yet wish to do so anyway
- People with a high toxic contamination level of DDT. DDT is stored by the body in a highly concentrated form in fat tissue. Fasting can release huge levels of DDT into the bloodstream as the fat stores are released. This can be quite dangerous.
**Foeniculum vulgare**
*Fennel*

FENNEL is best known as a digestive tonic.

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**Additional information on this herb is available under Nutrition – NEW STARTS**

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**Characteristics**
Common Names: Fennel, Sweet fennel (var. dulce), Bitter fennel (var. vulgare)

**Family: Apiaceae (Umbelliferae)**
Habitat: *Foeniculum vulgare* is native to the Mediterranean but is cultivated and naturalized elsewhere. It prefers well-drained soil in sunny locations.
Parts Used: Seeds (medicinal), herb, fresh bulb (culinary)
Constituents: Volatile oil, flavonoids, coumarins, sterols, fixed oil, sugars

**Medicinal Actions:** carminative/stomachic, aromatic, antiemetic, anti-inflammatory, antispasmodic, expectorant, hepatic, mild stimulant, slightly estrogenic, galactagogue, diuretic, orexigenic

**Uses**

**Historical Uses:**
*Foeniculum vulgare* was once used for snake bites and as an antidote to witchcraft. It has also been used for weight loss, longevity, and to promote lactation.

**Medicinal Uses:**
Digestive Tonic, flatulence, colic especially in infants, mild spasmodic gastrointestinal complaints, griping from purgatives
Other Conditions
Kidney stones, teething, sore eyes (eyewash), agalorhea, catarrh of the upper respiratory tract.

DBM PROTOCOL – ADJUNCT THERAPY – FENNEL - PRESCRIBING CONSIDERATIONS
The information provided is intended to augment treatments. Although most herbs are generally safe, it is recommended that patients avoid self-prescribing especially when there is an underlying ongoing medical condition, if they are STILL on any prescription medications or if they are pregnant or breastfeeding.
Ensure that you convey this information to the patient.

Formulations And Preparation
Infusion - 1-2 tsp/cup three times daily, or before meals for flatulence

Safety
The safety and prescribing considerations for this herb include:
Generally regarded as safe.

Side-effects are limited but may include allergic hypersensitivity to Apiaceae (empirical), photosensitizing effects, fresh plant may cause contact dermatitis, lactation (in medicinal amounts).

Cautions and Contraindications:
- Avoid use of oil in liver disease, alcoholism, while breast feeding, or during the use of acetaminophen; pregnancy due to emmenagogue action (empirical), essential oil use with infants or small children under 2 y.o.a. (speculative), prolonged use (speculative), acid reflux (speculative)

Drug-Herb Interactions are rare.
Foods to Cleanse Organs

To ensure proper organ maintenance, or if you are suffering from illness in an organ, eat certain foods to cleanse your organs and provide you with optimal health. Most organ-cleaning foods are most effective when eaten raw, according to the Living and Raw Foods organization. Check with your doctor before using foods to treat organ disease. On a daily basis, you are exposed to many toxins in the air you breathe, water you drink, products you use and food you eat. All of these toxins can have negative health effects including increased risk for certain diseases, including cancer. Your body filters out and removes toxic chemicals via the liver. The liver converts toxic chemicals into compounds that can be removed from the body via the urine and stool. In trying to remove toxins from the body, the most beneficial foods are ones that support liver detoxification. These foods include cruciferous vegetables, beets and carrots, turmeric, garlic, fibre and water.

Garlic and Onions
Garlic is known as one of the most cleansing foods you can eat. Onions are part of the same family of vegetables called allium and provide your organs powerful antioxidants. According to The Dr. Oz Show, garlic and onions detoxify and stop the spreading of cancer in the stomach, brain, colon, breasts, lung and prostate. As reported an article in the "The Huffington Post," garlic, onions and cruciferous vegetables like broccoli, kale, cauliflower, cabbage and watercress are high in sulphur and are helpful in generating more glutathione, which is a vitally important molecule in the proper function of the liver, heart and other organs. An element of garlic called diallyl disulfide kills leukaemia cells in a laboratory. Compounds in garlic help to increase levels of detoxification enzymes in the liver in much the same way as do cruciferous vegetables. Use garlic in pasta dishes, salsas, omelettes, stir-fries, salad dressings, soups and pesto. This small and pungent bulb is another powerful antioxidant and helps to neutralize the free
radicals that contribute to cancer and premature aging. Garlic stimulates enzymes in the liver to remove toxins from the digestive system. It also works to thin the blood, which protects against cardiovascular disease and improves circulation. Improved circulation facilitates toxin removal by increasing cellular regeneration and the elimination of waste materials. Garlic additionally has antibiotic and antibacterial properties that assist with purifying the blood and preventing acne.

**Brassica Family of Vegetables - Cruciferous Vegetables**
The brassica family of vegetables include Brussels sprouts, kale, cabbage, bok choy and broccoli and are foods typically eaten to cleanse organs. The organs that these foods focus on cleaning are the lung, colon and stomach. Specific compounds found in cruciferous vegetables help to increase levels of enzymes involved in detoxification in the liver. These enzymes help to eliminate carcinogens, excess hormones and toxins from the body. Cruciferous vegetables include cabbage, broccoli, kale, cauliflower, radishes and arugula.

**Fibrous Foods**
Foods high in fibre are helpful in cleaning certain organs, especially those associated with digestion like your small and large intestines and colon. The Dr. Oz Show recommends eating pears, because they contain soluble fibre, and sorbitol, both of which softens the stool in your intestines and helps your body to completely eliminate it with ease. Ground flaxseed are also an important source of fibre that cleans your intestines and lowers cholesterol. It also contains omega-3 essential fatty acids, which protect your heart from heart disease, as stated by the American Dietetic Association. Flaxseed contains zinc, iron, vitamin E and calcium. fibre is helpful for clearing toxins from the gastrointestinal tract by ensuring regular bowel movements. Fat-soluble toxins such as hormones, pesticides, and petrochemicals all must leave the body via the stool, and fibre helps to facilitate their removal. fibre is found in whole grains, fruits, vegetables and legumes.

**Probiotics**
Probiotics are foods that provide your digestive system with "good" bacteria, which rid your intestines of bad bacteria to cleanse your intestines. It is especially important to eat probiotics after you finish taking antibiotics, because antibiotics kill both the bad and good bacteria in your body. When you do not have enough good bacteria in your digestive tract, you can suffer from an overgrowth of bad bacteria, according to the National Center for Alternative and Complementary Medicine. It is easy to find probiotics in typical grocery stores in the form of organic yogurt. Probiotics are also found in kefir, kimchi and organic miso and tempeh. Raw apple cider vinegar is also a powerful probiotic and provides cleansing benefits to other organs beyond the intestines, such as the lungs, skin and stomach.

**Beets and Carrots**
According to the "Encyclopaedia of Natural Medicine," beets and carrots can help improve liver function and help to protect the liver from damage. Beets and carrots may be juiced, roasted, or chopped or grated for use in salads.

**Foods Rich in Vitamin C**
Vitamin C is a water-soluble antioxidant that helps transform toxins into digestible material. An antioxidant counters the negative effects of free radicals in the environment, and protects against cancer. Many fruits and vegetables contain vitamin C, such as berries, papaya, tomatoes, broccoli and cauliflower. Citrus fruits are among the densest in vitamin C and offer a powerful aid to detoxification. Citrus stimulates digestive enzymes and helps to accelerate your body's elimination of toxins.
Dark, Leafy Greens
Packed full of vitamins B and C, dark, leafy greens, such as kale, spinach, mustard greens and collards, promote detoxification in the digestive tract and liver. These health-boosting vegetables are also rich sources of phytochemicals and glutathione. Glutathione plays a critical role in nutrient metabolism, antioxidant defense, immune support and essential cellular activity. Deficiencies in glutathione have been linked to premature aging and diseases associated with harmful oxidation, such as stroke, arthritis, diabetes, cardiac illness and Parkinson's disease.

Green Tea
Green tea comes in several varieties and is a potent aid in detoxification. Full of antioxidants, green tea flushes toxins from the body and additionally contains catechins, a particular type of antioxidant known to increase liver function. A 2005 study published in the "American Journal of Clinical Nutrition" reports that catechins-rich green tea consumption facilitates body fat reduction and can prove useful in the treatment and prevention of diseases related to an unhealthy lifestyle.

Turmeric
Turmeric contains a compound called curcumin, which regulates the levels of detoxification enzymes in two important ways. According to the Linus Pauling Institute, curcumin may help to prevent the production of carcinogens in the body from ingested toxins and also may help to detoxify other toxins for removal from the body. Turmeric is a spice used in curry powder and in multiple cuisines around the world.

Water
The importance of adequate fluid intake cannot be overemphasized. Drinking enough water is vital for maintaining regular bowel movements, which allows for the removal of fat-soluble toxins. Additionally, adequate fluid intake is needed to remove water-soluble toxins in the urine.

Overview
As you age, toxins accumulate in the body. Harmful environmental exposures, alcohol, unhealthy foods, prescription medications and stress all take a toll on the functioning of your bodies' systems. Over time, these toxins contribute to feelings of lethargy, irritability and depression as well as increase susceptibility to disease and weight gain. Diet and lifestyle play an essential role in protecting the body from the harmful effects of toxins, and certain foods, such as garlic, green tea and citrus, may help to remove toxins and promote optimal health.

Visit the Nutrition for Life – Food for Life section for more information
Frankincense Essential Oil Therapy

DBM PROTOCOL - ADJUNCT TREATMENT – FRANKINCENSE THERAPY

Recommended by Dr. Budwig (especially when it comes to fighting brain tumours) frankincense essential oil is an unbelievably effective cancer killer, and research trials are filling medical journals proving this. Specifically, Indian Frankincense (*Boswellia serrata*) has been shown clinically to being a vital treatment for:

- Brain cancer
- Breast cancer
- Colon cancer
- Pancreatic cancer
- Prostate cancer
- Stomach cancer

According to researchers out of Baylor University Medical Center in Dallas, the cancer killing effects of frankincense are due in part to its ability to regulate cellular epigenetic function, which highlights its function in influencing genes to promote healing. Baylor cancer scientists emphasize that this potency makes *Boswellia serrata* a viable candidate for both cancer prevention and treatment!

DBM PROTOCOL – ADJUNCT TREATMENT - FRANKINCENSE ESSENTIAL OIL THERAPY

- Rub frankincense essential oil on your body (neck area, onto a tumour) 3 drops 3 x daily.
- Dilute essential oil with 1 drop of coconut oil to ease skin sensitivity.
• Drink 3 drops internally in 250ml of water 3x daily OR add to a teaspoon of coconut oil (warmed so it becomes liquid) OR add into a softgel capsule (use a syringe and draw out some of the omega 3 oils from a capsule and add it into that – less stressful on the oesophagus).

• As an additional method, diffuse in an oil diffuser

**Benefits**
The most common frankincense benefits include:
- Reduces Inflammation
- Cancer-killing Properties
- Spiritual Awareness
- Boosts Immunity
- Fights Infections
- Improves Anxiety
- Heals skin and reduces acne and scarring

**Frankincense Oil Cancer Natural Treatment**
People who have added Boswellia serrata into their natural health cancer care plan may find themselves experiencing double-benefits from this miracle essential oil.

For many cancer patients, there’s a time when the treatment becomes worse than the cancer itself. It is at this point that quality of life and symptom suppression is the focal point for many diagnosed with this deadly disease. Debilitating in-and-of itself, these cancer treatment side effect can make having cancer absolutely miserable.

Take, for instance, brain cancer patients who experience cerebral oedema (swelling in the head) after having their tumours irradiated. Typically, these people are treated with dexamethasone and other corticosteroids to control the swelling, but this is done at a great cost because the deadly complications of steroids are limitless.

Unfortunately, these people suffer toxic overload from the drugs that are supposed to help them in the first place and get headaches, migraines, and may even deal with blurred vision because of the steroid treatments.

Thankfully, frankincense offers a natural, viable solution to this horrible issue. Back in 2011, the journal *Cancer* published the results of a 44-person clinical trial evaluating how brain swelling was effected by frankincense.

**Astoundingly, 60% of the patients displayed 75% reduction or greater in cerebral swelling after being treated with 4200 mg/day of frankincense!** These results are so significant that scientists are urging the medical community to consider prescribing this potent essential oil instead of steroids for cancer patients assigned to radiation treatment.

**Frankincense Benefits Immune Function**
A growing body of research has recently unlocked the doors to our understanding of why frankincense benefits our health. In a study published by Phytotherapy Research, for instance, when mice took 1-10 mg of Boswellia serrata orally it was discovered that multiple levels of their immune systems were stimulated including:
- Delayed hypersensitivity reaction (early 24 hours, delayed 48 hours)
- IgG
- IgM
- Cytokines (interferon gamma, interleukin-4, and tumour necrosis factor-alpha)
- T-cell interactions (i.e. CD4/CD8, which are generally low in AIDS patients)

In layman’s terms, frankincense can boost the immune system like no other! Two fundamental ways this is accomplished is by proliferating lymphocytes (white blood cells, which are the body’s primary defense
team) and by keeping inflammation at bay (which is arguably the primary risk factor for most chronic diseases).

This may also explain why frankincense is so effective in treating autoimmune conditions like bronchial asthma, Crohn’s disease, rheumatoid arthritis, and ulcerative colitis.

Implement frankincense into your natural health regimen today and see how Frankincense Benefits Immune Function. This essential oil can be used in diffusers with ease to treat respiratory conditions or you can put it as an essential or salve directly on your skin.

And finally, you can also take frankincense (boswellia) as a supplement with a few essential oil drops placed under your tongue, on the roof of your mouth or in powdered capsule form for treatment of many health conditions.

In 2013, the University of Leicester conveniently published just before Christmas that has rekindled this theory. According to their press release, the Omani government-funded research has (for the first time) uncovered that frankincense has the ability to target cancer cells in late-stage ovarian cancer patients. And this all appeared to be due to AKBA (acetyl-11-keto-beta-boswellic acid). According to lead researcher Kamla Al-Salmani, “After a year of studying the AKBA compound with ovarian cancer cell lines in vitro, we have been able to show it is effective at killing the cancer cells. Frankincense is taken by many people with no known side effects. This finding has enormous potential to be taken to a clinical trial in the future and developed into an additional treatment for ovarian cancer.”

It has become glaringly obvious that boswellic acid (BA) is a compound fit to kill cancer cells, and researchers have tested frankincense essential oil to determine if it should role to play in oncology.

Although there is some debate whether or not BA is too large a compound to survive conventional essential oil filtration systems, there are studies in the literature that claim they are indeed part of frankincense oil. Subsequently, the jury is still out as to the exact mechanism(s) explaining why frankincense essential oil is so beneficial to cancer patients. However, advances in recent research suggest that Beta-elemene – a cancer fighting terpene found in frankincense and myrrh with the ability to cross the blood brain barrier – may be partly responsible.
Full Body Detox

Body detox - Why and how it should be carried out

A whole body detox is very beneficial, since harmful chemical substances, that cause headache, fatigue and nausea, are eliminated. There are myriads of detox programs available in the market, but the main focus of DBM detoxes are to relinquish diets that contain toxins such as sugar, meat, white flour, dairy food and caffeine.

In addition, one must refrain from taking medication and alcohol. Usually, a body detox diet starts with a short-term fasting followed by a strict diet of raw vegetables, fruit juices, fruits and water.

The best diet to detoxify the body has been scientifically proven as a WFPB diet which include whole grains, ample sources of unsaturated fats and vegan protein. The program should also include regular workout plans and certain stress reduction programs.

Our programs also include a certain amount of bowel/intestinal laxatives for natural bowel cleansing. The duration of this regimen ranges from one week to 14 days. This program also includes juices, smoothies, healing teas and hydration broths for two weeks.

There is a myriad of ways for body detoxification to be carried out. Some of the detox techniques could include a detox body wrap, sugar detox, liver cleansing as well as parasite removal. During this process it is important that the patient obtain adequate rest and sleep.

It is often thought that over-the-counter cleansers offer effective outcomes in body detox, but all cleansers are not effective and do not protect one from dangerous chemicals.
A detox will automatically eliminate excess fats stored in the body, so unwanted weight is lost naturally. In addition, detoxing helps the vital organs to function more efficiently and help one feel more vigorous and energetic.

It is essential to ascertain the patient’s overall health before implementing a full body detoxification program. Generally, a body detox lasts only for two or three weeks. However, for chronic disease, the program could and often does continue for up to three months.

**How to Begin with a detox cleansing diet?**

Remove unnecessary toxin accumulation by eliminating coffee, alcohol, cigarettes and saturated fats. These act as barriers in the process of healing. In addition, they must minimise the use of chemical-based homemade cleaners or personal health-care products such as shampoos, cleansers, toothpastes and deodorants, and other natural alternatives.

Another obstacle to a sound health is stress. Ensure protocols are implemented so that the patient is able to deal with stress levels more effectively, thereby automatically reducing stress hormones.

**Various body detox programs:**

**Full body detox** -

This is a compilation of body detox diets and cleansing several organs as this does a natural liver detox. An example of this would be the DBM 28-day program. For more information on the 28-DAY Program contact your DBM Physician or Practitioner.

**Colon cleanse** -

DBM colon cleansing begins with food elimination, impacted faecal elimination and parasite removal via cleansing food and cleansing tea, as well as Epsom salts flushes.

**Body Detoxification Program:**

Based on an individual’s needs, there are several detoxification programs available to detox the body. For instance, some detoxification programs follow a 7-day schedule, since the body takes some time to get rid of toxins. This program involves having liquids for seven days followed by a strict diet to allow the digestive systems to repair itself, whilst the rebalancing of the gut microbiome takes place.

**Complete body detox tips**

After a body detoxification program, the patient continues to support the body in its detox work via specific diets, hydration and organ-supportive teas. Specific nutrients are recommended such as magnesium chloride and MSM.

For more information on supplementing with Mg and MSM see those pages on this website

**The patient should note they should:**

1. Have ample amount of fibre foodstuffs along with brown rice, fresh fruits and vegetables. Even beets, cabbage, radishes, artichokes, broccoli, chlorella, spirulina and seaweed serve as best detoxifying foods.
2. Practice hydrotherapy regularly by having a hot shower [ensure a chlorine filter is attached, where possible]. While having a shower, allow the water to flow from your backbone for about 4-5 minutes. Follow the same with cold water for half-an-hour. Do this thrice a week and then rest on a bed for half-an-hour.
3. You can also protect your liver incorporating the IMMUNOCLEAN protocols and by drinking green tea.
4. Intake foods high in Vitamin C, as they help to produce glutathione.
5. Breathe deeply, so that oxygen flows all through their body – incorporating breathing exercises.
6. Drink at least two to six glasses of clean spring/borehole water every day
7. Reduce stress by emphasizing more on positive emotions and incorporating our destressing techniques.
8. Take a steam bath in a sauna to eliminate toxins and waste materials through perspiration.
9. Dry-brush the skin daily.
10. The most effective way to detoxify your body is to exercise. Rebounding, tai chi, qigong, gentle yet brisk walking or yoga are some exercises that will ensure good lymph flow and help move toxins out of the system.

Natural Body Detox:
Natural body detox is another effective way to detox the body. It involves consuming plenty of nutrients, raw fruits and vegetables. It also suggests herbs, spices and seeds that help to eliminate wastes from the body. This vegetarian detoxification helps to understand the importance of fibre and organic juices and vegetables in our daily diet. Dry-fasting will help the body repair itself faster, but does not allow for the elimination of toxins. This valuable respite during a dry-fast allows the body a respite to deal with repairs and is often recommended for patients with certain chronic diseases – under the guidance of a physician.

Ensure that after a dry fast or a full fast – proper elimination protocols are put in place to assist the body in removing that which it no longer needs.

The focus on a natural body detox however is on those ‘things that patients put into their mouths’. Eliminating toxic foods and unsafe water is pivotal to a good cleanse.

Ensure water consumption is sufficient to avoid dehydration and constipation. Avoid as protein from animals, store-bought bread, fat, pastries, caffeine, sugar, sweeteners, fried and refined foods.

Which Organs Have to Be Detoxified?
Internal cleansing is one effective way to detox the whole body. It can consist of a colon cleanse, kidney cleanse, parasite cleanse, gallbladder cleanse and liver cleanse. These are major elements for overall body detoxification. Proper detoxification of toxins and parasites help the body’s resources to effectively combat disorders. In addition, body cleansing helps in clearing up those inexplicable symptoms, which modern medications are only capable of suppressing. Often a change in diet, a simple cleanse and the patient is able to provide tools to the body that will enable it to heal and repair itself.

The colon, liver, kidneys and teeth are the most important organs to focus on during a cleanse and they play a vital role in eliminating waste and toxic substances from the body. If they do not function properly, the toxins accumulate and throw out the body’s natural ability to cleanse and repair. A 100 years ago, when the environment and our foods were not so toxic, the body was easily able to accomplish this task. However, that is no longer possible. The organs of the body are overtaxed with the accumulation of toxins, hence, detoxifying of these organs and freeing your body from parasites is the key to maintaining health.

The Colon and gut play a crucial role in overall health and a compromised colon can cause health problems and affect your heart, liver, brain and other organs. Conditions such as colitis and Crohn’s diseases are symptoms of a compromised colon.

The Kidneys are the most vital organs in the body. Urinary tract infections and kidney stones are most common warning symptoms of improperly functioning kidneys. Hence, detoxifying kidneys as part of your overall body detox will greatly improve the long-term wellbeing of these crucial organs.

The Liver is responsible for many functions essential to good health. As the liver performs several tasks, there is a chance of being damaged and an unhealthy liver may affect every single organ of the body. An
unhealthy liver mostly usually presents itself in symptoms such as poor immune system, allergies and
gallstones and much more.

How to Detoxify Your Whole Body?
Below discussed are some effective ways by which you can detoxify your entire body:

Fasting, a simple cleanse:
While food is crucial to health, unlike water, human bodies can survive without food for long periods.
Fasting at least for 3 days to eliminate unwanted substances from your body is easily accomplished. The
body uses up vast amounts of vital energy processing and digesting food. While fasting, the body is more
easily able to carry out natural processes without wasting vital energy.

Hyperthermia:
Also known as the heat therapy, sweat therapy or fever therapy. This type of therapy aids in the
detoxification process and further assists in the healing processes. It is also one of the most promising
and natural detoxification methods to expel toxins from the body. In fact, it reduces harmful toxins, kills
harmful viruses, helps clean clogged pores, increases circulation and enhances the immune system.

Oxygen Therapy:
Another effective way of a complete body detox is by oxygen therapy. Oxygen is one of the nature's
marvellous cleansers that you can use very efficiently to detoxify the entire body. One simplest way to
administer oxygen therapy is by mere deep breathing exercises.

Exercise:
One can also detoxify the entire body through proper and regular workouts. It is an effective way to
cleanse vital organs. Incorporating gentle to moderate exercises as part of a healthy lifestyle will also
increase oxygen and raise body temperature. It will stimulate lymph flow and aid in the removal of toxins.

Natural diet:
Upon completion of any body detox patients need to understand that the CAUSE of the imbalances in
their bodies were as a result of poor/unhealthy eating habits.

A simple way to begin changing these habits is the 5-IN-5-OUT program. Simply begin by removing 5 bad
things from your diet and replacing them with 5 healthier choices. Continue with those changes for about
two weeks, then remove 5 more and replace 5 healthier choices. Continue in this fashion retaining all the
changes as you go.

If you are a “all or nothing” type of person – make the changes by following the DAILY NUTRITION
program on this website.

Another guide that one could use would be to follow the 5-Track Plan. Download the PDF.

Overview:
Whole body detox is very beneficial, since harmful chemical substances in the diet can cause headaches,
fatigue and even nausea. There are myriads of detox diets available in the market. The main idea is to
momentarily relinquish certain diets that contain toxins such as sugar, meat, white flour, dairy food and
caffeine.

Of course, one must to refrain from taking pharmaceuticals, over-the-counter medications and alcohol.
Usually, these programs start with a short-term fasting followed by a strict diet of raw vegetables, fruit
juices, fruits and water. The best diet to detoxify your entire body is scientifically proven to be a WFPB
diet which incorporates fruits and vegetables, whole grains, ample sources of unsaturated fats protein.
Including a program for stress reduction will go a long way in recovering balance.
Some regimes suggest herbal laxatives or herbal teas for natural bowel cleansing. The duration of these regimens ranges from one week to ten days. The DBM programs incorporate magnesium sulphate / magnesium chloride or other methods as a bowel flush. Restriction of certain foods and the inclusion of nutrient-rich juices, smoothies, soups along with hydration broths and water is paramount to a good cleanse.

Ensuring that whilst the patient detoxes, they get adequate rest, relaxation and sleep is important.

**Warning:**
Early side effects of fasts such as juice fasting or water fasting include general aches and pains; often a sudden drop in blood pressure occurs along with an irregular heartbeat, low blood sugar or anaemia. Hence, stressing the importance of incorporating a wide variety of fruits and vegetables in juices, soups/broths and smoothies will ensure blood-sugar levels are maintained.
Gallbladder Cleanse

A Review
Most people never give a thought to the health of their gallbladder. During a fatty meal, the gallbladder contracts, delivering the bile through the bile ducts into the intestines to help with digestion. The gallbladder stores bile and bile acids which emulsify fats eaten so it can be properly transported through the intestine into the blood stream. The bile is made in the liver – but stored in the gallbladder until the body needs it for the digestion of fat. At that time the gallbladder contracts and pushes the bile into the bile duct, which carries it to the small intestine, to aid digestion.

When the gallbladder isn't working as well as it should, gallstones develop, and most people are unaware that there is a problem. Yet in a small percentage of people, gallstones can trigger a variety of symptoms, such as abdominal pain, bloating, nausea, and vomiting.

When gallstone symptoms are frequent, recurrent, and especially uncomfortable, the typical treatment is surgery to remove the gallbladder. Watching what you eat, keeping a healthy weight and cleansing may help you prevent gallstones from forming and avoid some discomfort if you do develop gallstones.

Gallstones can be as small as a grain of sand or as large as a golf ball. The gallbladder can develop either one large stone, hundreds of tiny stones, or almost any combination.

Foods to Boost The Function Of The Gallbladder Bile Flow
- **Red beets.** Eat them raw, grated into salads or add the juice into your daily Green juice.
• **Artichokes.** Leaves from the artichoke plant contain caffeylquinic acids, which promote bile flow. The simplest and least expensive way to benefit from these compounds is to eat the artichoke leaves. They're easy to both prepare and eat.

• **Sauerkraut and sauerkraut juice.** When used regularly, sauerkraut and its juice will promote bile output. A tablespoon or two half an hour before and after meals is recommended. In addition, enjoy a cup of the juice by itself taken once or twice a week before breakfast. It's easy to make homemade sauerkraut.

• Turmeric

• Garlic

• Leafy greens

• Apples

• Celery

**Why beetroot?**

Beets can be a wonderful health promoting food. Beets provide anti-inflammatory, antioxidant and detox support in the body. Today, I want to talk about why that is the case. I often recommend beets to many of my clients, namely clients with obvious liver or gallbladder issues. The reason beets help with liver/gallbladder issues is that they support healthy bile flow.

Beets are just one of the many foods that can help to support proper healthy bile flow and detoxify the body. I personally love beets and have several recipes for their use. Beets are in season summer through winter. Be sure to purchase organic beets with the tops and use both. Consider taking the very top of the beet where the leaves attach and shredding it up as a slaw to eat daily if possible, especially if you have a sluggish gallbladder.

Beets have a tremendous regenerating effect on the body, and for those recovering from digestive ailments beets help to be used a digestive aid. It is an excellent tonic for the blood as it alkalizes the blood, promotes regularity, cleanses the liver and is a good treatment for kidney stones. Beet juice or beet kvass is also helpful in healing the gallbladder, or important for those without a gallbladder as it helps to thin out the bile. If the bile is too thick the liver and gallbladder get congested and problems start to occur.

The betaine in beets is what aids digestion, as well as helps to promote healthy stomach acid and juices. The nice thing about drinking beet kvass is you get all the nutritive value of the beets without all the sugar content and the added benefit of lactic acid bacteria. Beets are also loaded with minerals, fermenting them only enhances their nutritive properties.

**How Beets Support Healthy Bile**

Beets contain betaine and are rich in calcium, iron, magnesium, vitamin C, potassium, manganese, phosphorous, as well as carotene and B complex. Betaine is a substance that helps to protect the liver and stimulate the flow of bile. Betaine also plays a role in reducing levels of homocysteine in the blood, according to the National Institutes of Health. Homocysteine is a toxic substance in the body that can lead to osteoporosis and heart problems. The betaine is found in the peel and flesh of the beet, but is mainly concentrated in the top of the beet where the leaves connect. Traditionally, beets have been used as a ‘folk remedy’ for liver disorders. Betaine is essential for proper liver function, fat metabolism and to help promote the flow of bile. Betaine can actually help protect the liver from the impact of alcohol on the liver, making beets (or betaine) an excellent support for detoxification.

**Healthy Bile & Bile flow**

Fats in the diet require adequate bile production from the liver and adequate bile release from the gallbladder to be properly emulsified and digested. **What is Bile?** Bile is a soap like substance secreted by the liver. Bile salts emulsify the fats from our food. By increasing the surface area of the molecules, lipase (or fat splitting enzymes) digest fats and absorb the fat soluble vitamins A, D, E, and K more efficiently. Bile is made from cholesterol, it sequesters cholesterol and is a main way in which we eliminate cholesterol from our bodies. When our bile acid levels are high, our body stops making more cholesterol.
When our bile acids are low our bodies can make up to 15 times more cholesterol. Bile also helps make calcium and iron more absorbable.

Bile is also the fluid into which the liver excretes toxins for removal. After the bile is produced in the liver, it goes to the gallbladder for storage, and eventually heads into the small intestine for removal. Bile is secreted by the gallbladder through hormone messages when we eat a meal containing fats. After the intestines absorb these fats they are then used by the body to build cells, hormones and prostaglandins. This only happens fully if our digestion is working properly.

Toxins are excreted from the liver through bile fluid, when the flow is encouraged and enhanced, the liver can remove those toxins/poisons more effectively. Bile and the toxins it contains, is incorporated into the stool. When the stool does not move through the intestines easily and timely enough, waste products accumulate and clog the bowel. When constipation occurs, bacteria in the intestines split the toxins that are bound up in the bile, in turn causing re-absorption of these already detoxified poisons. A clogged bowel actually irritates the lining of the large intestine, allowing waste products and other toxins to be reabsorbed into the bloodstream. Waste remaining in contact with the intestinal wall for a long period of time can cause chronic inflammation and other serious complications.

**DBM PROTOCOL - ADJUNCT THERAPY - GALLBLADDER CLEANSE**

Follow the instructions on the Body Cleansing page

For salads, juices, teas, and other foods that help support the gallbladder during the cleanse please visit the Nutrition for Life – Food for Life page
Gut Repair Protocol

**Keeping it Liquid**

**DBM PROTOCOL - ADJUNCT THERAPY - GUT REPAIR PROGRAM**
While on this Gut Repair Program, it is essential to remain on a “liquid” diet, so as to give the gut time to heal and rebalance. This Four Day Program can be reapplied to the patient’s Lifestyle as an on-going routine every couple of months to help the gut.

The best way to do this is with juices, soups and smoothies for at LEAST 4 days. The gut replenishes vital mucus at around the 4-day mark. For those patients that have been diagnosed with chronic gut problems, it is essential to retain parts of these gut protocols when preparing a program for them. A more effective healing process is remaining on this program for 28 days, but we understand that each patient is different and liquid diets are not easy, nor is it something that can be done on a continuous level at home, without guidance and regular ‘check-ups’ by the practitioner.

All the ingredients used must be organic (fresh), well rinsed in hydrogen peroxide water by adding 1 tablespoon to the sink – placing all the fruit and veg into the bowl and leaving to stand for a few minutes before used. If frozen – make sure that they are JUST frozen fruits or vegetables and that they contain no additives/preservatives are added. The recipes for smoothies, juices and soups specific to the Gut Repair Program are below.

**Note:** Throughout this 4-day program probiotics play a large role in helping to restore the microbiome.

For information on how to make this probiotic – see Sauerkraut – Food For Life

An example of a Gut Healing Program would include foods such as:

Vegan Bone Broth
Daily Gut Healing Smoothie
Sauerkraut Gut Healing Juice
Digestive Support soups
Daily doses of sauerkraut
Hamamelis virginiana
Witch Hazel

History
Native Americans used extract of witch-hazel extensively for medicinal purposes. Many peoples produced witch hazel extract by boiling the stems of the shrub and producing a decoction, which was used to treat swellings, inflammations, and tumours. Early Puritan settlers in New England adopted this remedy from the natives, and its use became widely established in the United States.

A missionary, Dr. Charles Hawes, learned of the preparation's therapeutic properties, and then determined through extensive study that the product of distillation (likely steam distillation) of the plant's twigs was even more efficacious. "Hawes Extract" was first produced and sold in Essex, Connecticut, in 1846, by druggist and chemist Alvan Whittemore.

Hawes' process was further refined by Thomas Newton Dickinson, Sr., who is credited with starting the commercial production of witch hazel extract, also in Essex, Connecticut, in 1866, and eventually establishing nine production sites in eastern Connecticut. Following his death, his two sons, Thomas N., Jr., of Mystic, Connecticut, and Everett E. Dickinson of Essex, each inherited parts of the family business and continued the manufacture of witch hazel extract, operating competing "Dickinson's" businesses that were continued by their descendants.

History sourced from Wikipedia
Composition
Witch hazel is a plant. The leaf, bark, and twigs are used to make medicine. You may see a product called witch hazel water (Hamamelis water, distilled witch hazel extract). This is a liquid that is distilled from dried leaves, bark, and partially dormant twigs of Hamamelis virginiana.

The main constituents of the witch hazel extract include calcium oxalate, gallotannins, safrole, as well as chemicals found in the essential oil (carvacrol, eugenol).

- Witch hazel is mainly used externally on haemorrhoids, minor bleeding, and skin irritation. As a hydrosol, it is used in skin care as an astringent and anti-oxidant.
- It is often used as a natural remedy for psoriasis and eczema;
- in aftershave and in-grown nail applications
- to prevent facial sweating and cracked/blistered skin,
- For treating insect bites, poison ivy, and haemorrhoids.
- It is recommended to women to reduce swelling and soothe wounds resulting from childbirth.
- Witch hazel is taken by mouth for diarrhoea, mucus colitis, vomiting blood, coughing up blood, tuberculosis, colds, fevers, tumours, and cancer.
- Some people apply witch hazel directly to the skin for itching, pain and swelling (inflammation), eye inflammation, skin injury, mucous membrane inflammation, varicose veins, haemorrhoids, bruises, insect bites, minor burns, and other skin irritations.
- In manufacturing, witch hazel leaf extract, bark extract, and witch hazel water are used as astringents to tighten the skin. They are also included in some medications to give those products the ability to slow down or stop bleeding.
- Those medications are used for treating insect bites, stings, teething, haemorrhoids, itching, irritations, and minor pain.

Whilst clinical studies supporting its effectiveness for these skin conditions are generally lacking, it has been used safely and effectively for many years as a folk / traditional medicine. One needs to understand that just because clinical studies on the effectiveness of witch hazel are lacking – does not mean it is not effective.

How does it work?
Witch hazel contains chemicals called tannins. When applied directly to the skin, witch hazel might help reduce swelling, help repair broken skin, and fight bacteria.

DBM PROTOCOL – ADJUNCT THERAPY – WITCH HAZEL – SUGGESTED USES
1. Natural Astringent
Probably the most famous way witch hazel is used is as a natural astringent. High concentrations of tannins in witch hazel make it an excellent astringent which means it has the ability to remove excess oil from skin and shrink down pores. Health-wise, those who are exposed to lots of environmental pollutants may apply witch hazel to the face in order to reduce the amount of contaminants that enter pores and, consequently, the amount and severity of blemishes. Also, because astringents remove excess oil, regular use of witch hazel may further prevent blemishes, especially black heads which result from dried sebum build-up in pores.

2. Fade Bruises and Blemishes
Witch hazel may also be used to treat blemishes already present on the face or other areas of the body. Apply witch hazel with a cotton ball or cosmetic pad to reduce irritation and appearance of acne or other inflammatory skin conditions. Witch hazel applied to bruises can also help to fade discoloration and speed up the healing process of any underlying damage.

3. Brighten Around Eyes
The ability of witch hazel to tighten skin and reduce inflammation makes this an ideal natural remedy for treating discoloration and puffiness under and around eyes and is one of the most popular uses for witch hazel.
hazel. Just make sure not to get any of this natural astringent on the eyes themselves as it will result in significant pain and lingering discomfort from dryness.

4. Shrink Swollen Veins
Soak soft terry cloth in witch hazel and lay over skin affected by varicose veins to temporarily reduce swelling and pain. Also, remember to prop up the areas to be treated as high as possible. This will decrease blood pressure in swollen veins and maximize the effectiveness of this remedy.

5. Stop Bleeding
Witch hazel naturally tightens skin and promotes faster healing. Apply organic witch hazel to minor cuts and scrapes to stop bleeding. Store-bought witch hazel also often contains isopropyl alcohol which disinfects, making it a popular choice for cleansing wounds before bandaging.

6. Post Hair-removal
For both men and women, witch hazel is a great follow-up to shaving any part of the body. Not only will it stop bleeding from nicks or cuts, anti-inflammatory witch hazel can also work to prevent razor burn. Furthermore, those who employ hot wax treatments for hair-removal may also apply witch hazel as an anti-inflammatory post-waxing or use it to stop bleeding from damaged hair follicles.

7. Hemorrhoid Relief
Witch hazel is great for easing the pain, itching, swelling, and bleeding of hemorrhoids. In fact, it’s a common ingredient used in many commercial hemorrhoid creams. Just mix witch hazel with a carrier like Aloe Vera gel and apply to affected areas for fast relief.

8. Ease a Sore Throat
Due to its astringent properties, an herbal tea of witch hazel (not the store-bought kind which almost always contains isopropyl alcohol) can help to ease the discomfort of a sore throat. Gargle with witch hazel tea to reduce swelling, dry up excess mucus, and ease pain caused by laryngitis, sinusitis, tonsillitis, or other throat maladies.

9. Treat Damaged Gums
A witch hazel mouth rinse (again, don’t use witch hazel that contains isopropyl alcohol) can help to reduce pain and swelling of irritated or infected gums. Witch hazel can be used stop minor bleeding of the gums and mouth. Try a teaspoon of witch hazel tea with one drop each clove and myrrh oil to safely relieve teething pain for infants. The same treatment may also be used to soothe pain caused by emerging wisdom teeth or after oral surgery to reduce discomfort and inflammation.

10. Dry Up Swimmer’s Ear
Otitis externa – commonly known as ‘Swimmer’s Ear’ – is caused by microbial infection of the ear canal. Use an eye dropper to insert several drops of witch hazel into each ear to dry up pus, clear away excess oil, and break up wax and debris that may be clogging the ear canal. Allow ears to drain then clean gently with a cotton swab or cosmetic pad. Follow up with a natural anti-microbial like basil oil, apple cider vinegar, or tea tree oil.

11. Soothe Diaper Rash
Anti-inflammatory properties of witch hazel make it an effective and safe remedy for soothing pain from diaper rash. Regular application will also assist in healing damaged skin faster, further reducing your baby’s discomfort.

12. Cool Down Sunburn
Mix some witch hazel in with your Aloe Vera gel the next time you need to treat a sunburn. The anti-inflammatory power of this incredible plant extract will aid your skin in healing while it and the Aloe help to cool the burn. This treatment can also help to prevent skin from peeling in the days following a bad burn.
13. Neutralize Contact Dermatitis
Because of its drying and anti-itch power, witch hazel can also be used to counter the effects of skin-irritating plant compounds like urushiol, the sap oil contained in poison ivy, poison oak, and poison sumac that causes contact dermatitis in about 85% of adults who come into contact with it.

14. Bug Bites and Stings
Just as witch hazel can be used to ease pain and itching from poison ivy and its cousins, the same works for bug bites and stings. Yet another reason to carry a small bottle of this awesome remedy with you the next time you plan to spend a day outdoors!

Dosage
External use:
For itching and discomfort associated with haemorrhoids and other anal disorders: witch hazel water (hamamelis liquid extract diluted with water) applied up to 6 times a day or after every bowel movement.

Internal Use:
No clinically approved dosages available. Only traditional dosages available.

Side effects
• Witch hazel is LIKELY SAFE for most adults when applied directly to the skin. In some people, it might cause minor skin irritation.
• Witch hazel is POSSIBLY SAFE for most adults when small doses are taken by mouth. In some people, witch hazel might cause stomach upset when taken by mouth. Large doses might cause liver problems.
• Witch hazel contains a cancer-causing chemical (safrole), but in amounts that are too small to be of concern.

Special Precautions & Warnings:
• Children: Witch hazel is POSSIBLY SAFE for children when applied directly to the skin.
• Pregnancy and breast-feeding: There is not enough reliable information about the safety of taking witch hazel if you are pregnant or breast-feeding. Stay on the safe side and avoid use.

Interactions
None known at this time.
Drug Interactions Source: WebMD
**Herxheimer Reaction**

*AKA: The Cleansing Reaction, The Detox Reaction, and The Healing Crisis.*

Also known as the "Herxheimer Reaction", this reaction occurs when the body tries to eliminate toxins at a faster rate than they can be properly disposed of. The more toxic one's bodily systems are, the more severe the detoxification, or healing crisis. It is characterized by a temporary increase in symptoms during the cleansing or detox process which may be mild or severe. You may feel worse and therefore conclude that the treatment is not working. But these reactions are instead signs that the treatment is working and that your body is going through the process of cleaning itself of impurities, toxins and imbalances. Such reactions are temporary and can occur immediately – or within several days, or even several weeks, of a detox. Symptoms usually pass within 1-3 days, but on rare occasions can last several weeks. If you are suffering from a major illness, the symptoms you experience during the healing crisis may be identical to the disease itself. Sometimes discomfort during the healing crisis is of greater intensity than when you were developing the chronic disease. This may explain why there may be a brief flare-up in one's condition. Often the crisis will come after you feel your very best. Most people feel somewhat ill during the first few days of a cleanse because it is at that point that your body dumps toxins into the blood stream for elimination. With a more serious condition there may be many small crises to go through before the final one is possible. In any case, a cleansing & purifying process is underway, and stored wastes are in a free-flowing state.

**Cause:**
The healing crisis is the result of every body-system, in concert, working to eliminate waste products through all elimination channels and set the stage for regeneration. The end result: old tissues are replaced with new. When any treatment or cleansing program causes a large scale die-off of bacteria, a significant amount of endotoxins (toxins within the bacteria itself) are released into the body. The more bacteria present, and the stronger their endotoxins, the stronger the cleansing reaction. When any treatment or detox causes the organs of the body (particularly the liver, which is a storehouse of drug and poison residues) to release their stored poisons and toxins, a cleansing reaction may occur. Any
A program, such as fasting, which causes a rapid breakdown of fat cells (which are a storehouse for toxins), can cause a healing crisis as toxins previously lodged in the fat cells are released into the bloodstream.

**Symptoms:**
The healing crisis will usually bring about past conditions in whatever order the body is capable of handling at that time. People often forget the diseases or injuries they have had in the past, but are usually reminded during the crisis. There are a wide variety of reactions that may manifest during a healing crisis, the most common are:
- Increased joint or muscle pain
- Diarrhoea
- Extreme fatigue and/or its opposite, restlessness
- Cramps
- Headache (believed to be caused by build-up of toxins in the blood)
- Aches, Pains
- Arthritic flair up
- Insomnia
- Nausea
- Sinus congestion
- Fever (usually low grade) and/or chills
- Frequent urination and/or urinary tract discharges
- Drop in blood pressure
- Skin eruptions, including: boils, hives, and rashes.
- Cold or flu-like symptoms
- Strong emotions: anger, despair, sadness, fear, etc.
- Suppressed memories arise
- Anxiety
- Mood swings
- New phobias develop

**Easing Your Way Through the Healing Crisis:**
Ensure that you drink plenty of fresh water (especially water), juices, and herbal teas to flush the body of toxins. Drink from 2 to 4 quarts (litres) per day. This will help flush the toxins out of your system and speed along the detoxification.
- If you are feeling fatigued, or sleepy, the body is talking to you, and telling you to rest. You should be kind to yourself and get the rest that you need.
- Symptoms frequently disappear immediately after a good bowel movement, use a coffee enema to provide relief.
- For other symptoms, meditation, EFT, acupuncture or a good massage might be helpful to speed up the healing process, and reduce the discomfort.
Hydration

Cleans spring/borehole water, teas, soups/broths, electrolytes, juices, smoothies

A Review
Dehydration is defined as the excessive loss of body fluid. Symptoms generally become noticeable with mild dehydration which is the loss of 1-2% of one's normal water volume.

The main cause for dehydration is drinking less water than is needed. Your need is based on your size and the amount of sweating you do.

The chronically dehydrated body cannot recover in just one day, regardless of the amount of liquids in the form of clean spring water, hydration broths and juices you imbibe.

What is the difference between thirst and hydration?
These are two entirely different things. After the continual intake of vital fluids, in about a two-week period you might experience the occasional dry mouth and THIRST (even though you are drinking a lot of fluids). This phenomenon can only be seen as the body’s confirmation of its true state of profound dehydration – years without meeting the body’s demand for intra and extra-cellular water content. The body, sensing the continue availability of vital fluids for the first time in many years, will allow the body’s defensive mechanism of conserving water to relax as all the cells begin to receive the required amount of fluids that have been denied for too long. ONLY NOW can the dramatic health changes can really begin to be visible and be experience.

In his master work “Water and Salt”, Dr. Batmanghelidj explains this phenomenon:
“If the body is once again conditioned to regular and adequate intake, the thirst sensation becomes sharp and the urge to drink water becomes strong... The re-hydration of cells takes place slowly.”

The extent of the chronic dehydration at this point truly becomes known to the individual, as this is the only way re-hydration can occur.
By the third or fourth week, it’s smooth sailing. This is when the potential for healing really becomes evident. Alleviation of symptoms from chronic problems with digestion, circulation, adrenal imbalance, nervousness, etc. becomes evident. The body being 75% water, by keeping it hydrated correctly, the vital fluids will affect many aspects of your health.

Proper hydration can have a dramatic therapeutic effect on chronic kidney, bladder and chronic colon problems, especially if the person has been on protracted medications for these conditions and is totally dehydrated.

**Kidneys**

Kidney function diminishes after years of a diet loaded with refined sugars and hydrogenated snacks. In their constant struggle to maintain blood pH against a flood of acidifying food and drink, the kidneys’ cells – nephrons – experience rapid aging. As they weaken, their ability to clean the blood slows down. If imprudent diet choices persist, the work backs up. This happens slowly and sub-clinically: jaundice only comes much later.

Once they fall behind, the kidneys may never really catch up with the ongoing toxic load coming in every day. And a slow, downward spiral ensues. Couple this with the additional handicap of dehydration of the kidney cells themselves and the result is chronic kidney disease, leading to eventual failure. The ninth leading cause of death in the US, according to the CDC, 2009.

Another compounding factor will present if the person is also on diuretics for high blood pressure. More and more demands are put on the already overworked kidneys, which are handicapped further by the increased blood viscosity – thicker blood.

In very advanced cases, water intake must be increased very gradually because the kidney cells are so weak and overstressed. But if the trend is constant – daily increased hydration – and decreased intake of processed trash – kidney disease can begin to resolve, slowly and gradually. The biggest obstacle of all actually seems to be finding out something like this is possible, especially if long term medications are involved.

**Bladder Problems**

Usually it’s an issue of muscle atrophy – disuse of the detrusor muscles of the bladder. Frequent trips to the bathroom at night are self-perpetuating. The slightest urge and up you get. With no opportunity to fill and thereby tone the bladder muscles, they become weak and thin. Coupled with a dehydration of the muscle cells, we see another downward spiral.

The introduction of additional good quality clean water and nutritious cell-hydrating juices into this person’s life is the most logical solution, for several reasons. Obviously more water will be available to hydrate the detrusor muscle cells, setting them up to strengthen. Waiting longer and longer to void the bladder, will slowly build muscle tone. Now we have an upward spiral – the stronger the detrusor muscles become, the more the bladder can hold and the less the feeling of urgency. Don’t worry, it’s not going to burst. Sleep improves – upward spiral – all things move toward equilibrium. If the 2.5 litre goal can actually be attained, together with the clean diet, the person may reclaim a normal drug-free life, for the first time in years. Again, the hard part is learning all this is possible, and then actually doing it.

**Colon Disease**

As the #3 type of cancer in the world, colon disease has reached epidemic proportions worldwide. The primary excuse for these numbers is lack of knowledge about how this important organ works. The physiology of the colon is thoroughly covered under the section in “Intestinal Cleanse”, with simple instructions on clearing out years of layered sludge, and re-establishing normal probiotic vitality and immune function. Of course, a prerequisite is to stop loading up on the same un-metabolisable “food” that brought on the problem in the first place.
Including a minimum of 2.5 litre hydration to the program will facilitate the elimination of the dislodged pieces of sludge, obviously. But an even more useful effect of new hydration may be the cleansing and re-vitalizing effect on the mucosal cells of the gut lining, as well as the muscles cells of the colon. The result will be a strengthening of overall peristalsis and providing a hospitable environment for the proliferation of normal flora throughout the tract.

**DBM PROTOCOL – ADJUNCT THERAPY - HYDRATION**

*Broths, Electrolytes, Teas, Water;*

Water makes up about 60 percent of the human body, and without enough of it, dehydration can set in, causing dry mouth, tiredness, and headaches as well as low/high blood pressure etc.

To stay hydrated, it’s essential to replace the water our body is constantly losing by breathing, perspiring, and using the bathroom. We use that H₂O to flush toxins, carry nutrients around the body, and protect sensitive tissue, like the nose and mouth. For adult males, that means about 3.7 litres of fluids per day (nearly 16 cups), while ladies need roughly 2.7 litres (or 11 cups) per day, studies show.

But not all fluids need to come from water or even liquids. Everything from goat’s milk to home-made pure fresh fruit juice and even coffee or tea, can contribute to our daily fluid intake - though clean spring or borehole water must be your main source.

On average, food also provides about 20 percent of our daily fluid intake, but it can account for more if we reach for water-rich foods like fruits and veggies (lettuce, oranges, tomatoes, etc.).

**Taking into account that 20 percent from food, in a temperate climate, men need to drink 3 litres (about 13 cups) of fluids daily, and women need 2.2 litres (about 9 cups). Some physicians estimate the required daily intake of water by the person’s body weight – but the above suggestion is a good rule of thumb.**

Not everyone’s hydration needs are the same. Age, climate, activity level, and illness can all effect daily needs—and how much we’re each affected by those factors varies too. Studies show thirst may be a better guideline than numbers, since most of us get plenty of H₂O just by letting our mouths be our guide. Thirst and urine colour might be better guidelines for staying hydrated. Weather, activity level, illness, and age can all impact water needs. HOWEVER, the problem of following the thirst trigger is that most people do not recognise the body’s call for hydration. Most see it as a call for food. Until you are able to distinguish the difference it’s important that you train yourself to ensure your body stays hydrated by drinking the daily requirements as a norm.

**Hydration Broths**

Broths used to be a dietary staple, as were fermented foods, and the elimination of these foods from our modern diet is largely to blame for our increasingly poor health, and the need for dietary supplements.

**Electrolytes**

Electrolytes are vital for your health and can be removed from the body by all types of deprivation.

**Coconut Water**

Coconut water will hydrate your body and rebalance your electrolytes and helps maintain the body’s fluid levels and its potassium content helps maintain water pressure within cells and blood. The best is to drink it from the fresh young coconut, but packaged coconut water is fine, too (be sure to choose one without added sugar or preservatives).

**Teas**
Herbal Tea (Infusions) is a great addition to your daily hydration. The leaves from plants such as mint, verbena, linden, balm, and so on give a pleasant aroma and flavour to the water in which they are steeped, which makes infusions a satisfying alternative to people who don’t enjoy drinking plain water. The hydration benefit does not extend to sweetened infusions, or if the tea is made with plants that have diuretic properties, such as parsley and dandelion.

**Water**

The water content in babies is often as much as 75%, but this will continually decrease with age. As you get older, the more water you should drink and the more fresh food you should eat, which will help keep you physically and mentally agile well into old age. The brain is up to 90% water. If you have been drinking far too little water for the last decade or drunk it in a way the body cannot use it properly, the consequences will become more apparent in the second half of your life. Fresh fruit and vegetables’ water content can be over 90%, by eating your water; you will provide the body with vitamins, trace elements and slow and evenly supplied water that have the minerals ready in biological bonds.

Water is the main means of transport not only for all the materials that are required in the cells, but also for all the cells’ waste substances. If the transport network isn’t functioning properly because of lack of water, waste isn’t taken away, but left behind as “deposits”. Putting the energy of infinite Love and Gratitude on your water, by giving thanks to it and loving it, you value it; you will even wash fears away and energise even the water with healing ability.

**Water Tips**

- Start the day with 1 or 2 glasses of water to flush the system and bring new life to your day.
- Drink 6 to 10 glasses a day – more if you are stressed.
- If drinking a minimum of 6 glasses a day, add a pinch of Himalayan salt to balance the water.
- Sip slowly to detox and cleanse.
- Hold the water in your mouth for a few seconds to encourage absorption.
- Dechlorinate tap water by letting it stand in a jug – the chlorine evaporates to a degree, or boil it and allow it to cool.
- Energize water by stirring it.
- Move your internal water pump: run, walk, move your ankles, and do any other foot or leg movement that you enjoy.
- Get a foot massage.
- Circle the body – move in figure eights with your eyes, head, hips, and shoulders.

**Lemon water / tea / tisane vs Plain water**

Throughout this entire program it is recommended that upon waking the patient flushes the body of accumulated toxins from the night with 125-250ml of CLEAN spring/borehole water. In addition to this just prior to or with their morning breakfast, lunch or dinner enjoy a glass of Lemon water / tea to which you may choose to add some grated/sliced fresh ginger and as an extra option a dash of honey if the patient so chooses.

**RULES TO DRINKING LEMON WATER / TEA.**

The first week of the program, as patients are not eating any solids, they may freely imbibe of this tea (hot) or water (cold).

Once they start re-introducing solids into their eating program (in Phase 2), they should start the morning with a glass of clean water – HOT preferably, but it may be cold as well.

Patients should drink a glass of lemon water (hot or lemon water (cold) about 30 minutes before a meal. If they enjoy a drink with a meal it is best for them to sip on the lemon TEA and NOT, the lemon water.

A glass of lemon tea may be enjoyed after meals about an hour later.
EXAMPLE OF DBM PROTOCOL – ADJUNCT THERAPY - SUPPORTIVE HYDRATION DURING ANY CLEANSE AND MAINTENANCE PLAN

Hydrating / Cleanse Tea #1 - Lemon

Hydration Tea #2 - Ginger, Honey, Cayenne, Mint, Cinnamon

Hydration Broth Recipe #1 – Vegetable Broth

See also – Dehydration and Electrolyte Regulation
Hydrogen Peroxide

Detox Baths, Wounds

A Review

Your skin is our largest organ, acting as both a barrier and a waste removal system. It's porous and permeable, which allows it to aid in our bodies' elimination processes, but also allows absorption of much of what we put on it and in the same way it digests nicotine through a patch, it absorbs toxins into your bloodstream, where your circulation propels them into contact with every single cell.

By entering through the skin, these toxins also bypass the detoxifying bacteria, selective cellular barrier, and sensitive immune system in your gut, meaning they can be deposited and even stored throughout your tissues before your liver has a chance to metabolise and detoxify them.

According to nutritional pioneer Dr. Hazel Parcells, 65% of body cleansing is achieved via the skin! Bathing is viewed more for relaxation than detoxification as a general rule. The focus on bathing enjoyment can be observed worldwide in the plethora of artificially scented, hormone disrupting bubble bath concoctions that are sold in stores, year around.

I would venture to suggest that health cannot easily be maintained over the long term without the regular incorporation of detox baths. If traditional cultures valued therapeutic cleansing baths back when our world was pristine with clean water, air, and unprocessed, additive free food, one can only imagine how important a gentle and regular detoxification bathing protocol is today given our toxic soup world with chemicals and other biologically disrupting agents nearly everywhere!

If the body is clogged up with toxins from the physiological stress of modern living and the chemical assault from every direction, it cannot properly utilize the nutrient dense food that is consumed.

To maximize the effects of the hydrogen peroxide bath we recommend that you perform the “Dry Brushing” protocol prior to your Hydrogen Peroxide or Detox bath. As hydrogen peroxide bath, as well as all bath therapies, are more effective when you utilize dry skin brushing on the entire body. Dry skin brushing removes the layer of dead skin that can block the absorption of energy and nutrients from this...
bath and also stimulates the blood and lymph fluids to rise to the skin to accept the healing effects of the bath.

**Hydrogen Peroxide Baths**

Hydrogen peroxide bath treatments are a form of oxidative or oxygen therapy. In oxygen therapy the goal is to increase serum oxygen levels. High oxygen levels are beneficial for oxidizing (breaking down) toxins. Oxygen hydrotherapy can help the natural processes of the body in numerous ways. Oxygen energizes our cells and can reverse degeneration, it stimulates the immune system and promotes healing. In cancer treatment the oxygen delivered to the cells by hydrogen peroxide baths are unwanted by cancer cells as cancer cells thrive in an anaerobic environment. Read about hydrogen peroxide baths in cancer treatment in our cancer program pages.

Hydrogen peroxide (H$_2$O$_2$) is a highly oxidizing agent. In hydrogen peroxide baths oxygen is released when hydrogen peroxide (H$_2$O$_2$) becomes water (H$_2$O) and the oxygen released is absorbed by the skin. The extra oxygen in the blood serum can be used to support the body in healing and to break down (oxidize) toxins. In detoxification, a hydrogen peroxide bath can help to cleanse and purify the skin. The biggest elimination organ of the body which will make the skin more effective in elimination of toxins.

Hydrogen peroxide baths are indicated for detoxification, inflammatory, autoimmune and degenerative diseases and cancers. Small amounts of hydrogen peroxide can activate several genes that are responsible for clearing tissue debris and improves venous and lymphatic circulation.

**Frequently asked Questions – Information for patients**

To help keep the body oxygenated, we recommend a hydrogen peroxide bath. Start slowly and build up. Begin with a half cup then a day later a whole cup and work up slowly until you can manage NO MORE THAN a maximum of two cups. (More than one cup should not be used unless advised to do so by your practitioner).

**Can I use 3% peroxide instead?**

The peroxide available from the chemist is usually about 3% hydrogen peroxide. In order to equal ½ to one cup of 35% hydrogen peroxide you will need at least 6 to 12 cups of 3%. That will make it quite expensive. HOWEVER, it is not our recommendation that you use these peroxides.

**Are there any side effects?**

Taking a hydrogen peroxide bath is like giving yourself an oxygen supplement. Some people report problems such as headaches and loose stools after bathing with peroxide. These symptoms are seen as “detox reactions” – the body doing some housecleaning with the extra oxygen you’ve provided. That’s why we would not recommend using more than the recommended amount. At least not until you’re very comfortable with peroxide baths.

**Why “35% food grade” peroxide**

Because food grade peroxide doesn’t have the stabilizers that most other kinds of peroxide have. Food grade is "cleaner". You could use any kind of peroxide – various kinds have different stabilizers. (If using a different kind, be sure to check the percentage (concentration) so that you are using an equivalent amount.)

**What else goes in the bath?**

You can also use salt or essential oils, right along with the hydrogen peroxide. We often recommend the use of Epsom salts, essential oils, and herbal infusions for peroxide bath soaks.

**Will the peroxide bleach your hair?**

That depends on how much peroxide you use, and how long and how often you stay in the peroxide baths. But, yes, it could bleach your body hair as well as your head hair (if you put your hair in the water).
Other Benefits
Peroxide will kill any anaerobic germs in the water and on your skin. Use coconut oil on the skin after baths, if your skin feels a little dry.

Safety of Letting Peroxide-water Go Down the Drain or into Garden
It goes to the sewage treatment centre and kills a lot of anaerobic bacteria there, and, in the process, it will break down into water and oxygen.

If you happen to live in the country and your tub water goes out to the land or to a creek, depending on the concentration of peroxide in the water. It may be too strong to release directly into a stream, for example. If your bath water is going to your own septic system, it is likely to be good for it.

Anything else to know?
Taking a hydrogen peroxide bath is mildly drying to the skin. Using some natural body lotion in the form of coconut oil or tissue oil after your bath is recommended.

How Detox Baths Work
The reason water as hot as can be tolerated is typically used is because this initially draws toxins to the surface of the skin, as described by Dr. Hazel Parcells in her book “The Pioneer Nutritionist Dr. Hazel Parcells in Her Own Words”. Then, as the water gradually cools down, the toxins are pulled into the water via the principle of osmosis – the weak energy from the cooling water draws from the strong energy from the body heated up initially by the very hot water.

SEE DETOX BATHS AND HYDROGEN PEROXIDE BATHS –

Cell Oxygenation Bath #1: Hydrogen Peroxide Bath – Body Cleansing – Skin Cleanse

See also Hydrotherapy, Detox Baths
Immune Boosting
Supporting the Immune System

The immune system is composed of many interdependent cell types that collectively protect the body from bacterial, parasitic, fungal, viral infections and from the growth of tumour cells. Many of these cell types have specialised functions. The cells of the immune system can engulf bacteria, kill parasites or tumour cells, or kill viral-infected cells. Often, these cells depend on the T helper subset for activation signals in the form of secretions formally known as cytokines, lymphokines, or more specifically interleukins.

How to Boost your Immune System
The immune system does not work independently of the body – in other words, whatever you subject your body to, or provide your body with will influence the immune system one way or the other.

There are two ways we support the immune system. The core of our Natural Health Program is our FAITH™ Drops and along with this vital component – we provide the body with support in the way of good wholesome, clean foods that will give the body the tools it needs to ensure the immune system remains functioning optimally.

Ensuring that you avoid processed foods, grains and sugar will go a long way to strengthening your immune system. Selecting nourishing, organic, fresh fruits and vegetables that have immune-boosting nutrients is far more beneficial to your overall health than a handful of supplements.

Avoid stress, as long term production of epinephrine (adrenaline) and cortisol place immense strain on the immune system. Whilst initially it pumps it up – continued duress taxes the immune system. For instance, psychological stress raises the risk for the common cold and other viruses. Less often, chronic stress can promote a hyper-reactive immune system and aggravate conditions such as allergies, asthma and autoimmune disease.

- Exercise – moderate exercise discharges tension and stress and enhances the immune function. A brisk walk ten minutes twice a day, is a good place to start.
- Sufficient sleep is vital, as it is during rest time that growth-promoting and reparative hormones repair the damage of daily life. Sleep deprivation activates the stress response, depresses immune function and elevates inflammatory chemicals which cause you to become ill.
- Live a full and joyous life – research shows that people with social lives enjoy better health and longevity – more so than loners do.
- Avoid cigarettes and alcohol
- Consume friendly bacteria in the form of goat’s yogurt, goat’s kefir, sauerkraut and other naturally fermented raw foods.
- Get enough natural Vitamin D. Vitamin D plays a large role in promoting normal immune function.
DBM PROTOCOL – ADJUNCT TREATMENT – IMMUNE BOOSTING – IMMUNOCLEAN PROTOCOLS
The Core of Our Natural Health Program IMMUNOCLEAN Drops
The core of our Natural Health Program is IMMUNOCLEAN Drops. It is prescribed by our team for everyone that begins our program and it’s recommended as an on-going maintenance program once your health is in balance.

IMMUNOCLEAN Drops combined with a holistic view of healing is the foundation of all we practice at Doctors Across Borders, as it is the best most natural and healthy alternative to healing and getting better.

IMMUNOCLEAN Drops is a natural formulation comprising of 12 herbs with a mineral ion is a well-researched. Correctly administered and following protocols that have been tried and tested, is the key to the success of your treatment.

IMMUNOCLEAN Drops has the following functions:
• To sterilise and clean the body
• To kill all viruses and pathogens
• To restart the Krebs cycle
• To encourage and stimulate the myeloperoxidase process
• To detox the body
• To reactivate enzyme production
• To fortify the immune system
• To stimulate the substantia nigra in releasing dopamine

Foods that support immune function
• Fermented foods
• Raw organic eggs from TRUE Free-Range chickens
• Coconuts and Coconut oil
• Locally grown ORGANIC vegetables
• Raspberries and blueberries
• Mushrooms
• Chlorella
• Propolis
• Teas – such as green tea and Echinacea
• Garlic
• Turmeric
• Black pepper
• Oregano
• Cinnamon
• Cloves
• Ginger

For Additional information on IMMUNOCLEAN Drops – See IMMUNOCLEAN – Module V

Examples of juices that help boost the immune system:
Juice Recipe #1: Juice for Immune Boosting
Juice Recipe #5: Juice for Immune Boosting and Digestive Support
Inclined Bed Therapy

Inclined bed therapy is where one's bed is raised 4 to 8 inches at the head by using bricks, wedges, or blocks to raise it. This can be useful in varied disorders including spinal cord injury, back pain, acid reflux or GERD, sinus and respiratory disorders, sleep apnoea, poor circulation, low metabolism, oedema in the legs, and many other conditions.

The easiest way to do this is to place wood blocks at the locations shown in the picture. Note that if there are legs in the middle of the bed, these must also be supported or the bed could be damaged. If the feet of the bed's legs are more than one inch in diameter and rigid, it may be best if the blocks are made as wedges with the same angle the bed is tilted, which is approximately 5 degrees, although if soft wood is used, such as pine, the feet will probably indent the wood enough to make it stable.

The least expensive method to build riser blocks is to get a piece of 2x8 lumber (actually 1.5 x 7.5 "). Cut the board into 7.5" lengths to make squares 7.5 x 7.5 x 1.5. Glue or screw 4 together in a stack to get a 6" tall block, and 2 together to make the 3" riser for the middle if necessary. However, this is NOT very stable and can be dangerous so is not recommended. Better than this but still not as sturdy as some would like are adjustable bed risers, which come in sets of 4 or 6 available here. They only adjust between 3.2 to 5.2 inches but are inexpensive and provide a better method than using blocks under the bed legs.

**Stable Methods of Raising the Bed.**

These are recommended methods to incline a bed.

1. **Buy a wedge of foam the entire size of the bed.** This is the easiest and very stable but one of the most expensive methods. Half wedges of foam, usually around 24x24" and 6 to 12 inches high can also be used and are commonly available for as little as $20. While this does raise the head and some internal organs and can certainly help those who sleep on their back, it does not provide the same benefit as wedging the entire sleep surface plus will cause the back to bend sideways if sleeping on the side. Whole bed foam should be placed between the mattress and box springs since with the weight distributed by the mattress it does not compress as much plus suffers less wear so cheaper grade foam can be used.

2. **Remove the legs of the bed and use risers the width of the bed going all the way across under the frame as shown in the picture above right.** For this method 2x6 lumber is cut the width of the bed and glued or screwed together using 4 at the top to make it 6” high while also using 2 at around the midway point. To make this more stable the top piece of wood in each stack can be shaved, sanded, or sawed off a bit to make it the same angle where it contacts the frame (around 4.3 degrees for a 6" rise over 80" bed length) although if using soft wood like pine it will eventually dent the surface and make it more stable. Either
way it is best to attach the wood to the frame - drill a hole through the metal of the frame into the wood and screw it down.

3. Method number 2 has the problem of lowering the bed since the legs are removed. This may be desired if the mattress and box springs are already tall and having the additional six inches at the top would make it too tall but most people prefer their bed at a height with legs. In this case one of two methods can be used by attaching a structure under the box springs. In both cases the structure must be attached to the wood of the box springs.

3a. Use 2x6’s cut into a triangle as shown to provide a 5.5” rise. Note that a 2x6 is actually 1.5”x5.5” (a 2x4 is actually 1.5”x3.5”)

It will probably require three of these per box spring running the entire length of bed - one on each side and one in the middle. Beds in the US are typically 80” or 75” long.

This example shows 80”. These must be attached well to the wood structure of the box spring, otherwise a strong lateral force could cause them to collapse. For the upper two-thirds of the triangle, braces or brackets can be used to attach the riser to the box spring frame to provide the most rigidity or just toe-nail or toe-screw them in and use two 2x4 braces on the top section. For the lower third, the riser can be screwed from the bottom directly into the wood of the box spring frame with 2.5 or 3” screws. This method probably requires the least expense.

Shown above are finished risers of this method mounted onto a full size bed’s box springs (actually, that’s a "bunky board", a 3” thick mattress support made for bunk beds). The 2x6’s were screwed in using 2.5 and 3” deck screws (so no pilot holes were necessary) and the lumber was so well toe-screwed at the top that no brackets or braces were necessary but if there is any suspicion at all that they are not sturdy enough, use braces or brackets to strengthen them. The lumber for this was purchased for less than $8. This went on top of the metal framed bed shown in the picture and it was necessary to place padding underneath the risers since the lumber squeaked a bit against the metal bars when moving. An old closed cell foam camping sleeping pad was cut up and used. This also masked the slight difference in the heights of the boards, which were ripped with a handheld circular saw.

3b. Use stacked 2x4’s, attached to each other and also to the box spring frame, which run the width of the box spring. Although it is probably sufficient to just use two stacks, one at the top and one at the middle, it is better to have three or four stacks to better distribute the weight. Some box spring frames may not be strong enough for a heavy person to plop down halfway between a frame supported with two stacks and the frame could crack, or warp over time even with a light person. Using stacks of 4, 3, 2, and 1 will reduce the chance of this occurring. Again, it is best if the portions of lumber that contact the box spring frame are shaved, sawed, mitred, or sanded to the same angle as the bed as shown in the diagram below.
4. Use an inclined bed riser. This is an insert used along with the frame to provide an adjustable incline, good for those who want to start small, at 2", and build up to 4 or 6".

**Dispelling The Night-Time Frequent Urination**

by Andrew K Fletcher reprinted at Chris Gupta’s New Media Explorer

During my research on the angle in which we sleep, I have worked with many people suffering from a whole range of illnesses, including multiple sclerosis. During my work with MS, it became clear that when horizontal bed rest was avoided in favour of inclined bed rest, with the head end fifteen cm or six inches higher at the head end, night time urine frequency was resolved in almost every single case, and there were many. Also oedema was resolved and this flies in the face of the current gravity/physiology relationship.

In order to determine what was happening with oedema and urine frequency, my wife and I conducted an experiment which involved measuring the specific gravity (density) of urine during different sleeping postures. We measured, horizontal bedrest, head down tilt bedrest and head up inclined bedrest. What we found was remarkable and can be tested by anyone using a simple hydrometer, the type used in home brew kits, to determine the density of urine.

Horizontal bedrest, produced a urine density lower than normal daily activity. Inclined bedrest produced urine density substantially higher that either horizontal bed rest head down tilt bedrest and normal daily activity and as we eat and drank the same during 3 weeks of measuring our urine the results were even more compelling.

But here is the crunch for this simple experiment. Head down tilt produced urine of near water density, no salts or minerals were being excreted in the urine! Which means that the salts end up in the bladder because of the effects of gravity on the salts and our posture in relation to the effects of gravity on said salts!

An additional effect of gravity on the body in the head up tilt position is the production of more heat during the night and this increases evaporation from the respiratory tract and skin, therefore reducing the amount of urine we produce and increasing the density of the urine produced.

Increased night time frequency of urination does not necessarily indicate prostate problems in males, it does however indicate that there might be something wrong with sleeping flat in both males and females.

**For Research on Inclined Bed Therapy – See The Following Open Source Links:**

http://inclinedbedtherapy.com/my-research/multiple-sclerosis-research

http://inclinedbedtherapy.com/my-research/diabetes-research

http://inclinedbedtherapy.com/my-research/diabetes-research

http://inclinedbedtherapy.com/my-research/gravity-vs-microgravity-in-space-health-research
| http://inclinedbedtherapy.com/my-research/parkinson-s-disease-research |
Iodine is a trace mineral which is crucial for the synthesis of thyroid hormone. It also appears to modulate the effect of estrogen on breast tissue. Two main forms of iodine are available which appear to have different effects on the body. Elemental iodine primarily exerts its effects outside the thyroid, namely on breast tissue. Iodine complexed with sodium or potassium for instance, is known as an iodide. Iodide complexes exert a stronger effect on the thyroid gland.

**Uses**
The following are the primary uses of iodine.
- **Prevention of iodine deficiency:** The primary use of iodine is to treat deficiency.
- **Fibrocystic Breast Disease:** Iodine caseinate has been used to treat fibrocystic breast disease. The hypothesis is that deficiency in iodine causes the epithelium in the breast tissue to be more sensitive to estrogen stimulation. This causes distention of the breast ducts, forming small cysts and later fibrosis. Elemental iodine appears to be the preferential form of iodine in this case. A possible side effect of elemental iodine use may be short-term increased breast tenderness on examination.
Deficiency Symptoms
A wide spectrum of conditions may result from a deficiency in iodine, which may include:

- goiter
- cretinism
- intellectual disability
- growth retardation
- hypothyroidism
- hyperthyroidism
- increased early- and late-pregnancy miscarriage
- increased infant mortality

There are several foods that block iodine utilization and can lead to deficiency.

These are known as goitrogens and include:

- turnips
- cabbage
- mustard
- cassava root
- soybean
- peanuts
- pine nuts
- millet

Cooking usually inactivates goitrogens.

Excess Symptoms
Adverse reactions have occurred with pharmacological doses including:

- hypersensitivity reactions
- flare-up of adolescent acne
- rashes
- arrhythmia
- central nervous system effects (confusion, numbness, tingling, weakness in the hands and feet)
- hypothyroidism or hyperthyroidism (Jod-Basedow phenomenon)
- parotitis (iodide mumps)
- thyroid adenoma
- small bowel lesions.

Hypersensitivity reactions include angioedema, symptoms resembling serum sickness, cutaneous and mucosal hemorrhages, urticaria, thrombotic thrombocytopenia purpura (TTP) and fatal periarteritis. Enteric coated potassium iodine has caused nonspecific small bowel lesions manifested by stenosis with or without ulcerations.

Assessment Procedure
Best specimens to collect:
- Serum T4 - a low level indicates a deficiency

Prescribing Considerations

- Organic sources of iodine such as kelp and iodine caseinate etc. are preferred to inorganic iodides such as potassium iodide and sodium iodide
- Potassium iodide is available as a nutritional supplement usually in combination products.
- Iodine content in iodized salt ranges from 20-40mg/kg or 20-40mcg/g.

The recommended dosages vary based on age and health status. These dosages are for iodine supplements:

- **Infants**: 40 mcg (under 6 months); 50 mcg (6-12 months)
Child: 70 mcg (1-3 years); 90 mcg (4-6 years); 120 mcg (7-10 years)
Adolescent - Adult (11+ years): 150 mcg
Pregnancy: 175 mcg
Lactation: 200 mcg

Safety
General Side Effects:
- Short term oral iodide administration at doses between 1500 mcg - 250 mg/day can reduce thyroid hormone secretion. In individuals with borderline hypothyroidism, doses as low as 750 mcg may inhibit thyroid hormone secretion. Increased dietary intake has been associate with acne-like skin eruptions.
- Chronic intake at pharmacological doses can lead to iodism characterized by frontal headache, pulmonary edema, coryza, eye irritation, skin eruptions, gastric disturbances, and inflammation of the tonsils, larynx, pharynx, and submaxillary and parotid glands
- The most common adverse effect of salt iodization is iodine-induced hyperthyroidism (IIH). This typically affects older people with nodular goiter. Theoretically it can also induce hypothyroidism but this has not been a reported side effect. Allergic response to iodized salt is rare
- Children: Children with cystic fibrosis appear to have an exaggerated susceptibility to the goitrogenic effect of high doses of iodide.
- Seniors: Older people with nodular goiters are a risk of developing hyperthyroidism from use of potassium iodide and iodized salt.
- Pregnancy and Breastfeeding: Avoid intake greater than the RDAs. Doses above 175 mcg in pregnant women may cause fetal damage. Doses above 200 mcg in a nursing mother may cause rash and thyroid suppression in the infant.
- Contraindications: individuals with hypersensitivity to iodine or iodide products
- Precautions: Potassium iodide and iodized salt may exacerbate symptoms in some with autoimmune thyroiditis.

Drug Interactions
Drug Interactions include:
- Antithyroid Drugs - Concomitant use of antithyroid drugs and iodide may potentiate the hypothyroid effect of iodides.
- Lithium - Concomitant use of pharmacological doses of potassium iodide and lithium may result in hypothyroidism.
- Warfarin - Concomitant use of pharmacological doses of potassium iodide (for hyperthyroidism) and warfarin may decrease the anticoagulant effectiveness of warfarin.

Nutrient Interactions
Nutrient Interactions include:
- Selenium - Intake of selenium and iodide may have a synergistic effect in the treatment of Kashin-Beck disease, an osteoarthropathy.
- Goitrogenic foods - Goitrogens contain a substance that is metabolized to a compound that may compete with iodide and negatively affect iodide status potentially leading to hypothyroidism. These foods include cassava and cruciferous foods such as cabbage, Brussels sprouts, broccoli, cauliflower, and rutabaga. Certain flavonoids also have goitrogenic activity.

DBM PROTOCOL – ADJUNCT THERAPY - DETERMINING IF PATIENT IS IODINE DEFICIENT
Evaluate symptoms mentioned above for iodine deficiency, hypothyroid and lymphatic congestion.

Having assessed the patient a functional assessment for iodine status in the body is the Iodine Test patch. Whilst this is not a 100% accurate guide, it does give one a fairly good overview of the patients iodine status at that time.

Thyroid Status Checks:
Perform the Barnes Test for one week to find the mean average. Temperatures consistently below 97.3°F could indicate possible low thyroid function.

Check patient’s TSH (Thyroid Stimulating Hormone) levels. If they are above 2 uIU / ml, it indicates low thyroid function. This is standard on most blood tests. This should be combined with other additional standard thyroid tests and, when possible, with a reverse T3 test.

**NOTE:** If patient’s thyroid has always tested normal, their first morning temperature is normal and they have not recently begun experiencing any of the classic symptoms of hypo-thyroid (fatigue, intolerance of cold, cold hands and feet, foggy thinking, increased need for sleep, dry skin, thinning hair, and constipation), then their thyroid may be functioning well, but they may still be iodine deficient and accumulating cellular toxicity.

**IODINE TEST PATCH**
While the best test for iodine is the 24 Hour Urinary Load Test, the Iodine Patch Test can in some cases screen for a gross iodine deficiency.

- **To do a patch test,** use a q-tip [cotton earbud] to apply a 2-inch thick square of 2% Iodine Tincture on the inner forearm.
- **Patient should avoid soaking in hot tubs or baths for 24 hours as the chlorine or bromine in the water will cause the iodine patch to ‘wash’ off.**
- **Patient should monitor how many hours it takes for the patch to totally fade.**
Conclusion

- If there is a deficiency or need for iodine the slightly brown/yellow stain will fade in less than 24 hours.
- This indicates that there is not sufficient iodine to normalise thyroid secretions.
- The faster the iodine fades, the greater the deficiency can be assumed.


The Iodine Test Patch can certainly be used as a general guide for assessing iodine deficiency. Whilst many factors come into play and are causative factors that do not give a ‘true reading’, the iodine uptake through the skin will be sufficient without overloading the system. If patient has an iodine sensitivity, first do a SMALL test on the forearm to test for sensitivity confirmation.

The most accurate test to determine an iodine deficiency is the 24 Hour Urinary Iodine Load Test. As these tests are not readily available throughout Africa, one can gain insight into general overview of iodine status of patient through the test patch.

24-Hour Urinary Iodine Load Test:
Have patient take a 50 mg tablet of iodine and collect urine for 24 hours, then send it to a lab to be evaluated. If patient has iodine sensitivity from eating shellfish or lobster, do not do this test.

Clinical implications
As mentioned, the quicker the patch fades, the greater the deficiency can be assumed.
Implement the supplementation as 20 – 30 drops of liquid iodine (as potassium iodide) per day.
Begin slowly - breaking the dosages up into 3 or 4 doses daily.

Interfering factors
Patients may react to the topical application of iodine or they may present with symptoms of iodism (too much iodine) during iodine supplementation. The symptoms of iodism are tachycardia, skin irritation, thinning of secretions (watery eyes, nose and saliva), nervousness and headaches.

(see chart over page)
**IODINE – “THE UNIVERSAL MEDICINE”**

<table>
<thead>
<tr>
<th>5% Lugol’s Solution Dosage Chart</th>
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- 2 drops 5% Lugol’s Solution - contains 5mg iodine and 7.5mg iodide
  
  (5% Lugol’s solution contains 50 mg iodine and 75 mg iodide/ml;  
  above calculation based on 20 drops/ml)
- 1 drop SSKI (Super Saturated Potassium Iodide) – contains ~50mg iodide

- Make sure you are not allergic to Lugol’s solution (5%) or SSKI – rub a drop into back of forearm and leave for 24 hours to see if there is any reaction, as a test patch.
- For internal doses, always take Lugol’s or SSKI in 4-6 oz. of water/juice -preferably with a tsp. of apple cider vinegar for slight acidification;
- Don’t take iodine at the same time as Vitamin C - which will negate disinfectant effect of iodine;
  Take vitamin C at least 2 hours before or after taking Lugol’ solution.

**Antidotes for iodine overdose**

- Chocolate or cocoa - high in bromine which displaces iodine
- Vitamin C – take ¼ tsp. (~2.5g) in juice or water

**Chart refers to 5% Lugol’s Solution unless otherwise specified**

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For more information on Iodine – Universal Medicine – Minerals – Advanced Nutrition PDF

For more information on the correct dosage for your Health Imbalance contact your DBM Physician
# Juicing

*Juices for Healing*

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## The Benefits of Raw Juice

Virtually every health authority recommends that we get 6-8 servings of vegetables and fruits per day and very few of us actually get that. Juicing is an easy way to virtually guarantee that one will reach your daily target for vegetables, especially for those patients that are experiencing problems with digestion or appetite.

There are three main reasons why juicing should be incorporated into the Health Plan you set up for the patient:

- Juicing allows full absorption of all the nutrients from the vegetables/fruit especially important for the health compromised.
- It allows for a variety of nutrients to be provided to the patient, in a very efficient bio-available manner
- Allows for a wider variety of vegetables in the diet.

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For more information on Juicing – See NEW STARTS - Nutrition

## There are four types of Juice Therapy that DBM recommends:

1. Juices that support organs during the DBM Cleanse Programs – Supportive Juices
2. Juices as adjunct therapy on a daily basis for general health – with good nutrition
3. Juice and Raw Food Therapy for a general detox – Detox Juicing
4. Raw Juice Therapy – extended period – for chronic disease
All of these programs need to be supervised to ensure patient is remaining sufficiently hydrated throughout the process and that they are taking in sufficient juices and where appropriate food, to provide their daily nutritional needs.

**Note: A Juice Fast / Juice Therapy is different to a Dry Fast / Total Fast.**

**DBM PROTOCOL – ADJUNCT THERAPY - JUICE THERAPY #1 - SUPPORTIVE JUICES**

Remember All Fruit and Vegetables Used Must Be Pre-Washed in Hydrogen Peroxide Rinse, Before Using – Whether Its Soup, Juices, Eaten Whole or in Smoothies.

Juices are an important part of the Gut Repair Protocol as well as for on-going health. For those patients not able to eat, providing small amounts of juices [30cc at a time even] on an ongoing basis throughout the day will ensure a good nutrient supply.

For information on Gut Healing see GUT REPAIR PROTOCOLS

See Juicing – NEW STARTS - Nutrition
SUPPORTIVE JUICES DURING ORGAN CLEANSING

Juice Recipe #1: Supportive - Daily Green Juice - This juice forms part of your daily Program.

Ingredients
- 1cm slice of ginger root
- 1cm slice of lemon
- ¼ green pepper
- ¼ small red cabbage
- ½ beetroot
- 1 handful kale (when available)
- 1 handful spinach, OR red leaf lettuce
- 1 handful water cress, OR parsley
- 1 carrot
- 1 granny smith apple

Special Equipment
Masticating juicer (preferred), centrifugal juicer or juice press

Instructions
Juice all ingredients and enjoy.
Be sure to wash non-organic fruit and vegetables well in water that contains a spoonful of hydrogen peroxide 35% food grade to rid it of the pesticides and chemicals.
Juice made in a centrifugal or masticating juicer should be enjoyed within 15 minutes – otherwise follow storing instructions in Section 37 of this book.

Juice Recipe #2: Juice for Kidney Cleanse - Supportive – Watermelon Flush

Ingredients
- 2 cups watermelon
- 1 lime peeled

Special Equipment
Masticating juicer (preferred), centrifugal juicer or juice press

Directions
Juice all ingredients and enjoy.
Be sure to wash non-organic fruit and vegetables well in water that contains a spoonful of hydrogen peroxide 35% food grade to rid it of the pesticides and chemicals.
Juice made in a centrifugal or masticating juicer should be enjoyed within 15 minutes – otherwise follow storing instructions in Juicing section of NEW STARTS – Nutrition - Juicing

Additional Supportive Juices #3 & 4 – Select One combination.
Clean and prepare all ingredients – Juice and Serve.
- 2 carrots + 1 large cucumber
- 1 cup Radish + 1 cup Purple Cabbage + 1 rib Celery

Juice Recipe #5: Sauerkraut Gut Healing Juice Combination
Use this juice combination for chronic gut irregularities.

Ingredients
- 1 teaspoon cold pressed extra-virgin olive oil, OR cold pressed hemp seed oil
- ½ inch slice of ginger root or to taste
- ¼ red cabbage
- 1 granny smith apple
- ½ cup sauerkraut
**Special Equipment**  
Masticating juicer (preferred), centrifugal juicer or juice press.

**Instructions**  
Juice all ingredients.  
Add cold pressed olive or hemp seed oil and stir well.  
* Store juice in a glass bottle and refrigerate, consume within 12 hours.  
* This recipe is repeated in the Gut Healing Protocol Section

**DBM PROTOCOL – ADJUNCT THERAPY - JUICE THERAPY #2 – GENERAL HEALTH / FOOD COMBINATION**

**Juice Recipe #1 & 2: Juice for Inflammation**

Aches, Pains and Inflammation. Beyond adding amazing colour, beets offer incredible benefits including combating inflammation, aiding detoxification, and even giving your brain a boost – as well as the added bonus of supporting the immune system. Select one combination, clean and prepare ingredients appropriately, juice and serve.

- 1cm slice of ginger root, peeled + 1 apple, unpeeled and seeds removed + 1 small beet, peeled + 1 large cucumber, unpeeled + 1 small lemon, peeled + 3-4 Kale leaves
- 2-3 slices of cucumber (including core and rind where possible) + 1 handful of spinach/kale + 1 small bunch of parsley + Comfrey tea (sufficient to make 1 cup)

**Juice Recipe #3: Juice for Healthy Skin – choose one combination**

For Healthy Skin - Here is a delicious juice that promotes healthy glowing skin. The cucumber is hydrating and contains silica, known for its amazing skin-toning benefits.

**Instruction**

- ½ lemon + ½ mango + 1 cucumber + 1 cup watercress / rocket / spinach + Handful cilantro (coriander)
- 1cm ginger + 6 carrots + ½ green bell pepper
- ½ handful spinach / Swiss chard + ½ green bell pepper + 1 handful Kale
- ½ a raw beetroot + 6 carrots
- 4 carrots + ¾ melon
- 1 apple + 5 carrots

**Special Equipment**  
Masticating juicer (preferred), centrifugal juicer or juice press

**Instructions**

- Juice all ingredients and enjoy.
- Be sure to wash non-organic fruit and vegetables well in water that contains a spoonful of hydrogen peroxide 35% food grade to rid it of the pesticides and chemicals.
- Juice made in a centrifugal or masticating juicer should be enjoyed within 15 minutes – otherwise follow storing instructions in Section 37 of this book.

**Juice Recipe #4: Juice to Support the Removal of Excess Uric Acid – Combo Juices**

Specific Juices to Support the removal of excess uric acid. Beets and bitter gourds are amazing liver and kidney cleansers. They detoxify the liver and kidneys, improve their functions and protect them from excessive alcohol consumption and other toxins. Pineapple, papaya and cucumber are excellent anti-inflammatory foods which should be included in your diet if you’re suffering from gout.

**Some Suggested Combos (measurement for one portion): selection one combination for Uric Acid Reduction:**

**Ingredients**

2 carrots + 2 green apples + 2 ribs celery
2 carrots + 2 green apples + 3-4 leaves kale + ¼ lemon slice + thumb-size ginger
2 carrots + 2 ribs celery + 2 leaves cabbage + thumb-size ginger
2 green apples + 2 ribs celery + 1 small cucumber + ¼ lemon slice
3 green apples + 1 small cucumber + 1 small bitter gourd + ¼ lemon slice
2 carrots + 1 small cucumber + 1 medium-sized beetroot + ¼ lemon slice
1 medium-sized beetroot + ½ small pineapple + 1 small cucumber + ½ lemon slice
4 ribs of celery + ½ small pineapple + thumb-size ginger
1 oz. wheatgrass juice neat with a squeeze of lemon Lemongrass-ginger tea

Instructions:
Wash your produce and run all ingredients through a juicer.

Directions
Juice all ingredients and enjoy.
Be sure to wash non–organic fruit and vegetables well in water that contains a spoonful of hydrogen peroxide 35% food grade to rid it of the pesticides and chemicals.
Juice made in a centrifugal or masticating juicer should be enjoyed within 15 minutes.

Juice Recipe #5: Juice - Fibroids
Ingredients
1 piece of fresh, raw beet
1 teaspoon of honey
1 clove of fresh garlic
2-3 large organic carrots

Instructions:
Pass carrots through the juicer – make at least 125ml of carrot juice – add more carrots if needed.
Juice the beet, and garlic add to the carrot juice and mix well.
Add the honey and drink the juice daily for 6 days – rest on the 7th day.
Continue juicing until advised otherwise by practitioner.

Juice Recipe #6: Juice - Ovarian Cysts
Ingredients
1 piece of fresh, raw beet
2 large organic carrots
1 green apple
Juice of ½ lemon

Instructions:
Juice all ingredients together.
Sip immediately

Additional Juices - choose one combination – Prepare ingredients appropriately, juice and serve.
- 1 medium English cucumber + 1 stalk of celery + 1 bunch of mint + 1 bunch of parsley + 1 lemon
- Cucumber + coriander (cilantro) + 2.5cm fresh turmeric root (if available or add a level teaspoon turmeric powder) + 1 stalk celery + 1 lemon
- Cucumber + 1 medium baby marrow + mint + 1 apple
- 2 green apples + 6-8 ribs of celery + a bunch of spinach + ½ lemon
- 2 green apples + 1 bulb of fennel + 6-8 leaves of kale or collard greens + ¼ lemon + 1-inch ginger root
- 1 bulb of fennel + 3 bulbs of lemongrass + 6 ribs of celery + ½ lemon
- 1 medium English cucumber + 1 stalk of celery + 1 small beet + 1 small carrot + ½ - 1 lemon (to taste)
- 2 kale leaves + 3 romaine lettuce leaves + 2 handfuls parsley + 1/2 bunch (or use spinach) + 1 cucumber + 1/2 fennel bulb (or 1/2 of top portion, i.e. the fronds/stems) + 3 stalks celery + 2 green apples + 1 lemon, peeled (yellow skin removed) OR 1 lime + 2cm piece of fresh ginger root (more if you choose)
Juice #7: Home-Made V8 Juice – General Health and Anti-Inflammatory

**Ingredients**
- 6 medium sized carrots
- 1 small beet (washed thoroughly)
- 3 large tomatoes
- 1 red bell pepper
- A bag of baby spinach
- 1 green bell pepper
- ¼ slice of sweet onion
- 3 stalks of celery
- ¼ head of fresh cabbage
- Half clove garlic
- Kale leaves, chili pepper and salt to taste

**Instructions**
- Once all the ingredients are prepared, we can now place them all in the juicer before adding the salt to add a little taste.
- For additional health benefits add some Golden Paste *(See Curcuma longa)*

**DBM PROTOCOL – ADJUNCT TREATMENT – JUICE THERAPY #3 - FAST & RAW FOOD DIET – 21 DAYS - DETOX**

**ONE COMPLETE CYCLE = 8 DAYS JUICE FAST + 3 DAYS REST + 10 DAYS ¾ RAW FOOD DIET = 21 DAYS**

**PATIENT INFORMATION**

**The Juice Fast:**
For the first two days, your body adapts and utilises that which is still in your digestive tract and then moves on to the reserves from the liver. The actual fast begins only on the fifth day in reality. Fasting is not recommended for pregnant women or children. The thought of “fasting” conjures up thoughts of starving oneself – but it is easier than one would think, especially as we are not at this stage advocating a total fast.

**Juices**
A balanced blend of certain fruits and vegetables is a highly digestible source of raw food. So the rule here is to drink juice when one is thirsty and to drink juice when one is hungry.

It is acceptable to dilute juices 50/50 but we do not recommend it unless there is a source of clean spring/borehole water readily available. To ensure that your liquid intake is sufficient aim for one glass of clean water to one glass of juice EACH time you drink a juice.

When making juices – some people can cope with the taste of pure veg juice – adding a fruit base often makes the juices more palatable. In fact, it is our recommendation that you use either apple or pear juice as the foundation to your vegetable juices. It just lightens the flavour a bit. Experiment with flavours and tastes until you find some combinations that suit your palate. Alternatively, and additionally (optional unless stated), add some lemon or lime juice.

There are ways that you can juice in bulk and store for during the course of the day – the problem with this is that for TODAY every juice one drinks will be the same, unless one juices two or three different juices and store them as follows:
- Purchase several Sigg flasks to store your juice in the ‘fridge for the day.
- To prepare your flask – rinse well before using.
• Fill the flask with about 2cm of clean water and place flask in the freezer the night before you make the juices. The ice keeps the enzyme activity alive for longer and helps to keep the taste intact.
• Prepare your juices as per the recipes provided and remove the flask from freezer – pour the excess juice into flasks, seal immediately and place in the ‘fridge, ready for drinking as you feel the need.
• Fill the flask to the brim to reduce air gaps – this reduces the speed of oxidation.
• If you are going to store it in the fridge for the day always add a bit of lime or lemon to the mix to help preserve the nutrients better.
• The length of time you can store your juice in these Sigg flasks depends entirely upon the juice extractor. If you have used a centrifugal juicer the maximum time you can store your juices are 5-7 hours in the fridge in these flasks without significantly affecting the taste or the nutritional content. If you are using a masticating juicer, one can store the juices for up to 48-hours in a flask in the fridge.
• This is the BEST was to ensure that your juice does not oxidise and that valuable enzymes are not lost – not to mention time-saving.

Do not fool yourself into thinking that fruit and vegetables juices purchased from your local supermarket will suffice. It will not – read the ingredients to verify for yourself exactly what the ingredients are and you will understand our stance on this. Unless the person makes the juice directly before your eyes and you drink it immediately to avoid oxidation – there is no alternative for the patient but to make their own juices.

Do not use cheap plastic water bottles – unless they are BPA free and are not opaque.

What to Juice:
Vegetables such as carrots, cucumbers, beetroot, tomato, baby marrows (zucchini), lettuce, spinach, kale, sprouts, celery, cabbage, bok choy (Chinese cabbage) are all suitable for juicing.
Fruit such as apple, grape, pear, lemons, pineapple, strawberry, citrus fruits and melon juices are delicious. For certain health imbalances we advocate some potato juice with lemon / citrus fruit as a blend – but for the purposes of this fast, we do not recommend it.

The best fruit and veg to use obviously are organic, freshly picked and should be non-waxed or sprayed fruit – ESPECIALLY in the case of fruits such as strawberries and veg such as cucumbers.

Although the majority of the nutrients lie just below the skin, if you are not sure of your veg and fruit sources, then wash and peel them THINLY, or if possible juice them with the skin on. It would be unwise to put more toxins into your system when you are trying to remove them.

Vegetables such as carrots (underground vegetables) require a good rinse and a scrub with a soft nylon vegetable brush. It is however our recommendation that you peel beetroots as the skin can often be slightly bitter. A quick way to handle the peeling of bulk beets is to steep them in boiling hot water for about 20 seconds and then peel – the skin comes off much easier.

If you have time and can make your juices “on demand” then that is the BEST way to drink them and they taste immensely better that way. However, using the method with the flask you can still preserve the nutrients and enzymes – BUT – if you do not chill the juice IMMEDIATELY upon juicing it and putting it into an airtight light-restricting container such as the SIGG flask, you will lose valuable enzymes and nutrients.

How Much Juice to Drink?
For the eight-day Juice Fast – drink as MUCH juice as your body requires. There is no danger of “over-eating” at all.
As a guide, along with the clean, fresh water you will be drinking, four to five 250ml glasses of juice (that are include a small amount of fruit – the ratio should be 1 apple or 1 pear per veg juice – not more.

If you wish to continue with juicing AFTER the initial fast – please feel free to include as many healthy juices as you choose into your daily regime of eating. The best time to have a juice is directly before a meal, when the stomach is empty or between meals. Absorption of all the beneficial enzymes and nutrients is at its highest then.

If you find yourself urinating more and having more bowel movements as your day progresses – understand that your body is removing toxins and is responding to the nutrients it is being fed. Our bodies were designed to be “self-cleaning” if we provide the correct nutrition. You might experience more excretory symptoms as a result of the juice fast.

**What Juices Are Best For You:**
As mentioned earlier, experiment with some of the recipes below. Try them all first before altering the flavours.

Feel free to use fresh herbs such as mint, basil etc and of course NEVER EVER add sugar or sugar alternatives or salt. A dash of paprika or turmeric is acceptable to “spice” up your juices.

- **CARROT** juice is tasty and popular, and two glasses of carrot juice per day are highly beneficial. Carrot juice is very high in vitamin A. The vitamin A in carrots is actually "provitamin A" or carotene. Carotene is completely non-toxic, no matter how much you consume. The worst thing that can happen if you drink a huge amount of carrot juice is that you will turn orange. Excess carotene is stored in your skin until your body wants it and then turns it into active vitamin A as needed. An abundance of carotene in your skin makes you look orange. This condition is called "carotenosis" and is harmless. The coloration disappears after you limit your orange veggies (carrots, butternut/yams) for a week or two. Naturally, you don't have to turn orange to enjoy the goodness of carrot juice. You can drink just enough to feel great ...without looking like a pumpkin!

- **CELERY** juice is very tasty, but a bit high in sodium. Use small amounts of this juice to flavour the others. Juice celery leaves and all for the most benefit.

- **CUCUMBER** juice is remarkably tasty and tastes rather different to eating slices of cucumber itself. Perhaps you will find that the taste reminds you of watermelon. Peel cucumbers before juicing to avoid the waxes applied to their skins to enhance their shelf life in supermarkets, unless your cucumbers come from an organic source.

- **ROMAINE LETTUCE** or **BEAN SPROUTS** will make an especially nutritious juice with a taste that is well worth acquiring. This "green drink" is loaded with minerals and chlorophyll.

- **ZUCCHINI SQUASH** juiced up tastes better than you'd ever imagine. Peel first, and enjoy. You may well be the first on your block to be a zucchini-juice fan. It also keeps the juicer from clogging on higher-fibre vegetables.

- **BEET** juice is, traditionally, a blood-builder. In days past, herbalists looked at the blood-red beet as a tonic more so because it worked, rather than any colour similarity. Beets must be peeled before juicing. Beet skins are very bitter. The beets, on the other hand, are quite sweet and make great juice. Remember, beet juice will colour your bowel movements.

- **CABBAGE** juice was used by Garnett Cheney, M.D. to cure bleeding peptic ulcers back in the 1950's. (Cheney, G. (1952) "Vitamin U therapy of peptic ulcer." California Medicine, 77:4, 248-252) Dr. Cheney's patients drank a quart of cabbage juice a day and were cured in less than half the usual time... with no drugs whatsoever. Since then, cabbage juice has successfully been used for a variety of gastrointestinal illnesses. Colitis, spastic colon, indigestion, chronic constipation, certain forms of rectal bleeding and other conditions seem to respond well to the nutrients in cabbage juice. Dr. Cheney called its healing factor "Vitamin U" (for unknown). More recently, the American Cancer Society has urged people to eat more of the cabbage/broccoli family of vegetables because of their protective effects against cancer. Cruciferous vegetables.

- **TOMATOES** are easily juiced. Do not juice the leaves, vines, or green tomatoes. Only the red, ripened fruit is good for you.
A TIMETABLE - INFORMATION FOR PATIENTS

Day 1 – Day 8 (up until the last meal in the evening) – Juice fast.

Day 9 – Day 11 – light meals such as fruit, fruit salads, vegetable soups, soft goat’s cheeses or feta and other light foods are appropriate. A good rule of thumb here is to eat only half as much as you want to at any one time, but eat twice as often, served onto a side plate.

Day 12 – Day 21 (up until the last meal in the evening) – 10 days – eat 75% raw food diet, you can eat all you want as long as three-quarters of it is uncooked. For the uncooked part of the diet, eat fresh, raw vegetables and fruits. Don’t forget nuts, too. If they are raw, they count. Begin each meal with a large salad, perhaps a fruit salad for breakfast. Then, when you’ve finished the salad, have whatever you want within reason. The 25% cooked portion could include whole grain breads (stone ground flour and preferably home-made or made from a source that you KNOW has not included soy flour into the mix), brown rice, cooked beans, lentils, cooked vegetables including potatoes, sweet potatoes, yams, squash and other foods that you like.

Meat is not recommended in ANY of DBM programs, nor is chicken, turkey, or fish. Eggs in moderation, goat or sheep cheese and milks, nuts and especially beans and freshly grown sprouts – all good sources of protein.

JUICE FOR JUICE THERAPY #3 – JUICE AND FOOD COMBINATION

Select any one combination – juice all fruits with skin on where possible. Make sure fruit is organic and unwaxed and that they are cleaned and prepared appropriately before juicing. Adding ice cools the juice down and slows down oxidation whilst sipping – ensure clean ice from spring/borehole water is used.

- 2 small apples + ½ beetroot + 2 small carrots + 1 small parsnip + ¼ lemon + ice
- 1/3 medium sized pineapple (with skin on) + 1 handful of broccoli + Handful of spinach + Handful of watercress + ¼ baby marrow / courgette / zucchini + ¼ cucumber + ¼ lime with skin on + 1cm of fresh ginger + Ice
- 2 medium carrots + 1 parsnip + 1 apple + ½ baby marrow + Dash of turmeric + Fresh herb of choice – such as parsley, basil + ice
- 2 apples + ¼ pineapple + Handful watercress + Handful of spinach or kale + 2 small florets of broccoli + ¼ lime + Dash of turmeric + Ice
- 1/3 pineapple + 1 stick celery + ¼ cucumber + Handful of spinach / kale + Dash of turmeric + 1cm fresh ginger + Ice
- 2 handfulls baby spinach + ¼ pineapple + ¼ cucumber + 1 medium carrot + ½ lemon – PEELED + Dash of turmeric + 1cm of fresh ginger (optional) to taste + Ice
- 3 apples + 1 stick of celery + ¼ courgette + ¼ cucumber + ¼ yellow pepper + ¼ lemon (peeled) + 1cm ginger with skin on + Ice
- 2 apples + ½ red pepper deseeded + ½ yellow pepper deseeded + 1 small raw beetroot + ½ lemon (peeled) + 1cm ginger with skin on + Ice

Something light for during the day (if you feel like something sweeter – ONE a day only)
2 firm pears + ¼ pineapple + 1cm ginger + Ice

2 carrots + ¼ pineapple + ¼ lemon (unwaxed with skin on) + Ice

For More Information on Juicing – See NEW STARTS - Nutrition
Juice Therapy, Raw

**DBM PROTOCOL – ADJUNCT TREATMENT – JUICE THERAPY #4**
The juice therapies described in “Juicing” are more in line with detox programs, Raw Juice Therapy is aimed at specific health imbalances.

Raw juice therapy is a method of treatment of disease through an exclusive diet of juices of fruits and vegetables. It is also known as juice fasting. It is the most effective way to restore health and rejuvenate the body.

During raw juice therapy, the eliminative and cleansing capacity of the organs of elimination, namely lungs, liver, kidneys and the skin, is greatly increased and masses of accumulated metabolic waste and toxins are quickly eliminated. It affords a physiological rest to the digestive and assimilative organs. After the juice fasting or raw juice therapy, the digestion of food and the utilisation of nutrients is vastly improved.

An exclusive diet of raw juices of fruits and vegetables results in much faster recovery from diseases and more effective cleansing and regeneration of the tissues than the fasting on pure water.

**Dr. Ragnar Berg, a world-renowned authority on nutrition and biochemistry observes:**
"During fasting the body burns up and excretes huge amounts of accumulated wastes. We can help this cleansing process by drinking alkaline juices instead of water while fasting. I have supervised many fasts and made extensive examinations and tests of fasting patients, and I am convinced that drinking alkali-forming fruit and vegetable juices, instead of water, during fasting will increase the healing effect of fasting. Elimination of uric acid and other inorganic acids will be accelerated. And sugars in juices will strengthen the heart. Juice fasting is, therefore, the best form of fasting."
As juices are extracted from plants and fruits, they process definite medicinal properties. Specific juices are beneficial in specific conditions. Besides specific medicinal virtues, raw fruit and vegetable juices have an extraordinary revitalising and rejuvenative effect on all the organs, glands and functions of the body.

**Favourable Effects**
The favourable effect of raw juices in the treatment of disease is attributed to the following facts:

Raw juices of fruits and vegetables are extremely rich in vitamins, minerals, trace elements, enzymes and natural sugars. They exercise beneficial effect in normalising all the body functions. They supply needed elements for the body’s own healing activity and cell regeneration, thereby speeding the recovery.

- The juices extracted from raw fruits and vegetables require no digestion and almost all their vital nutrients are assimilated directly in the bloodstream.
- Raw juices are extremely rich in alkaline elements. This is highly beneficial in normalising acid-alkaline balance in the blood and tissues as there is over-acidity in most conditions of ill-health.
- Generous amounts of easily assimilable organic minerals in raw juices especially calcium,
- potassium and silicon help in restoring biochemical and mineral balance in the tissues and cells, thereby preventing premature ageing of cells and disease.
- Raw juices contain certain natural medicines, vegetal hormones and antibiotics. For instance, string beans are said to contain insulin-like substance. Certain hormones needed by the pancreas to produce insulin are present in cucumber and onion juices.
- Fresh juices of garlic, onions, radish and tomatoes contain antibiotic substances.

**Precautions**
Certain precautions are, however, necessary in adopting an exclusive diet of raw juices.

- All juices should be made fresh immediately before drinking. Canned and frozen juices should not be used. It will be advisable that one should have one’s own juicer for extracting fresh juices.
- Only fresh ripe fruits and vegetables, preferably organically grown, should be used for extraction of juices. Thirdly, only as much juice as needed for immediate consumption should be extracted. Raw juices oxidise rapidly and lose their medicinal value in storage, even under refrigeration.
- The quality of the juices has a distinct bearing on the results obtained. In case of incomplete extraction of juices, their effective power is proportionately reduced due to the absence of the vitamins and enzymes which are left behind in fibre and the pulp.
- If juices are too sweet they should be diluted in water on 50: 50 basis or mixed with other less sweet juices. This is especially important in some specific conditions such as diabetes, hypoglycaemia, arthritis and high blood pressure.

**Fruit and vegetable juices may be divided into six main types.**

These are:
1. Juices from sweet fruits such as prunes and grapes.
2. Juices from sub-acid fruits like apple, plum, pear, peach, apricot and cherry,
3. Juices from acid fruits like orange, lemon, grapefruit, strawberry and pineapple.
4. Juices from vegetable fruits, namely, tomato and cucumber.
5. Juices from green leafy vegetables like cabbage, celery, lettuce, spinach, parsley and watercress.
6. Juices from root vegetables like beetroot, carrot, onion, potato and radish.

Generally speaking, fruit juices stir up toxins and acids in the body, thereby stimulating the eliminative processes. Vegetable juices, on the other hand, soothe the jaded nerves and work in a much milder manner. They carry away toxic matter in a gentle way. Owing to their differing actions fruit and vegetable juices should not be used at the same time or mixed together.

It is desirable to use juices individually. In any case not more than three juices should be used in any one mixture.

**The following broad rules apply when using mixtures of juices:**
Juices from sweet fruits may be combined with juices of sub-acid fruits, but not with those of acid fruits, vegetable fruits or vegetables.

1. Juices from sub-acid fruits may be combined with juices of sweet fruits, or acid fruits, but not with other juices.
2. Juices from acid fruits may be combined with those of sub-acid fruits or vegetable fruits, but not with other juices.
3. Juices from vegetable fruits may be combined with those of acid fruits or of green leafy vegetables, but not with other juices.
4. Juices from green leafy vegetables may be combined with those of vegetable fruits or of the root vegetable, but not with other juices.
5. Juices from root vegetables may be combined with those of green leafy vegetables, but not with other juices.

A proper selection of juices in treating a particular ailment is very essential. Thus, for instance, juices of carrot, cucumber, cabbage and other vegetables are very valuable in asthma, arthritis and skin disease, but juices of orange and mosambi aggravate their symptoms by increasing the amount of mucus.
Treatment Of Diseases
Some common ailments and fruit and vegetable juices found beneficial in their treatment are mentioned below:

- **Acidity**: Grapes, orange, mosambi, carrot and spinach.
- **Acne**: Grapes, pear, plum, tomato, cucumber, carrot, potato and spinach.
- **Allergies**: Apricot, grapes, carrot, beet and spinach.
- **Arteriosclerosis**: Grapefruit, pineapple, lemon, celery, carrot, lettuce, and spinach.
- **Anaemia**: Apricot, prune, strawberry, red grape, beet, celery, carrot and spinach.
- **Arthritis**: Sour cherry, pineapple, sour apple, lemon, grapefruit, cucumber, beet, carrot, lettuce and spinach.
- **Asthma**: Apricot, lemon, pineapple, peach, carrot, radish and celery.
- **Bronchitis**: Apricot, lemon, pineapple, peach, tomato, carrot, onion and spinach.
- **Bladder Ailments**: Apple, apricot, lemon, cucumber, carrot, celery, parsley and watercress.
- **Colds**: Lemon, orange, grapefruit, pineapple, carrot, onion, celery and spinach.
- **Constipation**: Apple, pear, grapes, lemon, carrot, beet, spinach and watercress.
- **Colitis**: Apple, apricot, pear, peach, pineapple, papaya, carrot, beet, cucumber and spinach.
- **Diabetes**: Citrus fruits, carrot, celery, lettuce and spinach.
- **Diarrhoea**: Papaya, lemon, pineapple, carrot and celery.
- **Eczema**: Red grapes, carrot, spinach, cucumber and beet.
- **Epilepsy**: Red grapes, figs, carrot, celery and spinach.
- **Eye Disorders**: Apricot, tomato, carrot, celery, parsley and spinach.
- **Gout**: Red sour cherries, pineapple, tomato, cucumber, beet, carrot, celery and spinach.
- **Halitosis**: Apple, grapefruit, lemon, pineapple, tomato, carrot, celery and spinach.
- **Headache**: Grapes, lemon, carrot, lettuce and spinach.
- **Heart Disease**: Red grapes, lemon, cucumber, carrot, beet and spinach.
- **High blood pressure**: Grapes, orange, cucumber, carrot and beet.
- **Influenza**: Apricot, orange, lemon, grapefruit, pineapple, carrot, onion and spinach.
- **Insomnia**: Apple, grapes, lemon, lettuce, carrot and celery.
- **Jaundice**: Lemon, grapes, pear, carrot, celery, spinach, beet and cucumber.
- **Kidney Disorders**: Apple, orange, lemon, cucumber, cucumber, carrot, celery, parsley and beet.
- **Liver ailments**: Lemon, papaya, grapes, carrot, tomato, beet and cucumber.
- **Menstrual Disorders**: Grapes, prunes, cherry, spinach, lettuce turnips and beet.
- **Menopausal Symptoms**: Fruits and Vegetables in season.
- **Neuritis**: Orange, pineapple, apple, carrot and beet.
- **Obesity**: Lemon, grapefruit, orange, cherry, pineapple, papaya, tomato, beet, cabbage, lettuce, spinach and carrot.
- **Piles**: Lemon, orange, papaya, pineapple, carrot, spinach, turnip and watercress.
- **Prostate Troubles**: All fruit juices in season, carrot, asparagus, lettuce and spinach.
- **Psoriasis**: Grapes, carrot, beet, and cucumber.
- **Rheumatism**: Grapes, orange, lemon, grapefruit, tomato, cucumber, beet, carrot and spinach.
- **Stomach Ulcers**: Apricot, grapes, cabbage and carrot.
- **Sinus Trouble**: Apricot, lemon, tomato, carrot, onion and radish.
- **Sore Throat**: Apricot, grapes, lemon, pineapple, prune, tomato, carrot and parsley.
- **Tonsillitis**: Apricot, lemon, orange, grapefruit, pineapple, carrot, spinach and radish.
- **Varicose Veins**: Grapes, orange, plum, tomato, beetroot carrot and watercress.
When on a raw juice therapy, the prescribed juice should be drunk every three hours. One can thus take juices five to six times a day. A glass of water mixed with lemon juice and 20 to 30 grams of honey may be taken first thing in the morning on arising. Thereafter, the prescribed juice may be taken at three-hourly intervals. The quantity of juice on each occasion may be 250ml on the first day. This quantity may be increased by 50 ml each succeeding day till one takes 600 ml on each occasion. The juice diet can be continued for 30 to 40 days without any ill-effects.

The patient should take adequate rest during the raw juice therapy. Raw juices act as a cleansing agent and start eliminating toxins and morbid matter from the system immediately. This often results in symptoms such as pain in the abdomen, diarrhoea, loss of weight, headache, fever, weakness, sleeplessness and bad breath. These reactions, which are part of the cleansing process, should not be suppressed by the use of drugs. They will cease when the body is able to expel all toxins.

After the raw juice therapy, the return to normal balanced diet should be gradual, and in stages. In the beginning, two juice meals may be replaced by milk and fruits. Then gradually juice meals may be substituted by a balanced-diet.

**Comment:** According to The Gerson Institute, the consumption of 13 x 8oz [236ml] glasses of juice daily provides the nutrition equivalent of 17lbs [7.7kg] of food per day.

**As an alternative to Juice Therapy – Consider also Fasting:**
Therapeutic, Intermittent and Water Fasting

**For More Information on Juicing – See NEW STARTS - Nutrition**
Kalonji Oil
Kalonji Oil (From Black Onion Seed) Nigella sativa

Whilst one is able to make use of Kalonji seeds, it’s important to note that these seeds need to have been roasted before use, in order to release the beneficial oils. Once Roasted, take a ¼ tsp ground onion seed on your tongue and swallow with some water, first thing in the morning. This is to help the body with the repair of the kidneys, production of new healthy blood, better oxygen and heart function, thus better energy, the better circulation leads to drainage of excess water.

Kalonji is an herbal/bush which grows to about 500mm high producing blue flowers and black seeds from which the oil is extracted. The seeds are triangular in shape and have a pungent smell.

Chemical Composition - seeds contain 1.5% volatile oil, while 37.5% Non-volatile oil. In addition to this Albumen, Sugar, Organic acids, Glucoside Melanthin Metarbin and bitter substances are also found. The Glucoside is toxic in nature; hence the use of Kalonji in large doses and prolonged use can be harmful.

It has been reported that in 1996 the U.S. Food and Drug Administration (FDA) granted a patent for drug based on extracts of "Nigella Sativa," for the use as an immune system stimulant and for treating cancer, preventing the side effects of anticancer chemotherapy, and for increasing the immune system functions in humans. However, a search of the FDA website failed to find any evidence of this and all applications for Kalonji seeds and preparations containing Kalonji have been rejected due to poor presentation, i.e. containing dirt and unfit for human use, but don't let this deter you.
Kalonji is seen as a *cure-all* and the uses described below have no known scientific validation, but are widely corroborated by natural medicine practitioners.

Almost all the essential beneficial components are present in Kalonji

**Sugars:**
Single molecule easily digestible sugars (monosaccharides) are present that include glucose, xylose arabinose etc.
Non-starch multiple molecule sugars that act as fibre and roughage and are considered good sugars as they relieve constipation are also present.

**Fatty Acids:**
The Essential fatty acids (that are required by the body but not formed in the body itself) linoleic and linolenic acids are found in black seeds/Kalonji

**Amino Acids (protein components):**
Almost up to 15 amino acids are found in Kalonji
Interesting fact is 8 out of total 9 Essential amino acids (required by the body to build up tissue but not present in the body itself) is found in them
These contain Arginine amino acid especially required for infant growth.

**Vitamins and Minerals:**
Sodium, iron, calcium and potassium required by our body enzymes these minerals act as co-factor (help enzymes to function). Vitamin A that is not only good for skin but is the vitamin when sufficient in amount in body act as anti-cancer agent is also present in Kalonji.
Main Effects of Kalonji:

Anti-Allergic:
People more prone to allergies like those with asthma (breathing problem) of allergic type are seen to benefit from Kalonji oil due to its volatile effect it just decreases the increases reactivity of air spaces to allergen.

Strengthening of Defence System of Body:
Many researches has been done on the effect of Kalonji on defence system of body and it has been seen that T-cells of the body are more activated against incoming and chronic infections if at least 1 gram of it is taken twice daily for four weeks... but these have been done on people with already low defence mechanisms... to see the boost in immunity.

Anti-Inflammatory Action:
Even local massage of Kalonji oil is seen to sooth the arthritis (painful joints) ... It has been shown that oil of Kalonji has anti-oxidant and anti – inflammatory action as it inhibits certain components production involved in inflammatory reactions.

Promotion of Lactation/Milk Production in Nursing Females:
Due to its fatty acid content and almost up to 21% lipid portion its effect to increase milk production in lactating females is seen.

A combination of vinegar and Kalonji, Kalonji and honey, Kalonji with warm water has been beneficial for most of the common problems... here I will mention just a few common ones. On average about ten drops is sufficient for most ailments.

- If taken with plenty of water - good to relieve constipation and early stage of haemorrhoids (piles)
- Diabetes: with any of hot drinks like kahwa (traditional green tea from Afghanistan) taken at night and early morning seeds of Kalonji are beneficial
- The oil of Kalonji is effective in Alopecia
- The oil of the seeds is also effective in Earache
- Stomach related issues: Kalonji oil has been shown to be beneficial for stomach and intestines problems and to treat parasitic infestations
- Asthma: with lukewarm water Kalonji oil or seeds be taken to prevent acute attack of allergic asthma. Decreased haemoglobin: Kalonji seeds have iron and good to improve haemoglobin
- Gum and Skin diseases: it’s equally beneficial for certain gum diseases if its oil is applied to swollen gums and topical skin preparations...

The list is endless - Kalonji powder, Kalonji seeds, Kalonji oil and even steam inhalation of Kalonji products is equally good for variety of things.

Kalonji in Ayurveda
Kalonji oil is a very good Ayurvedic medicine and Ayurveda appreciates its many qualities and bitter, warming, stimulant nature. It is used in wide variety of diseases like haemorrhoids, hepatitis, fever, diarrhoea, cough, and tapeworm, to mention only a few of them. Nigella Sativa works in a different way, which makes it suitable for diseases of the immune system itself, e.g. allergies; TB; cancer; aids etc.

The oil of nigella sativa is so beneficial due to its content of over a hundred components such as aromatic oils, trace elements, vitamins and enzymes. It contains 58% of essential fatty acids including omega 6 and omega 3. These are necessary for the forming of Prostaglandin E1 which balances and strengthens the immune system giving it the power to prevent infections and allergies and control chronic illnesses.

Healthy cells are protected from viruses thus inhibiting tumours. Blackseed oil also contains about 0.5 - 1.5% volatile oils including nigellone and thymochinone which are responsible for its anti-histamine, anti-oxidant, anti-infective and broncho-dilating effect.
As oil it is digested through the lymphatics consequently purifying and unblocking the lymphatic system. Recently independent clinical studies published in the archives of AIDS also established some astonishing effects of blackseed on the defence system by improving the ratio between helper t-cells and suppresser t-cells by a significant amount while also enhancing the natural killer cell activity.

**DBM PROTOCOL – ADJUNCT TREATMENT – KOLONJI SEED**

**Dosage Requirements for Black Cumin / Black Seed Oil**

Black seed was originally used to cure migraines and headaches thousands of years ago. As the word spread of its healing abilities, the black seed became known as the miracle cure.

There is much information on what Prophet Mohammad (PBUH) said, but little on how use the seeds properly. **Narrated Abu Huraira:** I heard Allah’s beloved Prophet (PBUH) saying ”There is healing in Black Seed for all diseases except death.”

A few things to keep in mind. **Using more black seed does not heal the person faster.** Beware of companies selling the blessed seed that suggest large quantities and if using the whole seeds, they need to be heated first.

**How to Prepare the Seeds**

The seeds have a harsh taste and will burn the stomach if the seeds are not heated first. Place the seeds on low heat and stir them every few minutes. Taste the seeds to see when the flavour becomes very bland. After the tartness is removed, take the pan from the heat. Grind what is needed in a coffee grinder and place in vegetarian capsules. Alternatively, add them to a tablespoon of goat’s yogurt and swallow. A bit of honey may be added for taste if desired.

**Cancers and Tumours**

Take 1 tablespoon of the oil mixed with one teaspoon of raw honey ½ hour before breakfast. This is a very simple protocol.

**Cardiovascular Problems**

Take ½ teaspoon of the oil mixed with hot water daily. Drink this first thing in the morning.

**Cystic Fibrosis**

Massage the chest with the black seed oil. Drink one teaspoon of the oil mixed with honey, three times a day.

**Diabetes**

Use the black seed oil mixed with raw honey twice a day. A change in diet is a must with little carbohydrates and no sugar.

**Diarrhoea**

Mix one teaspoon of the black seed oil with a cup of yogurt and drink twice a day.

**Dry Cough**

1/2 teaspoon of the oil mixed with coffee twice a day. Rub the oil on your back and chest.

**Earache**

Take one teaspoon of the black seeds that have been heated and smash. Add a few drops of olive oil to the black seeds and mix well. Place 7 drops into a syringe and place in the ear morning and evening until well.

**Flu and Colds**
Take one teaspoon of black seed oil with honey in the morning before eating. Also, place a few drops in each nostril for nasal congestion.

**Gallstones and Liver Stones**
Place a large spoon of black seeds mixed with honey in a glass, add in some hot water. Finally add in one teaspoon of oil. Drink this mixture daily, first thing in the morning.

**Gas**
Take one teaspoon of the black seeds mixed with one teaspoon of honey before breakfast.

**General Health and Well Being**
Take one spoon of honey and one spoon of black seeds mixed every day or 1/2 spoon of the oil mixed with honey before your breakfast.

**Headaches and Migraines**
Take the black seed oil and rub on the temples. Place a few drops in the nostrils and also place some oil on top of the head. Eat some black seeds and honey, two times a day.

**Hypertension or High Blood Pressure**
Take one half teaspoon of the oil each day mixed in some hot water. Eat plenty of garlic and get lots of sunshine.

**Increase the Flow of Milk in Breast Feeding**
Mix two tablespoons of ground black seeds and two tablespoons of honey together. Add in 1/2 teaspoon of the black seed oil and eat this daily.

**Immune System**
Take one teaspoon of the black seed oil every day.

**Memory**
Take 1/2 teaspoon of black seed and 1/2 teaspoon of honey three times a day.

**Stomach Pain**
Take one big spoon of black seeds mixed with honey. Drink some peppermint tea, then drink the water of boiled rice if hungry.

**Toothache and gum infections**
Place some black seeds in a cup of vinegar and bring to boil. When the vinegar has cooled to a warm touch, rinse the mouth with this mixture.

Substitute ground seed for oil (as an alternative) at a ratio of 2½ teaspoons to one teaspoon of the oil. As always be careful not to take a large amount of black seeds as it can be toxic in amounts exceeding 25 grams. Follow the recommended dosage and always use the best quality seeds you can find. The most expensive, does not mean the best seeds. Nor does the cheapest seeds mean they are the worse.
The kidneys are among our most vital organs, and they help process everything you put into your system (food, alcohol, medications, etc.).

They have many functions, including:
- Filtering waste out of the blood each day
- Regulating the body's salt, potassium and acid content
- Removing of drugs from the body
- Balancing the body's fluids
- Releasing hormones that regulate blood pressure
- Producing an active form of vitamin D that promotes strong, healthy bones
- Controlling the production of red blood cells

In other words, they keep your body healthy and it's a good idea to help them and give them a rest from time to time.

Why do we need to cleanse our kidneys?
Cleansing the kidneys helps prevent kidney infection and kidney stone formation. It also boosts immunity and flushes away toxins.

A kidney cleanse can greatly help the kidneys maintain a proper water/mineral balance in the body, regulate blood pressure, and filter waste from the blood, so the kidneys can help to maintain health. Proper water intake is essential in not only a kidney cleanse but also as part of the daily diet. It is especially important to have proper water intake as part of the herbal kidney cleanse because many of the foods utilised listed are natural diuretics.

Everyone needs to cleanse their kidneys on a regular basis. The kidney cleanse is the most basic yet necessary cleanse needed and is really easy to do. If you understand what the kidneys control in the body you will understand why it needs to be kept working at optimal levels.

Kidneys control:
• Ears – hearing
• Gums
• Teeth
• Lymph (aids the immune system, delivers nutrients, oxygen and hormones, removes excess fluids, toxins, cancer cells and pathogens)
• Bones
• Fertility
• Energy
• Physical strength
• Power
• Fear
• Balance
• Nails
• Lungs
What are the signs of congested kidneys?
- Loss of hearing or ringing in the ears
- Low sex drive
- Infertility
- Thin skin
- Weak nails
- Foggy head
- Low back pain
- Low energy
- Oedema
- Inability to balance properly
- Feelings of fear
- Poor physical development
- Bladder issues
- Kidney stones

KIDNEY CLEANSING
When indicators suggest a kidney cleanse is in order, the most important thing to do is to drink adequate amounts of water (minimum of 8 cups or 2 L of filtered or healthy spring water daily) to flush out unwanted waste and improve circulation to the organ. Eight glasses of water a day will produce about 2 litres of urine and regular urination will help get rid of excess waste whilst the extra fluid will help to dilute any materials in your system that could potentially cause kidney stones.

Follow a low-protein diet as much as possible, especially avoiding animal protein of any kind, including milk, dairy products, eggs, poultry, fish, and seafood, as these foods are high in phosphorus and encourage calcium deposition. Also avoid rhubarb, chocolate, and all caffeinated products, as these foods increase calcium oxalate or uric acid in the kidneys and could elicit a kidney stone attack in susceptible people.

GUIDELINES FOR ANY CLEANSE
Most healthy people can follow these cleansing guidelines for a period of two or three weeks. Those with more serious health issues, such as cancer, diabetes, or congestive heart failure, should check with their natural health care practitioner before beginning a cleanse, as the herbs and diet involved could negate prescribed medications.

There are really no good tests to see if a kidney flush is complete, but most people can tell it's time to stop by the way they feel. Symptoms such as fatigue, headaches, abdominal discomforts, and skin problems should all be improved. Headaches and weakness may be early signs of detoxification and are not a reason to stop any cleanse. A cleanse should be stopped if more serious symptoms occur, such as vomiting, fever, or severe abdominal pain.

Kidney cleanses can be optimized by avoiding known food allergens. Cleansing is an on-going process and as simple as doing it one sip at a time. In fact, just drinking sufficient CLEAN water is the first step towards an effective flush. Water, however, only provides hydration. These kidney cleansing juices provide that extra boost the kidneys need to flush completely.

1. Cranberry Juice
Cranberry juice has been touted for years as supporter for the urinary tract. Research shows that cranberries can help fight against urinary tract infections, possibly by decreasing the adhesion of bacteria to the bladder and urethra. Cranberries may also be helpful for cleansing the kidneys of excess calcium oxalate, one of the main contributors to kidney stones. When purchasing cranberry juice, always choose varieties that are certified organic and free of added sugars, preservatives, or artificial flavours. 
* Dilute the cranberry juice – 2-parts water to 1-part juice.*
2. Beet Juice
Beets and beet juice contain betaine, a very beneficial phytochemical. It has antioxidant qualities and increases the acidity of urine. This can help clear calcium phosphate and struvite buildup from the kidneys. The removal of calcium in the kidneys not only promotes kidney function, but decreases the likelihood of kidney stones.

3. Lemon Juice
Naturally acidic, lemon juice has been shown to increase citrate levels in the urine, a factor that discourages kidney stones from forming.

4. Juice Cleanses
A juice cleanse combines the nutritional power of fruits and vegetables into one, easy-to-drink beverage. The juice of vegetables and fruits is loaded with antioxidants and nutrients necessary for facilitating the removal of toxins. This helps take the strain off the liver, colon, and kidneys. Vegetables like celery, cucumber, zucchini, lettuce, carrots, kale, and spinach are great for juicing. For fruits, try apples, peeled oranges, pears, and peaches.

5. Citrus Fruits and Juices
Eating citrus fruits or drinking juices made from citrus fruits can stop the formation of small kidney stones from developing into larger more painful ones. The citric acid found in citrus fruits, such as grapefruits, oranges, lemons and limes helps to break down the small stones, as the acid eats away at the calcium oxalate. Citrate, according to the University of Wisconsin found in lemons and limes is found in higher levels than other citrus fruits such as oranges and grapefruit. The citrate is responsible for down and preventing kidney stones.

6. The Benefits of Kale
The leafy, dark green leaves of kale are chock-full of nutrients, including calcium, which helps reduce your risk of developing kidney stones by keeping your body’s oxalate levels low. While kale can be eaten raw or cooked, it can also be added to your daily recommended juices.

Foods to Optimize Kidney Health
- algae products such as spirulina, chlorella, and blue green algae
- bananas
- celery
- citrus fruits
- cranberries
- cucumbers
- kale
- legumes and seeds
- papaya
- parsley
- potatoes
- pumpkin
- sprouts
- watercress
- watermelon

DBM PROTOCOL – ADJUNCT THERAPY - ADDITIONAL SUPPORT FOR KIDNEYS DURING CLEANSE – TEAS/TISANES

Kidney Cleansing Tea #1 - Celery Seed *Avoid in pregnancy as celery seed is a uterine stimulant.*
**Kidney Cleansing Tea #2 – Parsley Tea**

The supportive foods below form part of the cleanse. When initially one begins the Introduction program, they are required to follow a “liquid” diet. This relieves the strain on the gut whilst being cleansed and supports the organs at the same time. These foods are recommended to be included in the cleanse program at the appropriate place.

**DBM PROTOCOL – ADJUNCT THERAPY - ADDITIONAL SUPPORT DURING CLEANSE FOR KIDNEYS – SPECIFIC SOUPS**
Kidney / Lymph Support #2: Butternut Apple Soup

**DBM PROTOCOL – ADJUNCT THERAPY ADDITIONAL SUPPORT DURING CLEANSE FOR KIDNEYS – SPECIFIC SALADS**
Kidney Support & Glutathione Production Salad #1: Red Cabbage Salad
Laughter
Let Your Spirit Shine Through

Laughter
Have you ever asked yourself, “self, when did I lose the ability to unselfconsciously roar with laughter?” To be able to express pure joy without any inhibitions is not only our birth right; it's also really good for us.

Here are a few reasons why:

- Laughter releases feel-good endorphins into your system, which can help to relieve pain and gives you a sense of well-being.
- Laughter has a relaxing effect on the whole body with the positive effects of laughter lasting up to 45 minutes afterwards.
- Laughter reduces anxiety and helps relieve depression by reducing stress and releasing pent-up tension thus fostering a positive attitude and feelings of happiness.
- Laughter contracts your abdominal muscles and gets your shoulders moving giving you a mini-workout. Laughter workouts are good for your heart, diaphragm, abdominal, intercostal, respiratory, and facial muscles.
- Laughter increases blood flow and improves the function of blood vessels, which can help protect the heart. Studies have shown that people suffering from heart disease are 40% less likely to laugh in many situations compared to people without heart disease.
- Laughter initially raises blood pressure, then reduces it, leaving a lower blood pressure than normal.
- Laughter increases the number of T-cells in your body, giving your immune system a boost.
- Laughter speeds up metabolism and heart rate, which could help you lose weight.
- Laughter expels more air than normal breathing, which has a cleansing effect on the lungs.
- Laughter can be contagious, increasing happiness and intimacy, thus enhancing relationships.
- Laughter restores playfulness in your life. Children laugh up to 300—400 x per day during their formative years, and this reduces to 10—15 x per day as an adult.
- Laughter helps reduce wrinkles to leave you looking and feeling younger.

DBM PROTOCOL – ADJUNCT THERAPY – LAUGHTER THERAPY
The following steps will explain the Laughter exercises that make up each class or session. Your teacher or group may develop their own variants, but these basics are standard and knowing them will help you to practice at home as well as within the group.

1. Clap Your Hands in Front of the Heart
How it’s done:
- Focus on your stomach and laugh "Ho, ho, ho."
- Focus on your chest and laugh "Ha ha ha."
- Change constantly between your abdomen and your chest up and down, and shout, "Ho ho ho, Ha ha ha, Ho ho, ho".

2. Lay Your Hands on Your Head
How it’s done:
- Laugh inside your head "He he he", to clean your head of tension.
- Then lay your hands on your chest and shout "Ha ha ha".
- Lay your hands on your stomach and yell "Ho ho ho". Concentrate on your feet and trample with your feet on the ground, saying: "Hu hu hu".

3. Do the Laughing Wave
How it’s done:
Bow your upper body to the earth. Have your hands facing down. Focus on the ground. Send your hands upward to heaven. Wail like a siren: "Ha ha ha ha." Perform the laughing wave several times. Through your laughter, connect heaven and earth.

4. Do the Welcome Laughter
How it’s done:
Within a group, keep eye contact and laugh, until all people in the group are happy. At home, look in the mirror and welcome yourself. When you look into the mirror there is always something to laugh about.

5. Extend Your Hands to Heaven
How it’s done:
Concentrate on your chest and laugh "Ha ha ha" for a minute.
Lavandula officinalis
Lavender

Alternative Names
Common lavender; English lavender; French lavender; Garden lavender; Lavandula angustifolia; Lavandula latifolia; Lavandula officinalis.

Overview
Many people appreciate lavender (Lavandula angustifolia or Lavandula officinalis) for its fragrance. Lavender is a common ingredient in soaps, shampoos, and sachets for scented clothes. The name lavender comes from the Latin root *lavare*, which means "to wash." Lavender may have earned this name because it was frequently used in baths to help purify the body and spirit. However, this herb has also been used as a remedy for a range of ailments from insomnia and anxiety to depression and fatigue. Research has confirmed that lavender produces slight calming, soothing, and sedative effects when its scent is inhaled.

Plant Description
Lavender is native to the mountainous zones of the Mediterranean where it grows in sunny, stony habitats. Today, it flourishes throughout southern Europe, Australia, and the United States. Lavender is a heavily branched short shrub that grows to a height of roughly 60 centimetres (about 24 inches). Its broad rootstock bears woody branches with upright, rod-like, leafy, green shoots. A silvery down covers the grey green narrow leaves, which are oblong and tapered, attached directly at the base, and curled spirally.

The oil in lavender's small, blue violet flowers gives the herb its fragrant scent. The flowers are arranged in spirals of 6 to 10 blossoms, forming interrupted spikes above the foliage.
Parts Used
Essential oil is extracted from the fresh flowers of the lavender plant and used for medicinal purposes.

Medicinal Uses and Indications
A number of studies have reported that lavender essential oil may be beneficial in a variety of conditions, including insomnia, alopecia (hair loss), anxiety, stress, and postoperative pain. However, most of these studies have been small. Lavender is also being studied for antibacterial and antiviral properties. Lavender oil is often used in other forms of integrative medicine, such as massage, acupuncture, and chiropractic manipulation.

Insomnia or Agitation
In folklore, pillows were filled with lavender flowers to help restless people fall sleep. Scientific evidence suggests that aromatherapy with lavender may slow the activity of the nervous system, improve sleep quality, promote relaxation, and lift mood in people suffering from sleep disorders. Studies also suggest that massage with essential oils, particularly lavender, may result in improved sleep quality, more stable mood, better concentration, and reduced anxiety. In one study, people who received massage with lavender felt less anxious and more positive than those who received massage alone. Several small studies suggest that lavender aromatherapy may help reduce agitation in people with dementia. Lavender flowers have also been approved in Germany as a tea for insomnia, restlessness, and nervous stomach irritations.

Alopecia Areata
In one study of 86 people with alopecia areata (an autoimmune disease that causes hair to fall out, often in patches), those who massaged their scalps with lavender and other essential oils daily for 7 months experienced significant hair regrowth compared to those who massaged their scalps without the essential oils. However, there is no way to tell whether it was one or the combination of oils that was effective. On the other hand, preliminary studies also show that lavender may be effective in treating women with hirsutism (excessive hair growth).

Other uses
Aromatherapists use lavender in inhalation therapy to treat headaches, nervous disorders, and exhaustion. Herbalists treat skin ailments, such as fungal infections (like candidiasis), wounds, eczema, and acne, with lavender oil. It is also used in a healing bath for joint and muscle pain. One study evaluating treatments for children with eczema founded it was therapeutic touch from the mother that improved symptoms; in other words, massage with and without essential oils (including lavender) both reduced the dry, scaly skin lesions. Another study found that lavender oil may improve pain control after surgery. Fifty people undergoing breast biopsy surgery received either oxygen supplemented with lavender oil or oxygen alone. People in the lavender group reported better pain control than people in the control group.

Available Forms
Commercial preparations are made from dried flowers and essential oils of the lavender plant. These preparations are available in the following forms:
- Aromatherapy oil
- Bath gels
- Extracts
- Infusions
- Lotions
- Soaps
- Teas
- Tinctures
- Whole, dried flowers

How to Take It
Paediatric
- Oral use in children is not recommended.
- May be used topically in diluted concentrations to treat skin infections and injuries, such as minor cuts and scrapes. For proper dilutions speak with a knowledgeable health care provider. There are some aromatherapy formulas for children as well. Speak with a knowledgeable provider for dosing. Never use lavender on an open wound. Seek immediate medical attention.
- A study published in the New England Journal of Medicine concluded that lavender and tea oils in some shampoos, soaps, and lotions may cause gynecomastia, breast development in boys. If you have any concerns, ask your doctor about using lavender for a child.

Adult
The following are recommended adult doses for lavender:
- **Internal use:** Speak with a knowledgeable provider to find the right dose for you.
- **Inhalation:** 2 to 4 drops in 2 to 3 cups of boiling water. Inhale vapours for headache, depression, or insomnia. If you have asthma, talk to your doctor before using essential oil inhalations to see if they are right for you. There are some people who find essential oil used in inhalation form irritating to lungs and/or eyes.
- **Topical external application:** For ease of application, add 1 to 2 drops per tbsp. of base oil (such as almond or olive oil). Lavender oil is toxic if taken orally. Only use the oil externally or by inhalation. Also, avoid contact with eyes or mucous membranes, such as the lips and nostril.

**Precautions**
The use of herbs is a time-honoured approach to strengthening the body and treating disease. Herbs, however, contain active components that can trigger side effects and interact with other herbs, supplements, or medications. For these reasons, you should take herbs with care, under the supervision of a health care provider qualified in the field of botanical medicine.
Some people may develop an allergic reaction to lavender. Nausea, vomiting, headache, and chills have also been reported in some people after inhaling or absorbing lavender through the skin. Lavender applied to skin may cause irritation in some people. Oral use of Lavender may cause constipation, headache, and increased appetite. Lavender oil is toxic if taken orally.

**Possible Interactions**
**CNS Depressants:** There are no known scientific reports of interactions between lavender and conventional medications. However, because lavender promotes relaxation, it may make the effects of central nervous (CNS) depressants stronger. These drugs include narcotics such as morphine or oxycodone (OxyContin) for pain, and sedative and anti-anxiety agents such as lorazepam (Ativan), diazepam (Valium), and alprazolam (Xanax). Ask your doctor before using lavender with these and other sedatives.

Source: http://umm.edu/health/medical/altmed/herb/lavender

**DBM PROTOCOL – ADJUNCT TREATMENT – THERAPEUTIC BATH – LAVENDER OIL**
The beautiful and fragrant lavender herb bush is a very powerful remedy in the plant world, offering both physical and emotional relief for problems such as burns, migraines, insomnia, insect bites, skin problems, infections, stress and nervous tensions. Lavender derives its therapeutic healing properties from its complex chemical makeup.

Lavender is particularly rich in aromatic molecules called esters, which relaxes the muscles, promotes tranquility and peacefulness (it pacifies), while other molecules give it its antiviral, bacterial and anti-inflammatory properties.

**Lavender Oil Properties:**
- antidepressant
- anti-anxiety (soothes and calms the nerves)
- relieves pain
- promotes wound healing
- aids in the clearance of mucus from the airways, lungs, bronchi, and trachea
- antiseptic

Lavender bath treatments are recommended especially for anxiety related disorders, depression, insomnia, to reduce stress and to promote psychological well-being.

A study published in Complementary Therapies in Medicine that investigated the effects of lavender (lavendula angustifolium) baths on psychological well-being found that negative responses to the future were reduced in women who received the blind allocated samples of 80% grapeseed oil and 20% lavender oil. The women used the oil baths over a 14-day period. Positive mood changes that occurred in the women who received the grapeseed/lavender (80/20) oil were significant for a reduction in anger-frustration.
Lemons / Lemon Juice

Fresh Lemon Juice

Lemon Juice for Health

Lemon Information
- *Citrus Limon* – official name
- pH = 2 - compare to stomach acid pH=1
- Low in calories - 27 Kcal per 100 g
- A lemon weighs about 6 oz.
- Lemon is widely grown all over the world - grows in abundance in India, Sri Lanka, Malaysia, Mexico and West Indies.

Lemon Contains:
- Vitamin C - antiscorbutic; helps absorb iron; needed for collagen; antioxidant; 40 to 50 mg per 100 g (twice as much as oranges); strengthens blood vessels and prevents internal haemorrhage
- Potassium – 145 mg per 100 g fruit – more than apple or grapes
- Calcium - 61 mg/100g
- Some vitamin A, along with B1 (thiamine), B2 (riboflavin) and B3 (niacin)
- Citric acid – 7.2%
- Other constituents (mostly from pith and peel) - include volatile oil (2.5% of the peel), limonene, alpha-terpinene, alpha-pinene, citral, coumarins, mucilage, pectins, and bioflavonoids

Functions of Lemon Juice in the body
- Alkalizes body – although obviously acidic, LJ contains alkalizing minerals (calcium, and potassium) that are retrieved through its metabolism. Useful for over-acidity in extracellular fluids.
- Cleanses and stimulates the liver and kidneys
- Antiseptic – Low pH of citric acid breaks down bacterial cell membranes. This powerful antibacterial kills bacteria of malaria, cholera, diphtheria, typhoid and other deadly diseases.
- It dislodges phlegm (that causes annoying cough)
• Liver tonic – lemon juice stimulates liver to produce bile; in turn, a more effective liver is better able to purify blood.

**Lemon Helps in digestion**
• Via improving bile production in the liver - LJ improves digestion of fats.
• Stimulates the flow of saliva and gastric juice
• Amount of acid in LJ does NOT significantly alter stomach acid pH to affect stomach digestion
• It is a diuretic – increases urination, prevents water retention.

**Other parts of lemon have therapeutic benefit:**
• Volatile oils in lemon rind - ease heartburn, bloating and constipation and expel wind from the digestive tract.
• The bark of the lemon tree - is used as febrifuge, which prevents fever
• Seeds - used as a vermifuge, which expels worms from intestine.

**Health Benefits of lemon juice**
• Prevents or restrains influenza and cold
• Scurvy – due to vitamin C content. Limes, which kept well on long voyages, were used by sailors in the 19th century to prevent bleeding to death through arterial wall due to lack of vitamin C
• Maintains health of the teeth and the bones - vitamin C content of lemon helps considerably in calcium metabolism.
• Used for constipation and indigestion
• Helps those with heart problems when taken regularly – due to potassium content
• Improves bile flow
• Great skin cleanser – contains alphahydroxy acid for light natural “peel”, and has antiseptic and astringent properties. Also, consuming LJ cocktail daily aids skin condition from within.
• Used externally for acne, fungus (ringworm and athlete's foot), sunburn, stings, and warts, corns (Tie a fresh slice of lemon over the painful area at night and leave overnight).
• High blood pressure – potassium content good for the heart
• Kidney stone preventative and treatment

A University of California study on lemon juice determined that it is a viable alternative to citrate supplementation - which is the common treatment for kidney stones. Researchers showed that using LJ and water increased urinary citrate levels without changing urinary volume (the same as citrate, but better tolerated and complied with).

*"Journal of Urology": Dietary Manipulation With Lemonade to Treat Hypocitraturic Calcium Nephrolithiasis; M.A. Seltzer, et al.; September 1996*

In another study, scientists proved that LJ inhibited the build-up of calcium oxalate crystals in the kidneys - During this study, all the subjects were given a water solution containing ethylene glycol and ammonium chloride. Half of the group were also given an additional water solution made with either 100, 75 or 50 % pure lemon juice. The results were astounding, showing no kidney stones or deposits in those subjects who were given the 100% or 75% lemon juice solutions.

*"BMC Urology": Lemon Juice Has Protective Activity in a Rat Urolithiasis Model; M. Touhami, et al.; October 2007*

Oral/Dental problems – high vitamin C content of LJ strengthens the gums and teeth, preventing/curing gum inflammation, pyorrhea, dental caries, and gum bleeds. Adding a little LJ to your mouth rinse water helps kill bacteria responsible for halitosis. A study found that LJ had antifungal properties and was effective against oral candidiasis (thrush).

*"Phytomedicine": Treatment of Oral Thrush in HIV/AIDS Patients With Lemon Juice and Lemon Grass (Cymbopogon Citratus) and Gentian Violet; S.C. Wright, et al.; March 2009*

**Also useful for:**
• Toothache - It is reported that toothache is minimized by massaging fresh lemon juice in painful area
• Sore throats
• Haemorrhage - Lemon is effective in the haemorrhage or bleeding of lungs, stomach, intestines, uterus, kidneys and other internal organs. In these cases, lemon juice should be taken with water several times a day.
• UTIs and high uric acid problems – diuretic quality flushed urinary tract

**The Real Benefits of Lemon Water According to Science**

We’re interested in the part that adds vitality and incredible cleansing effects on the body. If the patient has begun our cleansing program and are is the path to gaining better health through diet and lifestyle changes then making a replacement of lemon water for the usual morning coffee is the first step.

We truly believe that we have the power to heal our bodies by adapting what we consume every day.

**What We Know About Lemons**

Botanically it is a citrus fruit in the Rutaceae family (scientifically known as Citrus Limon), and while being the smallest in its family has more comprehensive health benefits than its family members. They are likely to have originated in India around the Himalayan foothills and spread from there.

**Lemons as a Source of Vitamin-C**

We know lemons are high in vitamin C which is essential for normal growth and development. A single lemon contains around 30-40 mg of vitamin C (3) (in comparison an orange contains around 80-90 mg of vitamin C).

Vitamin C has been studied extensively and shown to have a myriad of health benefits from protecting against prenatal problems, cardiovascular disease, eye diseases, skin wrinkles, and immune system deficiencies.

It acts as an antioxidant and helps protect cells from damage caused by free radicals.

1. **Lemon Water as Detox and Cleanse**

This is the first benefit that comes to mind when it comes to lemon water, and usually the most overstated. We’ve cited a few scientific sources that give true insight on the potential for lemon water as a natural detox.

Not surprisingly, the amount of urine is increased when drinking Lemon water however lemon water brings with it the primary compound known as Citrate.

This is a naturally-occurring inhibitor of toxins (which can build up in the form of crystals in the body). The Citric acid enhances your body’s ability to naturally flush out these unwanted toxins.

Two of the more well-known studies shed some light on the use of lemon as a cleanse:

As published by Dutch researchers in a 2002 edition of the *European Journal of Nutrition*, lemon peels and the waste stream of the lemon peels are effective in lowering blood and liver cholesterol levels. Although performed on animal subjects, these results insinuate that lemon peel consumption could be beneficial to those with fatty liver disease.

As published by Indian researchers in a 2005 edition of *BMC Pharmacology*, hesperidin (a citrus bioflavonoid found in lemons) demonstrates the ability to protect the liver from damage. After administration of CCl4 (a well-known liver toxin), the authors concluded that hesperidin demonstrates a protective effect on the liver.

Our liver is where we filter everything we consume and neutralize many toxins. We’ve covered the various methods of cleansing with related products like apple cider vinegar.
These studies shed light on the lemon's ability to enhance the liver's function of filtering out unwanted toxins.

The main premise behind lemon water as a detox revolves around its ability to enhance your body's enzyme function and stimulate the liver. Studies indicate that in cases where toxins have built up in the body, the lemon juice and peel have cleansing properties. Using lemon water, especially after meals may help you lower the amount of toxins in your body.

2. Improve Digestion with Lemon Water
Citrus flavonoids are the primary cause of improved digestion when drinking warm lemon water. They aid in the assimilation of food, help prevent fatty liver, decrease chances of cardiovascular disease, fat-lowering, and reduced insulin sensitivity. This has to do with its ability to inhibit certain synthesis of fat in the body.

Citrus flavonoids act as a great digestive tonic, with appetite suppressing abilities. It has also been shown to calm an upset stomach or mild indigestion. This has to do with the hydrochloric acid in your stomach that starts the process of breaking down your food. It is believed the citrus flavonoids in lemon water support the hydrochloric acid in the stomach in breaking down food (9). The best way to utilize lemon water as a digestion aid is to also include the zest of the lemon which will improve the good bacteria in your gut.

3. Alkalize with Lemon Water
If you’re new to the concept of alkalinity, it’s the process of neutralizing acid in the body. The basic idea is your body has certain acids that can build up causing negative side effects such as acid reflux, upset stomach, acidosis, and beyond.

Lemon water is a safe and effective way to manage your pH levels and achieving healthy alkalinity may benefit in bone health, reduced muscle wasting, decrease chances of hypertension and strokes, improved cardiovascular health, and improved memory.

4. Cholesterol
Pectin and polyphenols are the main substances found in lemons that have more research available showing weight loss and appetite suppressing qualities. Pectin gives a feeling fullness much like other soluble dietary fibres, which may help reduced caloric intake.

In one study these two substance increased fat metabolism, increased HDL (good) cholesterol & lowered LDL (bad) cholesterol and decreased the production of inflammation. The main study was carried out by Drs. Sheau C. Chai, Shirin Hooshmand, Raz L. Saadat, and Bahram Arjmandi, of Florida State University.

**DBM PROTOCOL – ADJUNCT TREATMENT – LEMON JUICE**

*How to take lemon juice?*

- One should NOT drink concentrated lemon juice – its acid is injurious to the enamel of teeth. Drinking through a straw to avoids this problem
- Lemon Juice detox - Combine fresh-squeezed juice of half a lemon with about 200-250ml cold or warm (not too hot) water – optionally add some raw honey to taste. Drink once or twice a day.
- Cleanses body when LJ mixed with cold water and taken on an empty stomach early in the morning - Add a little raw honey to make more palatable.
- Sore throat – dilute juice of half a lemon 50/50 with water and gargle frequently.
- Constipation - Use warm water in lemon juice drink when you want to relieve constipation.
Liver Cleanse

Nutrition, Beetroot, Tea & Coffee Enema

A Review

The liver is the father of all organs being the largest organ and having more jobs to do in the body than all other organs apart from the brain. It is located in the upper right-hand portion of the abdominal cavity, beneath the diaphragm and on top of the stomach, right kidney and intestines. It usually weighs about 3 pounds and is responsible for processes which deal with substances that enter the body and substances that are filtered, stored and excreted.

There are two distinct sources that supply blood to the liver:
- Oxygenated blood flows in from the hepatic artery.
- Nutrient-rich blood flows in from the hepatic portal vein.

The hepatic artery carries blood from the aorta, whereas the portal vein carries blood containing digested nutrients from the entire gastrointestinal tract and also from the spleen and pancreas. These blood vessels subdivide into capillaries, which then lead to a lobule. Each lobule is made up of millions of hepatic cells which are the basic metabolic cells. Lobules are the functional units of the liver

The liver holds about 13 percent of the body's blood supply at any given moment.

It consists of two main lobes, both of which are made up of thousands of lobules. These lobules are connected to small ducts that connect with larger ducts to ultimately form the hepatic duct. The hepatic duct transports bile produced by the liver cells to the gallbladder and duodenum (the first part of the small intestine).

The liver regulates most chemical levels in the blood and excretes a product called bile, which helps to break down fats, preparing them for further digestion and absorption. All of the blood leaving the stomach and intestines passes through the liver. The liver processes this blood and breaks down the nutrients and drugs in the blood into forms that are easier to use for the rest of the body.
The liver's highly specialized tissues regulate a wide variety of high-volume biochemical reactions, including the synthesis and breakdown of small and complex molecules, many of which are necessary for normal vital functions.

When the liver has broken down harmful substances, they are excreted into the bile or blood. Bile by-products enter the intestine and leave the body in the faeces. Blood by-products are filtered out by the kidneys and leave the body in the form of urine.

The bile produced in the liver is collected in bile canaliculi, which merge to form bile ducts. The intrahepatic ducts eventually drain into the right and left hepatic ducts, which merge to form the common hepatic duct. The cystic duct from the gallbladder joins with the common hepatic duct to form the common bile duct. Bile either drains directly into the duodenum via the common bile duct, or is temporarily stored in the gallbladder via the cystic duct. The common bile duct and the pancreatic duct enter the second part of the duodenum together at the ampulla of vater.

*Every month the liver replaces itself using the food ingested.* If it is not provided with the correct nutrients or overworked by consuming too many toxins and chemicals including drugs and alcohol it will begin to malfunction. This can cause raised cholesterol levels, poor skin, nails and hair due to toxin build up and digestion problems. It is vital to look at the patient’s diet when any of these symptoms appear as it is more often than not the cause. If left unchecked nutritional imbalance and over toxicity can lead to liver damage, cirrhosis and jaundice and malfunctions of the following processes:

**More than 500 vital functions have been identified with the liver including the following:**
- production of bile, which helps carry away waste and break down fats in the small intestine during digestion
- absorption of vitamin K
- production of certain proteins for blood plasma
- production of insulin-like growth factor 1 (IGF-1), a polypeptide protein hormone
- production of thrombopoietin is a glycoprotein hormone that regulates the production of platelets by the bone marrow
- hormone production
- synthesis of glucose from certain amino acids, lactate or glycerol
- conversion of glycogen into glucose
- formation of glycogen from glucose (this glycogen can later be converted back to glucose for energy)
- production of triglycerides (fats)
- production of cholesterol and special proteins to help carry fats through the body
- collecting LDL cholesterol from the blood and storing ready for excretion
- regulation of blood levels of amino acids, which form the building blocks of proteins
- processing of haemoglobin for use of its iron content (The liver stores iron)
- conversion of poisonous ammonia to urea (urea is one of the end products of protein metabolism that is excreted in the urine)
- clearing the blood of drugs, alcohol and other toxins and poisonous substances
- the breakdown of insulin and other hormones
- regulating blood clotting
- decomposition of red blood cells
- resisting infections by producing immune factors and removing bacteria from the blood stream
- storage of substances, including glucose (in the form of glycogen), vitamin A (1–2 years’ supply), vitamin D (1–2 months’ supply) vitamin B12 (1–3 years’ supply), vitamin K, iron and copper.

**Symptoms of Liver Damage**
- Pale stools
• Dark urine occurs when bilirubin mixes with urine
• Jaundice (yellow skin and/or whites of the eyes) This is where bilirubin deposits in skin, causing an intense itch. Itching is the most common complaint by people who have liver failure. Often this itch cannot be relieved by drugs.
• Swelling of the abdomen, ankles and feet occurs because the liver fails to make albumin.
• Excessive fatigue occurs from a generalized loss of nutrients, minerals and vitamins.
• Bruising and easy bleeding are other features of liver disease. The liver makes substances which help prevent bleeding. When liver damage occurs, these substances are no longer present and severe bleeding can occur.

Shockin Statistics about the Liver
• More than 25 million people in the United States have gallstones.
• Gallstones are most common in overweight adults of 35 to 55 years of age and affect more women than men.
• Each year there are nearly a million new cases of gallstone disease and the most common treatment is surgical removal of the gallbladder.
• 80% of all cases of liver toxicity are caused by pharmacological drug reactions.
• More than 900 prescription drugs are known to cause injury to the liver.
• 6,000 - 10,000 liver transplants are performed yearly in the United States.
• Upwards of 29 million people have nonalcoholic fatty liver disease.
• About 29,000 people in the U.S. die each year from liver cirrhosis.
• A poor diet is a major contributor to most liver problems and toxic buildup.
• 90% to 100% of heavy alcohol drinkers develop fatty liver disease.

This is only a short list. We recommend everyone do at least 3 liver cleanse programs every year just to keep up with the toxins we are all exposed to every day!

What does nutrition have to do with your liver?
Nutrition and the liver are interrelated in many ways. Some functions are well understood; others are not. Since everything we eat, breathe and absorb through our skin must be refined and detoxified by the liver, special attention to nutrition and diet can help keep the liver healthy. In a number of different kinds of liver disease, nutrition takes on considerably more importance.

Why is the liver so important in nutrition?
85-90% of the blood that leaves the stomach and intestines carries important nutrients to the liver where they are converted into substances the body can use. The liver performs many unique and important metabolic tasks as it processes carbohydrates, proteins, fats and minerals to be used in maintaining normal body functions.

Carbohydrates, or sugars, are stored as glycogen in the liver and are released as energy between meals or when the body’s energy demands are high. In this way, the liver helps to regulate the blood sugar level, and to prevent hypoglycaemia. This enables us to keep an even level of energy throughout the day. Without this balance, we would need to eat constantly to keep up our energy.

Proteins reach the liver in their simpler form called amino acids. Once in the liver, they are either released to the muscles as energy, stored for later use, or converted to urea for excretion in the urine. Certain proteins are converted into ammonia, a toxic metabolic product, by bacteria in the intestine or during the breakdown of body protein. The ammonia must be broken down by the liver and made into urea which is then excreted by the kidneys. The liver also has the unique ability to convert certain amino acids into sugar for quick energy.

Fats cannot be digested without bile, which is made in the liver, stored in the gallbladder, and released as needed into the small intestine. Bile (specific bile "acids"), acts somewhat like a detergent, breaking apart
the fat into tiny droplets so that it can be acted upon by intestinal enzymes and absorbed. Bile is also essential for the absorption of vitamins A, D, E, and K, the fat-soluble vitamins. After digestion, bile acids are reabsorbed by the intestine, returned to the liver, and recycled as bile once again.

**Can poor nutrition cause liver disease?**

There are many kinds of liver disease, and the causes of most of them are not known. Poor nutrition is not generally a cause, with the exception of alcoholic liver disease and liver disease found among starving populations. It is much more likely that poor nutrition is the result of chronic liver disease, and not the cause. HOWEVER, with the toxic environment and toxic foods we consume regularly, this does impair liver function.

On the other hand, good nutrition - a balanced diet with adequate calories, proteins, fats, and carbohydrates - can actually help the damaged liver to regenerate new liver cells. In fact, in some liver diseases, nutrition becomes an essential form of treatment. **Patients should be strongly advised against taking megavitamin therapy or to use nutritional products bought in special stores or by catalogue without consulting a doctor.**

**How does liver disease affect nutrition?**

Many chronic liver diseases are associated with malnutrition. One of the most common of these is cirrhosis. Cirrhosis refers to the replacement of damaged liver cells by fibrous scar tissue which disrupts the liver's important functions. Cirrhosis occurs as a result of excessive alcohol intake (most common), common viral hepatitis, obstruction of the bile ducts, and exposure to certain drugs or toxic substances. People with cirrhosis often experience loss of appetite, nausea, vomiting and weight loss, giving them an emaciated appearance. Diet alone does not contribute to the development of this liver disease. People who are well nourished, for example, but drink large amounts of alcohol, are also susceptible to alcoholic disease.

Adults with cirrhosis require a balanced diet rich in protein, providing 2,000 to 3,000 calories a day to allow the liver cells to regenerate. However, too much protein will result in an increased amount of ammonia in the blood; too little protein can reduce healing of the liver. Doctors must carefully prescribe the correct amount of protein for a person with cirrhosis. In addition, the physician can use two medications (lactulose and neomycin) to control blood ammonia levels.

**What other nutritional problems are caused by cirrhosis?**

When the scarring of cirrhosis interferes with the flow of blood from the stomach and intestines to the liver, portal hypertension may develop. This back pressure in the veins entering the liver sometimes requires surgical "shunting", or rerouting of blood away from the liver and into the general circulation can relieve this pressure, but this procedure often causes a new set of problems. Because the shunted blood has by-passed the liver, it contains high levels of amino acids, ammonia, and possibly toxins. When these compounds reach the brain, they cause hepatic encephalopathy, (liver caused mental impairment). Patients become confused and some temporary loss of memory occurs.

**Can diet help in treating other complications of cirrhosis?**

There are a number of complications of cirrhosis which can be helped through a modified diet. Persons with cirrhosis often experience an uncomfortable build-up of fluid in the abdomen (ascites) or a swelling of the feet, legs, or back (oedema). Both conditions are a result of portal hypertension (increased pressure in the veins entering the liver). Since sodium (salt) encourages the body to retain water, patients with fluid retention can cut their sodium intake by avoiding such foods as canned soups and vegetables, cold cuts, dairy products, and condiments like mayonnaise and ketchup. In fact, most prepared foods contain liberal amounts of sodium, while fresh foods contain almost no sodium at all.

Please note, we did not say stop the intake of sodium but rather that the diet be attended to and PROCESSED foods be eliminated. This will allow the patient to eat a healthier diet with a NORMAL intake of good salt (Himalayan Salt). A good-tasting salt substitute is lemon juice.
**Are there other liver diseases where specific changes in diet can help?**
Nutrition and a modified diet have been found to have a significant effect on a number of other liver diseases. Some types of liver disease, for example, cause cholestasis, a backup of bile in the liver. This means that bile cannot flow into the small intestine to aid in the digestion of fats. When this happens, fat is not absorbed but instead is excreted in large amounts in the faeces, which become noticeably pale-coloured and foul-smelling. This condition is known as **steatorrhea**. This loss of fat calories may also cause weight loss.

Special fat substitutes, such as medium chain triglycerides (MCT oil) can help alleviate this condition because they are less dependent on bile for intestinal absorption. Good sources of MCT are coconut oil and UNPROCESSED Palm Kernel Oil. Please ensure that patients do not purchase MCT oil prepacked in health shops or pharmacies – these oils are processed, whereas coconut oil is a NATURAL unprocessed source of MCT. MCT oils purchased pre-blended in health stores is an oil not found in nature, but rather is manufactured by machine which separates out the medium chain fatty acids from the rest of the oil. These fatty acids are extracted through an industrial process of fractionation. Pre-blended/packaged MCT oils do not contain lauric acid.

Patients with steatorrhea may also have difficulty absorbing fat soluble vitamins A, D, E, K. However, water soluble vitamins are absorbed normally. Supplementing the diet with fat soluble vitamins is possible, though it should only be carried out under the guidance of a physician. **Vitamin A in excess over what is needed is very toxic to the liver.**

**Vegetarianism and The Liver**
The liver has been described as a chemical workshop of the human body. All the nutrients and other substances absorbed from the intestines pass through the liver before entering into the systemic circulation. Thus the liver is vulnerable to the damage caused by a host of infections and toxic agents. Several types of viruses and alcohol are by far the commonest of these agents. The impairment of the liver function usually manifests as jaundice. Persistent infection and continuing impairment of function may be followed by death unless these changes can be controlled. The morphological changes in liver damage can manifest as fatty liver, hepatitis, cirrhosis of the liver and cancer of the liver.

A well planned dietary regimen is of utmost importance in the prevention and treatment of most hepatic disorders. It has been proved beyond doubt that some of the proteins derived from animals are responsible for producing persistent symptoms related to liver disease. Thus vegetarian diet, as mentioned below, has gained momentum in the treatment of hepatic disorders.

**Viral Hepatitis**
Rest and abstinence from alcohol and dietary modifications form the mainstay of the treatment, along with a program of UNA3.

Most patients have nausea and lack of appetite. They should be served with attractive and well presented, lightly steamed foods. Small meals served separately will be better tolerated than three large meals. A diet containing approximately 2000 kcal is recommended. This requirement can be fulfilled by glucose, natural sugar (honey), fruits, fruit juices, home-made bread, vegetables, salads, brown rice, boiled potatoes and cereal grains. Though diets high in their fat content do not ultimately influence the course of the disease they are poorly tolerated by jaundiced patients. Fried food, milk and butter cause dyspepsia and should be avoided. Thus a vegetarian diet is better tolerated by the patients suffering from viral hepatitis.

**Cirrhosis of Liver**
Most of the patients of cirrhosis of liver are severely malnourished and require a high calorie and high protein diet. A high protein diet, particularly if derived from animal proteins, carries a high risk of
Precipitating hepatic encephalopathy. It is also believed that cerebral disturbances due to liver damage are caused by the type of protein in the diet. Cirrhotic diet prescribed in standard Indian books on diet and nutrition does not contain proteins derived from animal sources. A diet high in carbohydrate (fruit and vegetables) and proteins low in fat (from animal sources) and fortified with vitamins would be most suitable. Thus a vegetarian diet is more suited to patients having cirrhosis of liver.

Ascites
In terminal stages of cirrhosis fluid accumulates in the abdominal cavity due to failure of the liver to synthetize plasma albumin. For such patients, a high protein diet which is low in sodium would be most suitable. But since these patients have no appetite, goat milk is the only practical diet which can supply the above requirements.

Finally, when the liver fails – encephalopathy - the strong incidence of animal protein intake has been established as the cause. The clinical features of this syndrome are sleep disturbances, restlessness, drowsiness, impaired intellectual function, confusion and stupor progressing to coma. Significant number of these patients develop chronic encephalopathy and can be managed successfully at home. They should be given 20gm of protein in the diet. Thus, it is very obvious that a vegetarian diet is more useful in the treatment of all liver disorders including the last stage of liver failure.

Support Liver Detoxification with Your Diet
Your liver plays a complex role in many critical functions in your body. A one-word summation of its task could be "detoxification." If there are nutritional deficiencies in your diet, your liver will have difficulty eliminating toxins, which will in turn increase the amount of toxins produced by your body.

Toxins and your liver
Toxins come from a variety of sources. They come from the environment, the content of our bowels, the food we eat, the water we drink, and the air we breathe. If you are exposed to chemicals or cigarette smoke, it is your liver's job to clean up the toxins before they do damage.
The liver removes toxins in three ways:
- It filters the blood.
- It neutralizes toxins by excreting fat-soluble toxins with cholesterol through making bile.
- It breaks down toxins with enzymes in a two-step process usually referred to as phase I and phase II detoxification.

NUTRITIONAL RECOMMENDATIONS TO PATIENT FOR LIVER SUPPORT:
**A good diet helps your liver detoxify**
To support proper liver function, it is important to eat a healthy diet that includes a variety of vegetables, which provide a wide range of essential nutrients. Your liver needs these nutrients to perform its duties. Ensure that these specific dietary changes are made to aid the liver in the detoxification process.

**Eating a high-fibre diet.** Fibre binds to the bile in the large intestines, which helps to transport it out of the body. This is one of the ways the body eliminates fat-soluble toxins from the body.

**Eat a varied diet.** Eat a wide variety of nutrient-rich foods, including foods high in antioxidants (vitamin C, beta carotene and vitamin E) and high in B vitamins, calcium, and trace minerals to protect the liver from damage and help it do its job.

**Ensure good supply of B-vitamins.** Make sure to get enough choline, betaine, methionine, vitamin B6, folic acid and vitamin B12. These special nutritional factors are needed to promote liver decongestion, improve liver function and metabolize fat.

**Recommend a medically supervised fast to aid in detoxification.** A full fast can quickly increase elimination of waste and enhance the body's healing processes. Fasting is not right for everyone, however; the doctor should establish current state of health – before recommending such a fast.
Interim fasting however (abstaining from food intake for 18 hours), is recommended.

**Important nutrients for the liver**
A diet high in fibre includes a wide variety of plant-based foods. The best way to increase fibre is to eat more vegetables, beans and fruit. Foods that contain vitamins C and E are important as antioxidants to protect and treat a damaged liver. B vitamins are often depleted when the liver is overworked from alcohol consumption or toxic exposure. Methionine and cysteine are sulphur-containing proteins that are known to protect the liver and aid in converting fat-soluble toxins to water-soluble substances that can be eliminated through the urine. Choline is needed to metabolize fats in the body.

**Foods That Contain These Vitamins Include:**

**Vitamin C.** Rose hips, kale, parsley, collard greens, mustard greens, cauliflower, red cabbage, strawberries, papaya, spinach, kiwi fruit, citrus fruits, asparagus, mangos, peppers, broccoli, and Brussels sprouts.

**Vitamin E.** Almonds, filberts, sunflower seeds, avocados, asparagus, walnuts, tomatoes, whole grains, and green leafy vegetables.

**B-complex.** Nutritional yeast, sunflower seeds, almonds, peanuts, pine nuts, sesame seeds, buckwheat, wild rice, and brown rice.

**Methionine and cysteine.** Egg yolks, red peppers, garlic, onions, broccoli, Brussels sprouts, sesame seeds, whole grains and beans.

**Choline.** egg yolks, nutritional yeast, cauliflower, lettuce, cabbage, lentils, chick peas and brown rice.

**The Liver Cleanse**
A liver cleanse is an all-natural procedure designed to detoxify, flush and purge the liver of fatty deposits, built up toxins, and accumulated stones. Most liver cleanse programs also include a gallbladder cleanse which helps purge the gallbladder of gallstones. Liver stones are formed when excess cholesterol crystallizes into small pebble size stones. Recently, researchers at the University of Bonn in Germany discovered that heredity may also be a contributor to the condition. The scientists believe they have isolated a gene within the body that greatly increases a person's chances of forming liver and/or gallstones.

A liver cleanse usually involves eating a healthy organic diet, performing coffee enemas and drinking IMMUNOCLEAN Drops to support and stimulate the liver and to soften any stones which may need to be removed.

**GENERAL INFORMATION - LIVER CLEANSE**
- Begin with a juice fast for at least six days.
- Fresh juices of beetroot, papaya and lemon should be taken during this period.
- Fresh goat's milk up to 500ml per day can also be taken during the fast with cinnamon to help cleanse the digestive tract. If desired the milk should be slightly warmed. Organic goat's milk is the best source of complete proteins for these disorders.
- Try steaming a wide selection of the vegetables listed with the herbs and spices listed and a tablespoon or two of bottled or filtered water then place in a blender for a deliciously healthy potage soup and eat a small bowl before each meal. Add goat yogurt to make the soup 'creamy'.
- Similarly blend a wide selection of the fruits together with nutmeg, cinnamon and honey to provide a tasty nutritious 'smoothie'. Add live probiotic organic goat yoghurt to make the 'smoothie' creamy.
- Drink at least 6 – 8 glasses of clean spring water to and avoid the chorine and fluoride chemicals added to tap water which can add to the workload of the liver.
Vegetables - (a selection of at least 4 per day meaning all colours have been eaten at least once a fortnight)
Alfalfa, artichoke, asparagus, aubergines, beetroot, carrots, cauliflower, chicory, chilli peppers (all colours), cucumber, garlic, ginger, hops, lettuce, mushrooms, okra, peas, radishes, tomato, turnips, Swedes and watercress.

Algae - such as chlorella and spirulina, contain many important nutrients and minerals often lacking in land-based crops. Take one tablespoon of one of them per day.

Garlic - Also consume three or four chopped garlic cloves per day. Let them and other allicin-producing plants, such as chives, leeks, onions and spring onions, stand for ten minutes to allow for the process, that produces allicin in these plants when they are damaged, to take place. Allicin has many powerful properties that benefit the health.

Fibre and Whole grains (at least 1 everyday)
Amaranth, barley, brown rice, buckwheat, oats, millet, psyllium husks, quinoa.

Fruit - (a selection of at least 3 colours per day meaning all colours have been eaten at least once a fortnight) - Apricots, ash gourd, lemon, limes, melon, mangos, oranges, papaya, peaches, soursop, tangerines and watermelon.

Juices - (only pure home-made unsweetened additive free to be drunk as often as possible)
Aloe vera, apple, barley (simmer and consume the juice), blueberry, beetroot, burdock, carrot, citrus fruits, cranberry, dandelion, lemon, lime, mango, mosambi, nasturtium, papaya, pineapple, pomegranate, tomatoes and watermelon.

Seeds - (as snacks or added to meals daily)
Flaxseeds, hemp, nasturtium, poppy, pumpkin, sesame, sunflower and watermelon. Hempseeds provide the correct balance of omega-6 (inflammatory) to omega-3 (anti-inflammatory) fatty acids and should be consumed daily. A handful of pumpkin seeds can be sprinkled on any dish or in sandwiches daily and add many important nutrients.

NOTE: Seeds are rich in oils so should be limited whilst recovering from any gall bladder or liver disorders.

Nuts - Best consumed with dried fruits to obtain the correct balance of vitamin C and E
Brazil nuts (2 per week unless excessive sweating, through exercise or fever, has taken place, then eat 2 per day, cashews, chestnuts, coconut, hazelnuts, peanuts, pecans, pine nuts, walnuts (5 per day).

NOTE: Nuts are rich in oils so should be limited whilst recovering from any gall bladder or liver disorders.

Sprouts (See Sprouting – Nutrition)
Alfalfa, almond, amaranth, barley, broccoli, buckwheat, cabbage, chickpea, hazelnut, fenugreek, flaxseeds, kamut, leek, lemon grass, lentil, lettuce, milk thistle, mizuna, mung beans, mustard seeds, oats, onion, pea, radish, rice, rocket, rye, quinoa, sesame, spinach, spring onions, sunflower, turnip and watercress.

Common Herbs (nutritious herbs to be used as often as possible daily)
Basil, bay leaf, burdock root, cardamom, coriander, cloves, dill, fennel, lemongrass, marjoram, mint, oregano, parsley, saffron, sage, tarragon and thyme.

Spices (nutritious spices to be used as often as possible daily. Can be added to teas also).
Cardamom, cayenne pepper, cinnamon, cloves (three ground), cumin, coriander, ginger, Himalayan pink salt crystals, nutmeg, paprika, peppercorns (all colours), sea salt (pure unrefined) and turmeric.
A ¼ teaspoon of turmeric should be consumed daily due to its powerful compounds that can prevent many ailments. Sprinkle on to egg, and vegetable dishes or on brown rice and other grains.

**Oils** (cold-pressed only and used to cook with or dress vegetables and salads, especially with foods that contain fat-soluble nutrients, such as carotene, to enable absorption).
Coconut oil, flaxseed, olive, sesame and rice bran oils.
Also take one capsule of cod liver daily, especially during the winter months between October and April in the Northern hemisphere.

**NOTE:** Keep oils to an absolute minimum when suffering with any gall bladder or liver disorder.

**Derivatives** (to be consumed and used as desired on a daily basis)
Aloe vera juice, anise seed tea, apple cider vinegar, barley grass (powder or juice), bergamot tea, black strap molasses, brewer's yeast, brine pickles, chamomile tea, green tea, honey, peppermint tea, pine needle tea.

- Barley grass is one of the rare plants to contain vitamin B12 so is a useful addition to the diet of those that do not eat meat and fish intake which should be the case when recovering from gall bladder or liver disorders.
- At least one (and ideally many more) natural foods and derivatives should be consumed each day from each of the categories above.
- Pick one of the six colours of fruit and vegetables to consume daily. Yellow/orange, white, red, green, black/blue/purple and cream/brown. (See Eat From The Rainbow – Nutrition) Nature has kindly colour coded natural food for us and each colour provides specific nutrients and minerals in the right balances which are required daily.
- At least one iron rich green leafy vegetable or herb should be consumed daily.
- If appetite does not allow enough consumption, juice them or make teas by steeping them in hot water for 20 minutes, then strain and drink immediately to gain the nutrients without the bulk. Teas can be gently reheated and honey and lemon added to make them more palatable and to add additional beneficial nutrients.

**NOTE**: Non-heme iron is found in tea and dark green leafy vegetables like spinach and kale. However, tea and green leafy vegetables also contain oxalates that block the absorption of iron. To assist the body in the absorption of non-heme iron eat a couple of strawberries, a kiwi fruit or some orange, tangerine or mango at the same time.

**NOTE:** To benefit from foods containing fat-soluble nutrients, such as the carotenoids in carrots and tomatoes, always eat together with oily foods like olive oil, nut or other seed oils or avocado because carotenoids are fat-soluble, and only absorbed into the body along with fats and can then assist with the manufacture of the essential vitamin A nutrient.

**How Patients Can Protect Your Liver During the Cleanse Process**

1. **Eat organic foods as much as possible**
   Your diet represents one of the biggest potential burdens on your liver, as many foods are contaminated with pesticides, growth hormones and chemical additives. By eating organic you are opting for the purest food possible, which means you’re saving your liver from a slew of toxins. By definition, organic foods must be free from genetically modified organisms, synthetic pesticides and fertilizers, antibiotics, growth hormones and other drugs.

2. **Limit fructose, fried foods and processed foods containing trans-fats and/or hydrogenated oils**
   Two more dietary burdens to your liver are hidden in many processed foods on your supermarket shelves: trans-fats and fructose. Trans-fats are common in fried foods like French fries and doughnuts and are also found in biscuits, crackers and many other processed foods. If the ingredient list contains “hydrogenated” or “partially hydrogenated” oil, it will contain some amount of trans-fat. Fructose is also found in numerous processed foods as well as in cold drinks and fruit juice. According to one study in the journal Hepatology, a diet high in fructose and trans-fats leads to obesity and fatty liver.
3. Increase fruits, vegetables and other liver health boosting foods in your diet
On the flipside, you can also use your diet strategically to support your liver health by eating plenty of fresh fruits and vegetables, which are naturally detoxifying. Specifically, sulphur-rich foods, such as onions, garlic and all the veggies in the cruciferous family (broccoli, kale, collard greens, Brussels sprouts, cabbage, cauliflower, etc.) are known to help your liver detoxify environmental toxins, including prescription drugs and pesticides. Vegetables are also an excellent source of fibre, which helps toxins to move through your digestive tract, reducing stress on your liver. Turmeric, cinnamon and liquorice are also known to support healthy liver function.

4. Drink alcohol only in moderation (not allowed on DBM programs)
Alcohol can destroy liver cells and lead to liver damage that causes fatty liver health, inflammation, alcoholic hepatitis or cirrhosis. If you already have liver health disease, drinking even a small amount of alcohol can make it worse.

5. Use natural household products
The more chemicals you are exposed to, the harder your liver has to work to keep you healthy. You can reduce stress on your liver health by choosing natural cleaning products for your home and natural personal care products for your body. Be sure your drinking water is free from contaminants and consider using an air purifier in your home, especially if you live in a high-traffic area. You’ll also want to avoid spraying pesticides in or around your home.

6. Detoxify your body regularly
Your liver health (along with your kidneys, blood, bowel, lymphatic system and skin) helps your body process and eliminate chemicals in your sweat, urine and faeces. Detoxing can help to support and enhance this natural process.

7. Be careful with medications
Taking medications in improper doses, for too long, or mixed with other substances, such as alcohol or other drugs, can harm your liver health.

8. Exercise
Exercise is one straightforward way to lower your risk of fatty liver health disease, not only by helping you to maintain a healthy body weight (obesity increases your risk of fatty liver disease) but also by leading to liver health improvements independent of weight loss.

One study published in Hepatology found that staying active for at least 150 minutes a week improved liver enzymes and other indices of liver health function.

9. Avoid Smoking
Smoking may harm your liver’s ability to effectively process and remove toxins from your body. It can also make alcohol-induced liver health disease worse.

10. Include liver health supportive foods in your daily diet
Select from the list of “Supportive Foods” and add them to salads, juices and other recipes. Remember to try to eat a raw to cooked food ratio of 80% raw to 20% cooked to bring your liver back to health. Curcumin and Green Tea, plus MSM powder will help enhance the body's natural defence systems and supports the liver's primary detoxification pathways. Including foods rich in Alpha Lipoic Acid which is a wonderful anti-oxidant supports liver function. You will find ALA in foods such as broccoli, spinach, Brussel sprouts, peas and tomatoes.

COFFEE ENEMAS – THE MOST VITAL PART OF THE LIVER CLEANSE
To stimulate bile flow and to detox the body, we recommend that recommend that all patients do a maintenance course of enemas every quarter, to stem the toxic build-up.
See Coffee Enemas – Body Cleansing

Health Benefits of Doing a Liver Cleanse

- Improved digestion and elimination of toxins
- Helps the liver can break down fats more efficiently
- Balanced lipid profiles
- Increase in energy and vitality
- Feeling lighter and healthier
- Mood support
- Decreased bloating and gas
- Improved memory and cognition
- Reduced cravings for sugar and fatty foods
- May help remove liver and gallbladder stones which clog the liver
- Removal of toxic fatty deposits and smaller particles of buildup

Daily Morning Liver Cleanser

The liver is the only internal human organ capable of natural regeneration of lost tissue; as little as 25% of a liver can regenerate into a whole liver if minor damage occurs. However, eventually it will become clogged and overworked which is when food stops being digested properly and the rest of the system is affected.

The Following Daily Practices Must Be Encouraged:

Going forward, once the cleanse has been completed and even DURING the Liver / Pancreas / Gallbladder cleanse, these natural protocols should be recommended. It may be advisable to consume a natural probiotic in the form of kefir, yoghurt or a glass of goat's milk before taking the flush to line the stomach, if there is discomfort.

These Ingredients Together Taken in A Glass of Warm Water First Thing in The Morning, Before Eating or Drinking Anything Else, Will Detoxify and Clean the Liver.

- Lemon or lime juice (half freshly squeezed)
- Apple cider vinegar (one tablespoon)
- Honey (one to two teaspoons)
- Turmeric powder (quarter or a teaspoon)
- Cinnamon powder, (pinch)
- Chilli pepper powder (pinch)
- Rosemary (ground pinch)

DAILY GALL BLADDER, LIVER AND PANCREAS FLUSH

In the event of gallbladder discomfort, it is a good idea to cut down on food consumption for a couple of days. The nutritional protocols below also help to cleanse the gall bladder, liver and pancreas and should be taken first in the morning unless otherwise stated. It may be advisable to consume a natural probiotic in the form of kefir, yoghurt or a glass of goat's milk before taking the flush to line the stomach, if there is discomfort.

Recommendation 1:
1 x apple (juiced fresh), 1 x beetroot (juiced fresh), olive oil (2 tablespoons) and 1 x lemon (juiced)

Recommendation 2:
Lemon (half juiced), olive oil (dessertspoon), garlic powder (1/8 teaspoon) or 1 fresh clove minced or well chopped/crushed, once a day.
Later in the day, consume the juice of the other half of the lemon.

**Recommendation 3:**
Ground black seed [Kalonji / black cumin/ Nigella sativa] (250g), pure honey (1 tablespoon) and black seed oil (1/2 teaspoon) mixed thoroughly with half a cup of hot water.
This should be taken in the morning on an empty stomach.

**Recommendation 4:**
Turmeric (1/2 teaspoon) daily can dissolve as many as 80% of gallstones. Turmeric has antioxidant and anti-inflammatory properties and improves the solubility of bile, making bile and its compounds, including those that form gallstones, easier to dissolve.

**Recommendation 5:**
Oregon grape enhances blood flow to the liver and increases bile production. It can be combined with dandelion and milk thistle [instead of milk thistle another option is UNA3] in a tea. This blend is even more effective when mixed with herbs such as chamomile, marshmallow and slippery elm. This mixture will also help decrease gallbladder inflammation. However, if these herbs are not available – any of the other recommendations are well advised.

**Recommendation 6:**
1/2 teaspoon cinnamon and 1/4 teaspoon nutmeg simmered in a glass of goat's milk and drunk before bed every day. Honey can be added if desired.

**Recommendation 7:**
8 glasses of water; 1 tablespoon of freshly ground ginger root; 1 whole organic cucumber sliced; 1 whole organic lemon sliced; 12 leaves of mint.

**Instructions**
- Place all ingredients in a large glass jug and stir well.
- Place in the refrigerator overnight.
- Consumes throughout the next day.
- Do this for one week.

**Recommendation 8:**
Milk thistle (trim the sharp edges off young milk thistle leaves) and mix them with dandelion greens and steam like spinach or eat them raw. These herbs can also be taken as tea or tincture. Milk thistle contains silymarin, a flavonoid believed to cure gallstones. Silymarin helps the gallbladder with the production of bile, which helps breaks down the components in the gallbladder than can lead to gallstones. Substances in milk thistle can also aid liver function, which is directly related to gallbladder function. Dandelion greens contain taraxacin that also stimulates bile production. And the greater volume of bile is more likely to flush out a stone. The seeds of milk thistle and the root of dandelion contain higher levels of these beneficial nutrients.

**For ADDITIONAL SUPPORT DURING CLEANSE FOR LIVER**

**DBM PROTOCOL – ADJUNCT THERAPY - ADDITIONAL SUPPORT DURING CLEANSE FOR LIVER – SPECIFIC TEAS**
Liver Cleansing Tea #1 - Sage and Fennel
Liver Cleansing Tea #2 – Turmeric
Liver Cleansing Tea #3 – Orange Peel and Cardamom

DBM PROTOCOL – ADJUNCT THERAPY - ADDITIONAL SUPPORT DURING CLEANSE FOR LIVER - SPECIFIC SOUPS
Soup #1: Cabbage Soup
Soup #2: Vegetarian Borscht

DBM PROTOCOL – ADJUNCT THERAPY - ADDITIONAL LIVER SUPPORT DURING CLEANSE – SPECIFIC SALADS – DAILY REQUIREMENT
Liver Cleanse Salad #1 - Beetroot Salad
Liver Cleanse Salad #2 – Carrot and Ginger Salad

Nutrients That Support the Liver and Help with Fat Removal
- **Aspartic acid** - found in egg white, nuts, pine nuts, seaweed, sesame seeds, sunflower seeds, parsley, spirulina.
- **Methionine** found in - amaranth, broccoli, Brussel sprouts, cauliflower, eggs, garlic, oats, onions, peppers (red), quinoa, spirulina, wheat germ, whole grains and goat yoghurt.
- **Threonine** found in - amaranth, eggs, seaweed, sesame seeds, spirulina, sunflower seeds.
- **Vitamin B15** found in - apricot kernels, brewer's yeast, brown rice, pumpkin seeds, sunflower seeds and whole grains. Avoid brewer's yeast if suffering with any virus or fungal infections. Consuming foods rich in vitamin B15 can help with both preventing and treating liver disease.
- **Vitamin C** and nickel can be beneficial for treating cirrhosis of the liver.

ADDITIONAL NATURAL TREATMENTS FOR DISORDERS OF THE LIVER, GALL BLADDER AND PANCREAS

**Raw Juice Therapy** can successfully treat liver damage and jaundice. The best organic natural foods to juice are: See Raw Juice Therapy
- Artichoke, beetroot, carrot, cranberry, cucumber, lemon, papaya, pear, pomegranate, spinach and tomato. Cucumber and tomatoes should be consumed separately.
- Aloe vera juice is a powerful cleaner and nourishes of the intestinal organs. To make juice from an aloe vera plant, break off a few leaves. Take a sharp knife and carefully peel the green rind from the leaves and discard. Peel off the yellow layer with a sharp knife or it can be removed by using 1 tablespoon of white vinegar and 1 cup of water. You should have about 2 tablespoons of clear aloe vera gel left. Place in a blender with a glass of orange and lemon and blend. Drink immediately.
- Apple cider vinegar can cleanse and purify the intestinal organs. Drink one tablespoon per day in warm water before eating or drinking anything else. Add any of the other foods from this page such as freshly squeezed lemon juice and honey.
- Cinnamon, cumin, ginger, turmeric, radishes and turnips, clean the liver, intestinal tract and purify the blood.
- Fig leaves have powerful gall bladder, liver and pancreas cleansing properties.
  - Take four fig leaves, wash them thoroughly and pound them.
  - Fill a medium glass with water (preferably bottled mineral water).
  - Add the leaves and drink this twice a day.
- Green tea has a protective effect against liver disease and has antiviral properties that help fight viral hepatitis. It also reduces oxidative stress, which initiates cirrhosis of tissues.
  - Drink three cups per day with the juice of half a freshly squeezed lemon and a teaspoon of raw honey.
- Liquorice root can treat chronic hepatitis B. Glycyrrhizin interferes with hepatitis B surface antigen and is synergistic with interferon against hepatitis A virus. It is also used at times to treat hepatitis C. Liquorice root helps protect the liver from damage due to chemotherapy. At low doses, the herb stimulates the liver to manufacture cholesterol and excrete it in bile. This can help lower serum cholesterol levels.
- Milk thistle tea can help to cleanse the liver of toxins and help it regenerate.
- Olive leaf extract has the ability to fight off viruses including hepatitis due to its ability to interfere with the amino acid production within the virus.
- Papaya seeds contain components known to support and cleanse the gall bladder, liver and pancreas.
  - Grind some fresh papaya seeds to extract one tablespoon of juice.
  - Add the freshly squeezed juice of half a lemon.
  - Drink it once or twice daily for one month.
- Passion fruit contains components which have the ability to protect the liver and help it to heal.

**ADDITIONAL SUGGESTED TREATMENTS AND PREVENTION OF LIVER DISORDERS**

- **Protection against toxic substances**
  - Artichoke leaf extract; Milk thistle (silymarin).

- **Bile creation enhancement (cholerectics) often lowers cholesterol**
  - Dandelion; Artichoke leaf extract (cynara which becomes caffeic acid in stomach); curcumin and turmeric.

- **Bile movement enhancement (cholagogues)**
  - Dandelion (enhances flow and improves bile duct inflammation; hepatitis, gallstones, jaundice); Beetroot juice; Taurine (thins the bile); cysteine and methionine rich foods; perform Liver/gallbladder flushing.

- **Fatty Infiltration reduction**
  - Alcohol avoidance; Non animal fat diet; High insoluble fibre consumption; Carnitine, Lysine and Methionine rich foods.

- **Heavy metal cleansing**
  - Heavy metals such as mercury tax the liver and can be removed by consuming coriander, algae such as chlorella and spirulina and sulphur-rich foods.

- **Protection from free radical damage**
  - Alpha Lipoic Acid, vitamin C, vitamin D, vitamin E, selenium and zinc.
Lung Cleanse

Smoking and other airborne toxins can damage the lungs. Smokers are easily identified by a characteristic cough that inevitably presents itself, after a long period of smoking. The lungs will become completely tar-coated within a few years of smoking. These blockages can result in severe chest pain and a disrupted balance of cells, which may contribute to the formation of carcinogenic cells in the lungs throat and mouth.

One of the main reasons smokers continue to smoke is nicotine, a chemical in cigarettes that causes addiction. Over time, the body gets used to having nicotine, but there’s a catch. The more you smoke, the more nicotine you need to feel “normal.” When the body doesn’t get nicotine, it can cause symptoms of withdrawal including:

- Trouble sleeping
- Nausea
- Moodiness and irritability
- Restlessness
- Trouble thinking and concentrating

While most physical symptoms of nicotine withdrawal disappear in a few days or weeks, cigarette cravings may remain for a while, making it difficult not to give in. Figuring out what your triggers are is one step toward ending your addiction.

To clear the lungs from toxins, certain compounds in food can protect the lungs to a small extent, but will clean out the lungs once you stop smoking.

Passive smokers can clean their lungs from 2nd-hand smoke as well as polluted air. Whilst undergoing a Lung Cleanse, it’s important to eliminate stress and avoid eating processed foods (white flour, sugar as well as dairy) as these foods stimulate the production of mucus in the body.

**Steps you can take to assist your Lung Cleanse**

- Don’t smoke
- Do lung Cleansing Exercises
- Eat lung cleansing foods
- Reduce indoor air pollution exposure
  - Make a castor oil pack for lung cleansing
  - Use lung cleansing herbs

**Ginger**

is a very powerful detox tool for the lungs. It can be used in many ways such as in food and teas.

**Turmeric**

Smoking causes plaque build-up in the lungs and increases a person’s risk for many different types of cancer. Studies have shown that the curcumin in turmeric has strong anti-inflammatory, antioxidant, anti-cancerous and anti-toxicity properties. It can help remove harmful toxins from the body while protecting organs from further damage.

**Thyme**

is very powerful in the fight against chest congestion. It produces powerful antiseptic essential oils which are classified as naturally antibiotic and anti-fungal. Thyme is well known to zap acne more so than expensive prescription creams, gels, and lotions. Thyme tea has the power to chase away and eliminate bacteria and viruses so whether your infection is based on either, it will work. Thyme has been used as a lung remedy consumed since antiquity and is used extensively today to prevent and treat respiratory tract infections and bacterial infection pneumonia.

**Oregano**

Although oregano contains the vitamins and nutrients required by the immune system, its primary benefits are owed to its carvacrol and rosmarinic acid content. Both compounds are natural decongestants and histamine reducers that have direct, positive benefits on the respiratory tract and nasal passage airflow. Oil of oregano fights off the dangerous bacteria Staphylococcus aureus, better than the most common antibiotic treatments.

**Sage** –
Sage tea is a traditional treatment for sore throats and coughs. The rich aromatic properties arising from sage’s volatile oils of thujone, camphor, terpene and salvene can be used by inhaling sage tea’s vapors to dispel lung disorders and sinusitis. Alternatively, brew a strong pot of sage tea and place it into a bowl or a vaporizer.

**Watercress**

Watercress is believed to be a great lung cleansing plant, according to a lot of doctors worldwide. This plant can be used for making soup, which will really help in the lungs cleansing process. You may double the watercress’ health benefits if you eat this soup two to three times a month, especially if you are a smoker.

See [Watercress soup recipe to support a lung cleanse](#)

**Deep Breathing for Lung Cleanse**

**Oxygen Helps With Lung Cleansing**

Oxygen is, by far, the most vital component humans need to live. We can go weeks without food, days without water, but only a few minutes without air. To get the most out of oxygen, it’s imperative our lungs are functioning properly. Every cell in the human body requires oxygen and, although it seems like an autonomous function, deep breathing exercises can be done to help clear out toxins that may have built up in the lungs which can help improve lung performance and clear airways.

Deep breathing gets more nourishing oxygen into your body. Blood that is rich in oxygen will help you feel better, and give you more energy. Deep breathing also reaches the deepest depths of your lungs, and helps to expel and break up residue.

**Shallow Breathing vs. Deep Breathing**

Although the average human lung capacity is about 6 liters of air, we typically inhale much, much less. In fact, it’s amazing how little of our lung capacity is routinely used. This can be described as shallow breathing, or chest breathing. Shallow breathing is a self-descriptive term, and may be caused by poor posture, stiff muscles, or simply inactivity. The majority of the breathing we do is shallow breathing. After all, it's just not feasible to be heavily huffing and puffing all day. However, when shallow breathing is the only type of breathing you do, you’re utilizing a small fraction of your lung capacity and doing your lungs a disservice. Shallow breathing lets stagnant air and pollutants accumulate in the depths of the lungs and may lead to fatigue, respiratory sluggishness, and diminished tissue function.

**Deep Breathing Exercises for Lung Cleansing**

Find a relaxing and quiet place to sit down. Close your eyes, and begin by breathing in deeply through your nose from your belly up. Count to five, inhaling the entire time. Even when you think you can’t inhale any more, try to squeeze a little more air in. Allow your lungs and stomach to fully inflate. This enables oxygen to reach the deepest depths of your lungs to inflate all the alveoli and break up any toxins and pollutants that may have accumulated. Hold your breath for several seconds and then exhale over the course of another five count. When you think you can’t
exhale any more, keep blowing from the deepest depths of your lungs and stomach! You should feel your chest and abdomen flatten inward. Repeat this breathing exercise 9 times. Performing this exercise on a daily basis will not only help cleanse your lungs, but it also helps relieve stress. It won’t take long before you notice positive improvements!

Health Benefits of Deep Breathing Exercises
Although the lungs are not muscles, they can be exercised. Failing to exercise the lungs can impact the respiratory system. Related muscles, and even the rib cage, can become stiff and lead to reduced elasticity in the lungs, which furthers shallow breathing. Air can remain in the tissues of the lungs and become stale, hindering fresh oxygen from finding its way into the bloodstream.

Those who exercise, especially athletes, often have larger than average lung capacities as a result of taking deeper breaths more often. Why? Because deep, rhythmic breathing expands the diaphragm muscle and the air pockets within the lungs. This allows for more oxygenation of the cells within the body which improves health, helps all the body’s systems perform better, and even can provide you with more energy. Deep breathing actually helps to stretch out the torso, you needn’t look any further than at the Olympic swimmers who typically have very large torsos to see this in action. Humans need oxygen for complete cell development. It’s impossible to be healthy if you’re not getting enough oxygen.

Lung Cleansing Improves Lung Performance
Taking deeper breaths that utilize the full capacity of your lungs helps cleanse the lungs and provides your body’s cells with more nourishing oxygen. Poor breathing allows toxins to accumulate, robs energy and negatively affects mental alertness. Daily breathing exercises are a vital way to keep the body clean, and provide your inner systems with the necessary oxygen to operate at optimum capacity. Proper lung function is especially important when working out because your body uses the oxygen as a source of energy. Less than adequate lung function when working out can cause a significant reduction in the amount of intensity and time your body can exercise. Adding deep breathing exercises to your daily routine to cleanse your lungs will balance and help your body. Remember, small changes add up to big improvements!

For more information see Mucous Cleanse

(Leave these links in please)

Sources:
The Spirit Science
American Lung Association
Smoke Free
Smoke Free
Livestrong
Turmeric for Health
Lymph Cleanse
Dry Brushing; Rebounding; FIR Saunas; MLD; Castor Oil Packs; Tea

The lymphatic system removes waste from every single cell in the body (yes, even all the way down to your little toes). Our lymph travels with our nerves, arteries and veins, and is twice as big as our arterial blood supply.

This complex network of fluid-filled nodes, vessels, ducts and glands (including the spleen, thymus and tonsils) that bathe our cells and carry the body’s “sewage” away from the tissues. These organs work in conjunction with the lymph system to carry cellular waste into the bloodstream so that it can be eliminated. The lymph system is responsible for handling endotoxins (internally produced toxins) as a result of normal metabolic processes in the body.

By cleansing your lymphatic system, you will improve the body’s ability to remove or sweep away toxins that are linked to problems such as cellulite, general aches and pains and even weight issues – but more importantly so it will improve certain auto-immune disorders. By keeping your lymphatic system working well, your spleen is better able to handle the retired red blood cells.

Sadly, we don’t often talk about the lymph until it turns into cancer. In Ayurveda, the lymphatic system is the first system that is addressed. That’s because congested lymph is responsible for a variety of ailments, including suppressed immune system, fibromyalgia, multiple sclerosis, chronic fatigue syndrome, aches and pains, bloating and poor digestion. If your lymph is sluggish, you’re also more prone to cellulite, collecting fat deposits and obesity.

Did you know that we are exposed to 82,000 different toxins, chemically-based products and processed foods in our environment weekly? Detoxification is the body’s natural, ongoing process of eliminating harmful toxins from the body so that it can function at its best. Toxins are man-made chemicals found in the air, water, food, household cleaners and cosmetic products as well as waste products produced by normal cellular activity.

When toxins enter the body through the skin, nasal passage or mouth, the body prevents “pollution” by surrounding the toxins with fat and water and stores them in different areas of the body. This can put a
strain on our body's own detox system (the liver, intestines, kidneys, lungs, skin, blood and lymphatic systems). These systems can become burdened as they try to safely excrete toxins.

Our bodies were not meant to work this hard to maintain optimal functioning. By adding following our Cleanse Program, you can help pull these toxins, along with the excess fat and water, out of the body and improve your health quickly.

The lymphatic system is the most forgotten and least understood system in the body. It is critical to the detoxification process. The lymph travels parallel with the blood system and is responsible for the removal of wastes from every cell in the body, in addition to regulating the immune system. The lymph is thus a very important system to support optimal health.

Keep Your Body’s Drains Clean
The lymphatic system is like the garbage system of the body. Proper functioning of the lymphatic system is essential in order to properly eliminate wastes. Our lymphatic system can become and remain congested and stagnant for many years. Thus, we often live in an environment of toxins that weakens our immunity. Proper lymph drainage will eliminate these toxins and assist the body to function optimally.

The enzymes and acids in raw fruit are powerful lymph cleansers particularly when eaten on an empty stomach. By adding raw fruits and vegetables to your daily diet your lymph will have the tools its needs to do the serious deep cleansing that has to be done to keep the body functioning well.

Digestion: Where It All Begins
The body’s ability to detox starts in digestive system, in the villae of the small intestine. The “lacteals” in the villae are part of the lymphatic system and they pull nutrients and fat-soluble toxins off the intestinal wall. If the gut is constipated or there is excessive reactive mucus bogging down the villi, the lymph and its white blood cells may not provide immunity or detoxification.

The highest concentration of lymph is found lining the outside of the gut wall and is called the Gut Associated Lymphoid Tissue (GALT). The skin of the intestinal tract is constantly being exposed to toxins and undesirable microbes that could present a problem. So, the body has an immunity army waiting in the GALT just across the wall of the gut.

Symptoms of Lymphatic Congestion
Is the patient experiencing any of these lymphatic congestion symptoms?
- Rings get tight on fingers
- Soreness and/or stiffness in the morning
- Feeling tired
- Bloating
- Itchy skin
- Holding on to water
- Breast swelling or soreness with each cycle
- Dry skin
- Brain fog
- Cold hands and feet

Major Causes of Lymphatic Congestion
1. DEHYDRATION
2. Stress has been identified as the cause of about 80% of all chronic health issues. The chemistry of stress is degenerative and lymph congesting.
3. Digestive imbalances may irritate intestinal villi, which is a classic reason for lymph congestion. As the majority of the lymph in the body surrounds the gut (Gut Associated Lymphatic Tissues – GALT), the quality of the villi are critical for proper lymph flow, detoxification, assimilation and immunity.
4. Iodine deficiency is also a common cause of lymphatic congestion. Iodine helps to mitigate the effects of a toxic environment and supports the lymph at the cellular level.

**Foods that support a healthy lymphatic system**

Start educating the patient on how to treat the lymphatic system - by avoiding toxins, chemicals, and foods that are hard to digest—that means processed foods that are steeped in pesticides, preservatives, and artificial ingredients.

**Ensure the following foods are included in their nutrition program to support a healthy lymph system**

- **Water** – Whilst it isn’t a food, but it is vital to life. Drink plenty of clean, purified water. Water keeps the lymph fluid hydrated and flowing smoothly.
- **Beetroot** – in fact all red fruits and vegetables
- **Cranberry** – Cranberry is an excellent emulsifier of fat. It will help break down excess fat for the lymphatic vessels to carry away. Choose fresh cranberry fruits and juices, not the sweetened and pasteurized processed ones.
- **Leafy Greens** – Chlorophyll, the green nutrient that captures sunlight, has powerful cleansing properties and beneficial effects on the blood and thus on lymph fluid as well. Look for dark greens for chlorophyll like kale, spinach, wheat grass, barley grass, turnip greens, dandelion leaves, broccoli, and mustard greens.
- **Nuts and Seeds** – Essential fatty acids, the healthy fats found in seeds like chia, nuts, olive oil, coconut oil, sacha inchi, coconut, and avocado, play a role in fighting inflammation. They also strengthen vascular tissue, help in the absorption of fat-soluble vitamins and minerals, and aid in the removal of fat-soluble wastes.
- **Garlic** – Garlic boosts immune function and combats harmful microbes. It improves circulation and aids in the cleansing of toxins.
- **Ginger** – Ginger has beneficial effects on digestion and circulation, two systems that are tied directly to the lymphatic system.
- **Turmeric** – Turmeric is related to ginger. It helps reduce inflammation, thins blood, and improves circulation.
- **Seaweed** – Sea vegetables help the body detox and eliminate excess fluid that can build up in tissues and slow the lymphatic system down. An alternative to seaweed is with regard to lymph drainage is fresh fruits; organic dried fruits; green vegetables such as kale, spinach, wheatgrass, broccoli; garlic; turmeric; raw, unsalted nuts and seeds (pre-soaked and dehydrated); foods that are high in iodine – organic baked potatoes with skin, cooked navy beans, boiled eggs.
- **Citrus** – Citrus fruits aid hydration, carry powerful antioxidants and enzymes, and help cleanse and protect the lymphatic system. They aren’t alone.
- **Home-juiced fresh fruit and vegetable juices** of all sorts will deliver more hydration, enzymes, and antioxidants to the body.
- **Echinacea tea** – reserved for extreme cases of lymphedema.

**Red Foods**

All red-staining foods tend to be ideal for moving lymph. Manjistha is a red root traditionally used as a dye that is known for its great lymph-moving properties. Berries, cherries, pomegranate, beets, and cranberries were all traditionally used as dyes and as natural lymph moving and detoxifying agents. Beets in particular also have one other very important property that put them at the top of the list as lymph support foods. Beetroot thins the bile and as bile is responsible for about 80% of the immune response in the gut, it regulates the stool, digests good fat and gets rid of bad fat. Beets also scrub the villi of the gut, which is where the digestive lymph originates.

**LYMPH DECONGESTING / CLEANSE**

**Hydrate to Decongest Your Lymph**

- Sip warm water every 10-15 minutes for 2 weeks.
One of the most common causes of lymph congestion is dehydration. Water, and only water, can adequately rehydrate the body.

The best lymph-moving rehydration technique is to sip hot water every 10-15 minutes throughout the day. Advise the patient to try it for one day. If by the end of that day they are experiencing a dry mouth and are now thirsty for this once tasteless sip of hot water, this is a good indication they are dehydrated and their lymph is congested.

If this happens, try this rehydration therapy: sip hot water every 10-15 minutes for 2 weeks straight. Keep a thermos of hot water nearby to make it easy to follow this protocol.

In addition to sipping hot water as part of the lymph-moving rehydration technique, try to drink 1/2 your ideal body weight in ounces per day for two weeks as well. For example, if you weigh 140 lbs, drink 70 ounces of water (almost 9 glasses) per day.

Some lemon and honey may be added for taste.
Other LYMPH CLEANSE Techniques

- Dry Brushing
- Castor Oil Packs
- Manual Lymph Drainage
- Exercise e.g. rebounding
- FIR Saunas

See Castor Oil Packs, Manual Lymph Drainage, Exercise (NEW STARTS) and FIR Saunas in this manual for more information
Magnesium Chloride

DBM PROTOCOL – ADJUNCT TREATMENT – MAGNESIUM CHLORIDE ‘OIL’

Ingredients
- ½ cup Magnesium Chloride
- ½ cup distilled water
- A glass bowl or glass measuring cup
- A glass spray bottle (plastic will work too provided it is BPA-free)

Instructions
1. Boil the distilled water. It is important to use distilled to extend the shelf life of the mixture. Put the Magnesium Chloride in the glass bowl or measuring cup and pour the boiling water over it.
2. Stir well until completely dissolved. Let cool completely and store in the spray bottle. Can be stored at room temperature for at least six months.

How to Use Magnesium Oil
- Spray on arms, legs, and stomach daily. (in some cases spray directly onto affected breast)
- Use 10-20 sprays per day. It will tingle on the skin the first few times it is used, and this is normal. It should fade after a few applications, but you can dilute with more water if it bothers you too much.
- You can leave on the skin or wash off after 20-30 minutes, or you can apply after a shower and then use coconut oil to moisturize about 5 minutes later.
- If applying (if directed to do so) directly onto breast, massage gently into the tissue.
- Leave on for 20-30 minutes and moisturize with coconut oil.

DBM PROTOCOL – ADJUNCT TREATMENT – MAGNESIUM CHLORIDE ORAL SUPPLEMENTATION

The best way to practice magnesium medicine is to combine transdermal application with oral administration for concentrated doses that achieve maximum therapeutic effect.

When practicing medicine, we are looking to change people’s conditions quickly and we do that best when we take doses up to the maximum.

From 3-5 to as much as 10-15 sprays of magnesium chloride under the tongue or in a glass of pure water or juice (not green juice) is an excellent way to take magnesium internally. It assists digestion, counteracts excess acidity in the stomach, and delivers magnesium swiftly into the bloodstream for
distribution to all the cells of the body. Minerals like magnesium in ionic liquid form are superior to pill forms. More magnesium will get absorbed and absorption will not depend so much on hydrochloric acid levels.

**MAGNESIUM OIL RECOMMENDED DAILY ORAL DOSE:**
- Spray 5 squirts from your spray bottle into a glass of freshly squeezed orange juice, b.d/b.i.d
- Vitamin C helps with the absorption – grapefruit juice or lemon juice may also be used or even a combination of them all.
- Patient should find an appropriate time to take the oral dose – half an hour away from your IMMUNOCLEAN Drops.

**DBM PROTOCOL – ADJUNCT TREATMENT – MAGNESIUM CHLORIDE OIL PACK**

**Magnesium Chloride Oil (Mco) Pack Instructions:**
- To make a compress pack - Fold a piece of 100% wool, soft cotton or small towel into 3 or 4 layers and soak in magnesium chloride oil to make a pack.
- Heat in a low-heated pan or in a bowl in a steamer (ensure the steamer is at optimal working level before placing pack which is in a plastic bag, in the steamer) – make sure it is not too hot.
- Place pack over area of concern – E.g. tumours, infected, inflamed, painful/stiff/calcified joints or muscles, adhesions or scar tissue.
- Cover with plastic and a dry towel for insulation and leave for 1-2 hours – For best absorption, place a hot water bottle over the pack to keep it warm.
- Pack can be reused a few times - keep it wrapped in plastic, and refresh with a little more oil at the next use.

**DBM PROTOCOL – ADJUNCT TREATMENT – MAGNESIUM CHLORIDE INTESTINAL CLEANSE**

**How to Use Magnesium Oxide for an Intestinal Cleanse**
Magnesium oxide cleanses small intestines and colon. It has been used for over a century in naturopathic medicine as a safe natural laxative to cleanse the entire digestive tract with oxygen - It is gentle and non-habit forming.
Cleansing with magnesium oxide for one week is like having a colonic, and it cleans the small intestine, which a colonic does not. It is claimed to remove impacted food matter, heavy metals, and anaerobic pathogens by dissolving the waste build-up. Supposedly, it is used by NASA to detoxify astronauts’ digestive tracts in preparation for outer space. Proprietary blends with magnesium oxide are found under such brands as: Colozone, Oxy-Cleanse, Aerobic Mag 07, Colosan, and Homozon, but these tend to be expensive.

**How often to do cleanse?**
- To cleanse entire digestive tract - Take first thing in the morning and last thing at night for 1 week;
- For maintenance - use it one time per week.

**Instructions for using Magnesium Oxide**
- Patient must drink 250ml of water (room temperature) mixed with 1 level tsp Magnesium Oxide
- Immediately drink the juice of 1/2 a fresh lemon (the catalyst to activate the oxygen in the stomach) diluted with 60ml to 120ml of clean spring/borehole water
- Take Magnesium Oxide on an empty stomach and wait 90 minutes before eating.
- Access to a bathroom is advised after each serving! - It will create a watery bowel movement which indicates it is working. It is not a sickness type of diarrhoea - Any magnesium based laxative works by the body drawing water into the bowel to flush out the excess magnesium you consumed. Some oxygen is also released into the body.
• Patient MUST DRINK EXTRA WATER to replenish the water used!
• If patient’s reaction to the cleanse is too strong, cut down the amount of magnesium oxide taken when next dose is required.
• Take any other medicine and magnesium oxide at least 2 hours apart
Malic Acid

Malic acid is a component of many of the foods that we eat daily. Although it is found as a naturally occurring organic compound in various fruits, many choose to take malic acid supplements to increase their overall health, as well as treat various maladies. Today, the acid is most commonly used as a food additive and preservative. It is a mild and relatively harmless acid when used in appropriate amounts. As a food supplement, it is generally considered beneficial for health and is present in large amounts in apple juices. As when taking any supplement, however, you should not exceed the recommended amounts for consumption.

**Benefits of Malic Acid**

**Pain Reduction**

One of its most commonly touted benefits is its ability to help reduce pain. For this reason, it is frequently used by those who suffer from fibromyalgia and chronic fatigue system. Those who take it for this reason have reported reduced muscle soreness and pain. Although it takes several days of consistent consumption for the supplement to take full effect, it can start to reduce pain as quickly as 48 hours after your first supplement.

**Energy Boost**

In addition to providing reduced pain, it is also said to provide increased energy. This is another side effect enjoyed by sufferers of chronic fatigue syndrome and fibromyalgia. Those who have it as a supplement to their diet, especially those who suffer from these conditions, have experienced a significant reduction in fatigue, giving them a much-needed boost of energy.

**Skin Care Benefits**

Not only is this acid used in the form of a food supplement, it is also a common additive to skin care products. Malic acid has long been used in skin products for its exfoliating properties. Furthermore, it is able to penetrate the skin more deeply, due to its chemical composition. As a result, products that employ this great supplement can greatly help in improving skin smoothness, pigmentation and complexion. Its
superior ability to penetrate the skin makes it an ideal moisturizer for people who have very sensitive skin that does not benefit from typical moisturizers.

In the majority of products it is used in, it functions largely as a pH adjuster. By raising the pH of the skin, this acid helps to facilitate healthy exfoliating, thereby improving the overall health and appearance of the area that you are targeting.

**Side Effects**

Although generally regarded as a very safe and effective supplement, there can be some minor side effects. The most common of these, while uncomfortable, are only experienced by a small number of those who use the supplement. The side effects most frequently experienced include muscle pain, nausea, redness, constipation, swollen skin, chest pain and itching. While annoying, these typically dissipate after a couple days.

While most of the side effects are relatively minor, there are also some more serious side effects, which are very rare. These serious side effects are often more serious forms of their minor counterparts, such as extreme chest tightness. This also includes dangerous events such as allergic reaction, which can lead to difficulty breathing or a completely closed throat. If you experience any of these, seek medical help immediately.
Foods Containing Malic Acid
The food that is most well-known for its high malic acid content is the apple. Other fruits with a very high concentration of the acid are nectarines, cherries, lychees, bananas, mangoes, peaches, tomatoes and strawberries. It can be found, however, in nearly all fruits.

Malic acid is also used as a flavour enhancer for many drinks and candies. It is especially common in diet sodas and other artificially sweetened drinks. This is also true of artificially sweetened candies, such as gum and other gummy candies. Because of its highly versatile nature, especially in masking unnatural flavors, it has become an important part of nearly any food product that contains alternative sweeteners.

One of the greatest things about malic acid as both a food supplement and a skincare agent is the fact that it is a completely natural, organic compound. Rather than relying on man-made products to improve the health of your body and skin, it provides a natural alternative for a variety of purposes. Whether you are treating chronic fatigue, fibromyalgia or just some dry skin, this acid is a safe and readily available solution. Because of its powerful pain relieving and healing properties, it has become a very popular, and viable solution for many physicians in the treatment of various maladies. This has only been amplified by its overall safety.

Article: Malic Acid’s Numerous Benefits: Digestion, Metabolism, Detoxification
by Michael McEvoy, FDN, CNC, CMTA (link)

Malic acid has numerous benefits for digestion, detoxification and to support aerobic metabolic functions.
Malic acid is an acid derived from plant foods, especially apples. Malic acid’s nutritional benefits are under-appreciated. The salt forms of malic acid known as malates are Kreb’s cycle intermediates: they assist in the intracellular process of energy production.

In addition to this, malic acid can be used to improve stomach digestive functions by supplying enough hydrogen for stomach acidification.

1000-1,500 mg of malic acid can supply an ample amount of hydrogen necessary to trigger the release of pepsin. Low production of hydrochloric acid (stomach acid) is a very common and this potentially serious condition is called hypochlorhydria. Hypochlorhydria can result in numerous health conditions and nutrient deficiencies. Several nutrient minerals are dependent upon adequate amounts of stomach acid for utilization including calcium, magnesium, zinc, sodium, chromium, copper, manganese and selenium.

Malic acid can be used as a viable substitute if a person’s production of stomach acid is low.
In addition to these benefits, malic acid may also assist cellular detoxification of toxic metals, particularly aluminum and strontium.

In addition, 2,400 mg of malic acid daily has been shown to significantly reduce muscular pain of those who suffer from fibromyalgia.

If taking malic acid, you experience burning in your digestive system you should discontinue use. Burning after ingestion of an acid indicates pre-existing damage to some part of the GI mucosal barrier.
Article: Treating Fibromyalgia with Malic Acid
by Donna Earnest Pravel (Link)

Malic acid appears to be beneficial to fibromyalgia patients, not as a pain reliever, but to boost muscular performance. It may be taken as a supplement with magnesium. Malic acid may also be consumed by drinking juice from tart fruit and apple cider vinegar.

The only medical study that has ever been published regarding fibromyalgia treatment with malic acid was performed in 1995 and published in the Journal of Rheumatology.

There, a commercial tablet containing 200 mg malic acid and 50 mg magnesium was undergoing safety and efficacy studies before going to market. Twenty-four fibromyalgia patients took three tablets twice a day of a product called “Super Malic” for four weeks.

The study was placebo-controlled. Patients had to be free of prescription medications in order to participate in the trial. After the first four weeks, the patients were allowed to take up to six tablets of “Super Malic” twice a day for a period of six months.

Scientists measured pain and tenderness, psychological levels, and functionality over the course of the study.

At the lower dose, no benefits were seen at all in the study participants. However, when the dose was doubled to six tablets twice a day, the participants reported significant reductions in pain and tenderness, plus improvements in functionality and mood.

Quoting this medical study, several articles state that malic acid may be beneficial in the treatment of fibromyalgia. However, the researchers did not study malic acid alone, but a dietary supplement containing both malic acid and magnesium.

Magnesium has been clearly demonstrated to relieve several fibromyalgia symptoms, including pain, both clinically and with copious amounts of anecdotal support.

It could very well be that the fibromyalgia patients who took the “Super Malic” supplement were benefitting and commenting more from the magnesium boost than the malic acid.

What is malic acid? What health benefits does it have?
Malic acid is the organic compound found in tart fruits such as Granny Smith apples, certain grapes, and cranberries. Malic acid is added to “sour” candies to give them an extremely tart flavour.

Malic acid is also formed in the human body. It is an important element in the Krebs', or citric acid cycle, which creates energy for both aerobic and anaerobic activities.

In fibromyalgia, it is postulated that malic acid may prevent hypoxia to the muscle tissues. This means that malic acid may help muscle tissues get more oxygen, improve energy production in the muscle cells and prevent muscle tissue breakdown.

This muscle tissue breakdown may be one part of the reason fibromyalgia patients experience so much pain and tenderness.

Since malic acid delivers oxygen to muscle tissues, it positively affects muscle performance and recovery after exercise. Both fibromyalgia and healthy individuals may elect to take malic acid to increase athletic endurance.
If the fibromyalgia patient chooses to take a malic acid-magnesium supplement, it is best to start with 600mg malic acid combined with 150mg magnesium twice a day. Over time, this can be increased to as much as 1200 mg malic acid and 300 mg magnesium.

**DBM PROTOCOL – ADJUNCT TREATMENT – MALIC ACID SUPPLEMENTATION**

Rather than taking synthetic dietary supplements, there are a few natural sources of malic acid. One source is apple cider vinegar. The late traditional herbalist Dr. John R. Christopher recommended that each of his patients make a tart beverage containing eight ounces distilled water, one tablespoon raw, organic apple cider vinegar, and two teaspoons raw honey.

This beverage should be consumed three times a day for a multitude of health benefits. Adding Epsom salt into this beverage to bowel tolerance has the same effect as a malic acid and magnesium dietary supplement.

Dr. Christopher and many naturopathic physicians recommend making fresh apple juice with Granny Smith apples to get the daily dose of malic acid.

Freshly juiced, raw, unsweetened cranberries are also high in malic acid and provide a tart beverage. The two juices may be blended together for another option.

**Sources**


Vitamin Research Products.com, “Krebs’ Cycle Intermediate Also Important for Exercise Recovery & Endurance,” By VRP Staff

Herbal Legacy.com, “Apples,” by Anna Lovett-Brown
Manual Lymph Drainage (MLD)

Lymph vessels are also found under our skin throughout the body. These vessels support circulation, drainage of waste and immunity. When the lymph flow slows, the skin will appear dull and toxins will build up.

Since the lymph moves against gravity, it is common for the lymph and veins to congest, yielding an unsightly appearance in the feet, legs, thighs, hips, belly and arms and causing much discomfort and/or pain to the patient.

Manual Lymph Drainage (MLD) is a gentle rhythmical technique that gently works on the lymphatic vessels to enhance the flow of lymph throughout the body's tissues.

MLD also helps to support the healthy function of the immune system and the autonomic nervous system, thereby reducing stress. Including Dry brushing along with some MLD into the program will encourage better lymph flow, the connective tissues to be cleansed of waste, thus decongesting and reducing oedema, pain and swelling.

- Faster recovery and less scarring from surgery and other types of trauma by making lymph flow faster and stimulating the formation of new connections between lymph vessels
- Clears congestive conditions such as chronic sinusitis, bronchitis, acne, and headaches
- Strengthens the immune system
- Relieves heaviness tightness and swelling in those suffering from lymphedema.
- Increases overall relaxation by decreasing stress
- Relieves retention of fluids during pregnancy and menstrual cycle
- Decreases local oedemas and hematomas from orthopaedic surgery, cosmetic surgery scars, and burn scars; leading to a decreased in healing time and increase in mobility
- People who suffer from insomnia, stress, fibromyalgia, and autoimmune diseases such as multiple sclerosis, lupus, and rheumatism benefit greatly from MLD.

**Manual Lymph Drainage And Its Role In The Treatment Of Lymphedema**

*By Joachim Zuther,*

Manual lymph drainage (MLD) is one of the main components of complete decongestive therapy (CDT). In combination with compression therapy, skin and nail care and decongestive exercises, MLD performs the crucial role of re-routing stagnated lymphatic fluid, which is essential in the treatment and management of primary and secondary lymphedema. This gentle manual treatment technique is based on four basic strokes, which were first described by Dr. Emil Vodder (1896-1986), PhD.

The goal of MLD is to stimulate healthy lymph vessels and lymph nodes, which generally are located adjacent to the area of non-functioning or blocked lymphatic drainage, and to re-route the lymph flow around these blocked areas into more centrally located healthy lymph vessels and nodes. This is achieved with specific stretches and manipulations – a common denominator in all MLD strokes – to the skin and those structures located directly beneath the skin, the subcutaneous tissues. The resulting increase in lymphatic activity in the healthy areas creates a “suction effect”, which stimulates the accumulated fluid present in lymphedema to move into an area with normal lymphatic drainage.

**What is the difference between MLD and traditional massage?**

It is unfortunate that the term massage is often wrongly used to describe MLD. The origin of the word massage is derived from the Greek massain (to knead) and is used to describe such techniques as effleurage, petrissage, vibration, etc. Massage techniques traditionally are applied to treat ailments in muscle tissues, tendons and ligaments, and in order to achieve the desired effect, these techniques are generally applied with considerable pressure.

MLD on the other hand is a very gentle manual technique, designed to have an effect on fluid components and lymphatic structures located in superficial tissues, i.e. the skin and the subcutis. Lymphedema almost exclusively manifests itself in the subcutis, which is a layer of connective tissue between the skin and muscle tissues.

The only commonality between MLD and traditional massage is that both techniques are applied manually. There are significant differences in technique, pressure and indications for which these two therapeutic measures are used.

There are a number of reasonable explanations why MLD and massage are often confused with each other. One is that there is a tendency to call any hands-on manual therapeutic technique a form of massage; the other is that massage can be very helpful if applied to treat oedema.
However, lymphedema and oedema are two very different conditions and it is important to understand the differences. Although both conditions involve swelling, oedema and lymphedema have very different causes and are treated differently.

Additional Resources:
http://www.lymphedemapeople.com/thesite/edema_or_lymphedema.htm

The Science Behind Manual Lymph Drainage In The Treatment Of Lymphedema
By Joachim Zuther

Manual lymph drainage (MLD) is a gentle manual treatment technique based on four basic strokes, which were initially developed in the 1930's by Dr. Emil Vodder, a PhD from Denmark. These basic strokes known as the “stationary circle”, “pump”, rotary” and “scoop” techniques are designed to manipulate lymph nodes and lymphatic vessels with the goal of increasing their activity and promote the flow of lymph.

Movement of Lymph Fluid in Lymph Vessels
The common denominator of all strokes is the resting and working phase. In the working phase of the stroke lymphatic structures located in subcutaneous tissues are stretched, resulting in an increase of their activity (lymphangiomotoricity). In addition to increased lymphatic activity, the light directional pressure in the working phase of the strokes causes lymphatic fluid to move in the desired direction, thus contributing to the reduction of the swelling.

Certain MLD strokes are designed to manipulate lymph vessels located in the subcutaneous tissues of larger body surfaces, such as the trunk, other techniques are better suited to be applied on contoured surfaces, such as the extremities.

Stationary circle: This technique consists of an oval-shaped stretching of the skin with the palmar surfaces of the fingers or the entire hand. Stationary circles can be applied with one hand, or bimanually and are used on the entire surface of the body, but mainly on lymph node groups (axilla and groin), the neck and the face.

Pump technique: The entire palm and the proximal (upper) phalanges are used to apply a circle-shaped pressure on the skin, operating within almost the full range of motion in the wrist. Pumps are primarily used to manipulate lymph vessels located in the extremities and can be applied with one hand or bimanually.

Rotary technique: This stroke is used on large body surface areas, such as the trunk. The entire surface of the hand and fingers are used in an elliptical movement during the working phase. Like the scoop technique, rotaries are applied dynamically, meaning the working hand moves over the surface of the treated body part in a continuous fashion. If applied bimanually, the techniques are alternating.

Scoop technique: Scoops are applied mainly on the lower parts of extremities and consist of a spiral-shaped movement. During the working phase, which can be applied with one or both hands, the palmar surface of the hand moves dynamically over the skin. The hand movement is facilitated by transitional movement in the wrist, combined with forearm pronation and supination.

Lymph Vessels in the Skin
Compared to traditional massage, the pressure applied with manual lymph drainage is much lower in intensity. The goal of these techniques is to manipulate the lymphatic structures located in the subcutaneous tissues. In order to achieve the desired effect, the pressure in the working phase should be sufficient enough to stretch the subcutaneous tissues against the fascia (a structure separating the skin from the muscle layer) located underneath, but not to manipulate the underlying muscle tissue. The amount of pressure needed in MLD is sometimes described as the pressure applied stroking a new-born’s head.

In the resting phase of the stroke the pressure is released, which supports the absorption of lymph fluid into lymph vessels. To achieve the maximum effect with each technique, the working phase with every stroke should last about one second and should be repeated five to seven times.

The overall goal of MLD in the treatment of lymphedema is to re-route the flow of stagnated lymphatic fluid around blocked areas into more centrally located healthy lymphatic vessels, which eventually drain into the venous system.

In the case of upper extremity lymphedema caused by breast cancer surgery, it is necessary to re-route the flow of stagnated lymph in the subcutaneous tissues of the arm around the blocked axillary area towards and into the axillary lymph nodes on the opposite side and the inguinal lymph nodes on the same side the surgery was performed. These groups of lymph nodes represent the drainage areas for the stagnant lymph fluid located in the affected upper extremity and need to be manipulated prior to initiating the treatment of the arm itself.

In the case of lower extremity lymphedema, the stagnated lymphatic fluid is generally re-routed around the blocked inguinal (groin) area towards and into the inguinal lymph nodes of the opposite side and the axillary lymph nodes on the same side of blockage. As with lymphedema affecting the upper extremity, these groups of lymph nodes represent the drainage area for the stagnated lymph fluid and need to be manipulated prior to starting treatment of the leg.

The manipulation of these drainage areas with MLD strokes creates a “suction effect” in the healthy lymph vessels located in the drainage areas, which enables accumulated lymph fluid to move from a region with insufficient lymphatic drainage into an area with normal lymphatic drainage, and eventually back into the venous system.

Following this preparation, the extremity itself is treated in segments; the proximal (upper) aspect of the affected extremity is decongested prior to expanding the treatment to the more distal (lower) aspect of the arm or leg. This segmented approach ensures that lymph vessels located in more proximal areas of the extremity are properly prepared to handle incoming lymphatic fluid from areas located more distally.

In order to prevent reaccumulation of the fluid evacuated from the extremity, it is necessary that the MLD treatment is followed up with compression, which depending on the stage of treatment, is applied either with specialized padded bandages or compression garments.

Manual lymph drainage presents a unique opportunity for health care professionals to specialize and opens the door to treat and manipulate a variety of conditions associated with dysfunctions of the lymphatic system. However, the unique techniques of manual lymph drainage deviate considerably from traditional manual techniques and therefore require specialized training.

**Lymphatic Drainage Massage**

Within us all there is a silent system working to keep us healthy- the lymph system. Without it our bodies would swell up like balloons, swamping our cells with stagnant fluid. The lymph system’s impact is so far reaching that many don’t even realize that minor aches and pains, low energy or susceptibility to colds...
and flu may be due to a sluggish lymph system and a compromised immune system. In this article we'll
discuss the anatomy of the lymph system, what happens during oedema and how lymph drainage
massage can help, as well as contraindications to lymphatic massage.

**Lymph Vessels:**
Lymph vessels make an intimate meshwork that covers every inch of your skin, and surrounds each organ
in great detail. The lymph vessels start very small in what are called the initial lymphatic. Over 70% of the
initial lymphatics are in and just under the skin. The initial lymphatic is a very delicate structure, one cell
thick. Those cells are supported within the connective tissue by collagen and elastin fibres that help to
anchor them in place. When the pressure within the interstitial space increases due to a build-up of fluid,
or when the skin is slightly stretched, the filaments deform the wall of the initial lymphatic, opening it up.
Then the interstitial fluid flows in and starts to move along the channel. At this point we start calling it
lymph. Although only 2-3 litres of lymph is filtered through the lymph system per day, it is vital because it
helps to remove proteins that that are too large to get back through the capillary wall. (Guyton and Hall,
page 139) The spaces that open in the initial lymphatic are 4 to 6 times bigger than the spaces in the
capillaries. Removal of protein is essential because they draw water to themselves, so excess protein in
the interstitial spaces causes swelling or oedema. The lymph vessels also collect dead cells, waste
products, bacteria, viruses, inorganic substances, water and fats.

By performing lymphatic drainage massage correctly, we can stimulate the opening of the initial
lymphatic and increase the volume of lymph flow by as much as 20 times. But if we push too hard, we
collapse the initial lymphatic, diminishing the lymph flow. Excessive pressure can even break the filaments
that hold the initial lymphatic in place. This is one reason that deep styles of massage are contraindicated
in areas of oedema. Luckily if deep pressure has broken any filaments, they usually reform within 24 hours.

After the lymph has entered the initial lymphatic, the lymph moves into a larger vessel called the pre-
collector, and then into even larger vessels called the collectors. The collectors are 100-600 microns in
diameter. These vessels have one way valves every 6-20 mm that only allow the lymph to move in one
direction. When you're performing lymphatic drainage massage, you never have to worry that you are
damaging your clients by pushing the lymph in the wrong direction- because it literally can’t flow
backwards. Pushing in the wrong direction won’t be very effective, but it won’t hurt your client unless
you are using deep pressure- and in that case, you are not doing lymphatic drainage massage.

From one one-way-valve to the next is called a lymphangion. The lymphangions have a layer of smooth
muscle that spirals around them. Angion means heart- so this is really the pump that pushes the lymph.
Each lymphangion has an internal stretch sensor. The walls of the lymphangion stretch when they fill up
with lymph, and then the stretch sensor tells the muscle to contract. This spiralling muscle contracts
squeezing the lymph into the next chamber. This swells the next lymphangion, which then contracts,
pushing the fluid down the line. At the same time the lymphangion is pushing the lymph forward, it also
is creating a vacuum behind it. It is partly because of this vacuum effect that the lymph gets pulled into
the initial lymphatic in the first place. (Kasseroller, R., Compendium of Dr. Vodder's Manual Lymph Drainage,
Haug, Heidelberg, 1998)

Once the lymphangions begin contracting, they cause a chain reaction, or a wave of contractions that
start to push and pull the lymph through the body. In this way stimulating lymph flow in one area can
increase lymph flow in another. Other factors that can assist the movement of the lymph are skeletal
muscle contractions, breathing, the pulsing of arteries, as well the ability of the angions to contract
independently of the stretch receptors. Lymphatic Drainage Massage’s effectiveness lies in its ability to
activate the stretch response, which significantly increases the pulsation rate of the lymphangions,
increasing lymph flow through the vessels.
Lymph Nodes:
Eventually, all lymph vessels lead to lymph nodes. Lymph nodes can be as small as the head of a pin, or as big as an olive. There are 400-700 lymph nodes in the body, half of which are located in the abdomen, and many are in the neck.

The primary function of lymph nodes is to filter and purify the lymph. The lymph nodes produce various types of lymphocytes. Lymphocytes destroy harmful substances within the body, and are a big part of the immune system. The lymph nodes reabsorb about 40% of the liquid content of the lymph. This makes the lymph much thicker. Because of this thickening and the filtering process, the lymph nodes offer the greatest resistance to the flow of lymph. In fact, the lymph nodes offer about 15 times more resistance than the vessels themselves. Lymphatic drainage can help overcome this resistance and get the lymph flowing.

Oedema:
Each cell is nourished by the nutrients, oxygen and proteins that flow across the walls of capillaries into the interstitial fluid. There is a dynamic balance between the forces that help those nutrients to first exit the capillaries, and then get reabsorbed back into the bloodstream. Proteins play a big part in this transfer because they have a tendency to draw water to themselves. This means that the proper amounts of protein on both sides of the capillary wall are vital to keep the tissues balanced. If there are too many proteins within the interstitial spaces, fluid will start to accumulate, causing oedema. The lymph system’s role of removing proteins is vital to keeping oedema down. If the lymph system becomes sluggish, or is damaged by surgical removal of lymph nodes, oedema can develop. This type of oedema is called lymphostatic oedema, or a high protein oedema. Lymphatic drainage can be helpful in reducing this type of oedema because the cause is a reduced functioning of the lymph system.

Other causes of oedema can be a chemical imbalance in the body caused by liver disease, diabetes, or a variety of other ailments. This type of oedema is called lymphodynamic oedema, and requires other forms of therapy due to the fact that it is a chemical imbalance. (Kasseroller, R., Compendium of Dr. Vodder’s Manual Lymph Drainage, Haug, Heidelberg, 1998)

Indications:
Lymphatic drainage massage is a profound technique to help increase lymph flow. With an increase of lymph flow immune function is increased. Harmful substances are removed from the tissues and neutralized in the nodes. It has also been shown that an increase in lymph flow stimulates an increased production of lymphocytes- enhancing immune function.

Patients that have extreme amounts of oedema should work with a group of healthcare practitioners trained in lymph drainage, bandaging and other modalities. However, with a proper understanding of contraindications and some basic training, massage therapists can enhance the health of their clients and reduce minor cases of oedema.

Lymphatic drainage in this arena can be applied to clients who are suffering from a lack of energy, or a sluggish immune system.
Lymphatic drainage massage is also useful when working with clients who have sports injuries. After the initial inflammatory stage has passed, lymphatic work can be applied after Sports or Neuromuscular massage has been completed. This will help to clear the tissue of debris, and help to reduce the minor oedema that sometimes occurs after deep massage. Continued applications of lymphatic drainage while the client is healing can help to enhance the tissue regeneration process by keep the tissue as healthy as possible.

Not only is lymphatic drainage useful for sports injuries, but it can also help scars. (Godart, S., “Lymphatic regeneration after second degree burn,” Progress in Lymphology, 1975/ Hutzshenreuter, P.O. and Brummer, H., “Manual Lymph Drainage used for Scar Healing,” University of Ulm). Lymph work has been shown to help the scarring process by enhancing circulation and immunity. As the lymph flow around the scar is increased, lymph vessels that have been damaged are stimulated to heal, and the increased lymph flow also draws away toxins, improving the health of the tissues.

When attempting to assist healthy scar formation, it is important not to push the lymph into the scar, which can cause the formation of keloids (a build-up of collagen fibres). All scar work should be done without deforming a newly forming scar so as to not rip the tissue. One way is to work above the scar (closer to the node that drains the area). For example, a lymph therapist could work in the axilla and upper arm to help increase the lymph flow around a scar in the forearm.

Beyond its application for injuries, Estheticians have been using lymph drainage massage for years to enhance the quality of the skin, especially on the face. When the lymph is flowing, the cells are being bathed in fresh fluid, causing the skin to look fresh and alive. We have all experienced having minor edema in our faces- that puffy feeling and baggy eyes when we first wake in the morning after a long night. Usually after a few minutes of being vertical the lymph system starts to drain the face. A great way to see the power of lymph drainage is to apply a few strokes on one of those mornings, and watch in just a few minutes the tissues drain right before your eyes- leaving you looking vibrant and healthy.

Another common use for lymph drainage massage is with women who have had breast cancer and had some axillary lymph nodes removed. Sometimes these people develop edema in their arm. If there is a great deal of swelling, then this is out of the scope of practice for a most massage therapists due to the need for bandaging. If the swelling is minor however, then a fully trained lymphatic drainage therapist working in conjunction with medical supervision can do a great amount of good.

Contraindications:
For the most part lymphatic drainage massage is safe. With such a light touch, the danger of causing damage to the tissue is slim. However, there are a few conditions that are contraindicated, and these happen when an increase of lymph flow would be detrimental. It is a good idea to get clearance from their doctor if you ever feel uncertain about working on someone. Acute inflammation, Malignant tumours, Thrombosis and major heart problems are all contraindications to lymphatic drainage massage. Let’s look at these one at a time.

Acute inflammation caused by bacteria, viruses, poisons or allergens is contraindicated. You can tell if this is the case because the tissues will be hot, red and painful, with congestion accompanied by fever. Lymphatic drainage massage will push these substances into the lymph channels before the body has a chance to eliminate them through phagocytosis in the interstitial spaces. If you perform lymphatic drainage you can spread the toxic substances throughout the body. Wait a few days until the condition is not acute, and the body has had a chance to clean up the area.

Malignant tumours are a contraindication for lymphatic drainage massage because of the fear of spreading the cancer. Wait until after the malignancy is treated to perform lymphatic drainage massage. Thrombosis and phlebitis are two conditions that can lead to free floating blood clots. Usually people with these conditions will be in a hospital on blood thinners. If you are working in a hospital setting, do not work on these patients. In your practice, one indication of a possible femoral thrombosis is when the
client has pain in one leg and a sudden swelling and bluish discoloration of the skin. People who are bedridden have a greater likelihood of developing thrombosis in the legs.

Major heart problems. If the heart is not fully functioning the edema can be lymphodynamic, due to lack of venous return. Putting more fluid into the heart would only stress it more, worsening the condition.

After reading the contraindications for a modality, many therapists experience fear of working on anyone. The most appropriate response to this list is to add it to your client intake questionnaire. It should also make you take pause to reflect on the power of this type of work - to do harm as well as good.

Lymphatic drainage massage is a great ally in any massage therapist’s tool kit. By being able to address the lymph system directly, client’s immune system function can be significantly increased. When we have a strong immune system, we are happy, balanced and whole. Lymphatic drainage massage can go where Deep Tissue and Swedish cannot - into swollen areas. The paradox is that such a superficial technique has such a deep impact.

Lymphatic Drainage Massage Therapy Demonstration – Full body
https://www.youtube.com/watch?v=XvGqGRecMto

Lymphatic Drainage Techniques

All the Lymphatic Drainage techniques are based on one principle motion. Research has found that the initial lymphatics open up and the lymph angions are stimulated by a straight stretch, but even more so with a little lateral motion. After these 2 motions, we need to release completely to allow the initial lymphatics to close and the lymph to be sucked down the channels. In this zero pressure phase don’t completely disconnect from the skin, just return your pressure to nothing. Also don’t pull the skin back with you as you return, let it spring back by itself.

This basic lymphatic technique may resemble a circle, and is called stationary circles. All motions are based on this principle.

In orienting this motion, we always want to push the lymph towards the correct nodes, so the last, lateral stretch motion should be going towards the nodes.
Think about moving water. Visualize those initial lymphatics just in the skin, stretch, opening them up, then release and wait for the lymph angions to pump the lymph down the vessel. Remember how superficial this is. If you are feeling muscle, or other tissue under the skin, you are pushing too hard.

Here are four points remember when performing Lymphatic drainage massage techniques:

1. Correct pressure is deep enough so that you do not slide over the skin, but light enough so that you don't feel anything below the skin. This is about 1-4 ounces. It is very common for massage therapists trained in Swedish or deep tissue to apply too much pressure with lymphatic drainage massage. Sometimes it is hard to believe that something so light could be effective. Always remember- you are working on skin. How much pressure does it take to deform the skin? Almost nothing. Remember- if you push too hard you collapse the initial lymphatic.

2. Direction of your stroke is of great importance, because we always want to push the lymph towards the correct nodes. If you push the lymph the wrong way, your work will not be effective.

3. Rhythm is very important while performing lymphatic drainage techniques, because with the correct rhythm and speed, the initial lymphatics are opened, and then allowed to shut and then there is a little time that is given for that lymph to get sucked down along the vessel. An appropriate rhythm will also stimulate the parasympathetic nervous system, causing the client to relax.

4. Sequence means the order of the strokes. When we want to drain an area, we always start near the node that we are draining to. Always push the lymph toward the node when you are performing the techniques. Then as we work, we move further and further away from the node, but always pushing the fluid back in the direction of the node. In this way we clear a path for the lymph to move, as well as create a suctioning effect that draws the lymph to the node.

Sean Riehl is the author of the DVD, Lymphatic Drainage Massage.

Leg & Thigh Lymphatic Skin Technique for Swollen Feet & ankles
https://www.youtube.com/watch?v=hnLVssspfo

Head Massage & Chest Skin Technique Therapy – Lymph Drainage
https://www.youtube.com/watch?v=LjP6X8bR9EU

Lymph Drainage – Breast Massage
https://www.youtube.com/watch?v=Gr0kqKFMfww

Manual Lymph Drainage – Vodder Technique
https://www.youtube.com/watch?v=azNh7KX0V7M

Self Manual Lymph Drainage For Lymphedema Affecting The Leg
By Joachim Zuther,

Complete decongestive therapy (CDT) is performed in two phases; in the first phase, also known as the intensive or decongestive phase, treatments are administered by trained lymphedema therapists on a daily basis until the affected body part is decongested.

The duration of the intensive phase varies with the severity of the condition and averages two-three weeks for patients with lymphedema affecting the lower extremity. However, in extreme cases the decongestive phase may last longer and may have to be repeated several times.

The end of the first phase of CDT is determined by the results of measurements taken by the therapist on the affected body part. Once measurements approach a plateau, the end of phase one is reached and the patient progresses seamlessly into phase two of CDT, which is also known as the self-management phase.
Phase two is an ongoing and individualized part of CDT, in which the patient assumes responsibility for maintaining and improving the treatment results achieved in the intensive phase (phase one).

During the intensive phase patients are instructed by the therapist in the individual components of self-management, which include self-manual lymph drainage (self MLD, or simple MLD), abdominal breathing techniques, a skin care regimen, home exercises, and the application of compression garments (and bandages).

The self-manual lymph drainage techniques are relatively easy to perform and therapists generally teach one or two MLD strokes that can be learned and safely performed by the patient. It may help if the patient’s spouse, a relative or a friend is present during the therapist’s demonstration of these strokes to observe, take notes, or record the techniques with a camera.

The strokes are based on the same principles as those performed by the therapist, and it is very important that the patient clearly understands the hand movements, specifically the principles of skin elasticity, the pressures used during the working and resting phases of the strokes, and in which direction the pressure should be applied.

The following techniques can be used for lymphedema affecting one leg; the illustrations and techniques describe the sequence used for lymphedema affecting the left leg. In this case the lymph nodes located in the opposite groin (right) and those in the axilla of the same side (left) are unaffected and working properly.

This sequence should not be used in lymphedema affecting both legs, or if the axillary lymph nodes on the affected, or the inguinal (groin) lymph nodes on the unaffected side are removed, or non-functioning due to other reasons.

Ideally, self MLD should be applied at least once daily for 15-20 minutes, directly preceding the exercise program, and should be followed by appropriate skin care and compression therapy. Each stroke should be repeated 5-7 times.

The techniques and sequences below are standard examples and may vary from those demonstrated by the therapist. Therapists may have different preferences, or the techniques may have to be adjusted to accommodate specific requirements or physical limitations of the individual patient.

**Preparation and Abdominal Breathing:**
1. Stationary circles with flat fingers above the collarbone on both sides. The fingers of the right hand manipulate the skin above the collarbone on the left and the fingers of the left hand manipulate the skin above the collarbone on the right. The pressure is applied with the flat phalanges of the fingers (generally the index, middle and ring fingers) and the pressure is directed toward the neck. This technique can be applied simultaneously on both sides or on each side individually.
2. Stationary circles with the flat hand in the centre of the axilla (armpit, underarm) on the same (affected) side. The pressure is directed downward (deep) into the axilla and applied with the flat fingers and palm.

3. Stationary circles with the flat hand in several placements from the waist on the affected side to the axillary lymph nodes on the same side covering the entire surface of the lateral trunk (flank). The pressure is directed toward the axillary lymph nodes (same side).

4. Stationary circles with the flat hand in the area of the groin lymph nodes (inguinal lymph nodes) on the opposite side. The hand is placed just below the inguinal ligament (in the green area depicted on the illustration on the very bottom of this page) and the pressure is directed toward the belly.
5. Stationary circles with the flat hand in several placements from the groin (inguinal) area on the affected side to the groin (inguinal) area on the opposite side. The pressure is directed toward the groin (inguinal) area on the opposite side.

6. Diaphragmatic (abdominal) breathing:
   **It is important to discuss any possible contraindications for this technique with the therapist!**
   Abdominal breathing is done by contracting the diaphragm, a muscle located horizontally between the chest cavity and stomach cavity. As air enters the lungs this deep breathing is marked by expansion of the abdomen rather than the chest when inhaling. During the inhalation both hands that are placed flat on the belly provide resistance to the expanding abdomen.
Step 6 – Inhalation
During the exhalation the hands follow the belly and at the end of the exhalation, the hands press gently downward and upward toward the chest.

Step 6 – Exhalation
This technique should be repeated five times.

Leg
7. Soft effleurage over the skin of the entire leg from the ankles (or knees) to the waist.
8. Stationary circles with the flat hand and fingers in several placements on the lateral (outside) thigh and hip. The pressure is directed toward the waist.

9. Stationary circles with the flat hand and fingers in several placements from the medial (inside) portion to the lateral portion of the thigh. With the pressure directed toward the lateral aspect of the thigh, the entire thigh from the top (just below the groin) down to the knee should be covered.

10. Stationary circles with the flat fingers of both hands behind the knee. The pressure is directed upward toward the thigh.
11. Stationary circles with the flat fingers of both hands on the medial (inside) lower leg. With the pressure directed toward the thigh, the entire area between the knee and the medial ankle bone should be covered.

12. Stationary circles with the flat hand and fingers of both hands on the inner and outer surface of the lower leg. With the pressure directed toward the thigh, the entire area between the area below the knee and the ankle bones should be covered.
Step 12

13. Repeat as many of the steps on the leg as you wish.
14. Repeat steps 2, 4, and 6

Inguinal Ligament, Groin Lymph Nodes – Step 4
Chamomile (*Matricaria recutita*) is used both internally and externally. It is used to treat pediatric colic and teething and for digestive and skin conditions. To explore the characteristics, medicinal uses and prescribing considerations of this herb in more detail, check out the references indicated.

**Characteristics**

**AKA** *Chamomilla recutita*, *M. chamomilla*

- **Common Names:** German chamomile, Single chamomile, Ground apple, Hungarian chamomile, Pinheads, Wild chamomile, Sweet false chamomile
- **Family:** Compositae/Asteraceae
- **Habitat:** *Matricaria recutita* is native to Europe and is now naturalized in North America and elsewhere.
- **Parts Used:** Flowers (preferably picked a few days before opening)
- ** Constituents:** Volatile oils (active constituent), Apigenin and other flavonoids (active constituents), Sesquiterpene lactones, coumarins, phenolic acids, dicyclic ethers, mucilage
- **Medicinal Actions:** antispasmodic, anti-inflammatory, anti-inflammatory gastrointestinal, mild sedative, nerve, carminative, stomachic, antiemetic, antirheumatic, analgesic, antiseptic, vulnerary, diaphoretic, mild antimicrobial, anticatarhal, antiulcer, aromatic, bitter, decongestant, emmenagogue, tonic
Medicinal Uses:
Internal
- Digestive Conditions
  - Gastrointestinal discomfort, flatulence, dyspepsia, loss of appetite, Irritable Bowel Syndrome, peptic ulcers, gastritis, diarrhea.
- Other Conditions
  - Insomnia and anxiety (mild).
  - Pediatric colic and teething.

External
- Skin Conditions
  - Inflammatory skin conditions, cuts, bruises, hemorrhoids, pruritic irritation (compress or ointment), eye strain (eyewash).
  - Canker sores, irritation of the gums and mouth, aphthous ulcers, gingivitis, sore throats (gargle).
- Respiratory Conditions
  - Phlegm, hay fever, asthma, bronchitis (steam inhalation).
DBM PROTOCOL – ADJUNCT TREATMENT – MATRICARIA RECUTITA / CHAMOMILE

Prescribing Considerations
The information provided is intended to augment a treatment plan. Although most herbs are generally safe, it is recommended that you avoid self-prescribing especially when there is an underlying ongoing medical condition, if you are on any prescription medications or if you are pregnant or breastfeeding.

Formulations and Preparation
- Infusion - 2 tsp/cup three to four times daily
- Tincture - 1-4mL (1:5, 40%) three times daily or 7-14mL (1:5, 50%) three times daily
- Oil - 2-3 drops of essential oil in hot water basin for steam inhalation
- Eyewash - 5-10 drops in warm water
- To encourage a baby to sleep - 1-2 cups strained infusion in bath water

Safety
The safety and prescribing considerations for Chamomile include:
- Generally regarded as safe.
- Side-effects are possible contact dermatitis, vomiting (in very high doses)
- Cautions and Contraindications: individuals with known allergy to members of the Asteraceae/Compositae family, pregnancy (whole plant, empirical; excessive doses, speculative)
- Drug-Herb Interactions.
  - Non-heme Iron - Reduced absorption (human study)
  - Warfarin - Potentiated (speculative)
  - Benzodiazepines and Opiate Withdrawal - Adjuvant to (empirical)
Meditation

Quality of Life is Determined by Internal Conditions

Meditation
Meditation can wipe away the day's stress, bringing with it inner peace. If stress has you anxious, tense and worried, consider trying meditation. Spending even a few minutes in meditation can restore your calm and inner peace. Your quality of life is determined by your internal conditions. If you are overstressed or constantly worried, this triggers off all sorts of physiological responses in the body which contributes to further health imbalances.

Anyone can practice meditation. It's simple and inexpensive, and it doesn't require any special equipment.
And you can practice meditation wherever you are — whether you're out for a walk, riding the bus, waiting at the doctor's office or even in the middle of a difficult business meeting.

Prayer is meditation – Reading the Holy Books is a form of meditation

Understanding meditation

*Meditation is not just sitting in one place in a strange position “clearing your mind”. Rhythmic movement such as tai chi/qigong is also a form of meditation. Using the subha/mishaba to recite prayers is also a form of meditation. ANYTHING that clears the mind of matters happening in your daily life is a form of meditation*
Meditation has been practiced for thousands of years. Meditation originally was meant to help deepen understanding of the sacred and mystical forces of life. These days, meditation is commonly used for relaxation and stress reduction.

Meditation is considered a type of mind-body complementary medicine. Meditation produces a deep state of relaxation and a tranquil mind.

During meditation, you focus your attention and eliminate the stream of jumbled thoughts that may be crowding your mind and causing stress. This process may result in enhanced physical and emotional well-being.

**Benefits of meditation**
Meditation can give you a sense of calm, peace and balance that benefits both your emotional well-being and your overall health.
And these benefits don't end when your meditation session ends. Meditation can help carry you more calmly through your day and may improve certain medical conditions.

**Meditation and emotional well-being**
- When you meditate, you clear away the information overload that builds up every day and contributes to your stress.
- The emotional benefits of meditation can include:
  - Gaining a new perspective on stressful situations
  - Building skills to manage your stress
  - Increasing self-awareness
  - Focusing on the present
  - Reducing negative emotions

**Meditation and illness**
Meditation might also be useful if you have a medical condition, especially one that may be worsened by stress. While a growing body of scientific research supports the health benefits of meditation, some researchers believe it's not yet possible to draw conclusions about the possible benefits of meditation.
With that in mind, some research suggests that meditation may help people manage symptoms of conditions such as:
- Anxiety disorders
- Asthma
- Cancer
- Depression
- Heart disease
- High blood pressure
- Pain
- Sleep problems

Be sure to talk to your patient about the pros and cons they are experiencing with the practice of using meditation. Ensure that a full assessment has been done before recommending a patient try meditation for if they have any of these conditions or other health problems, in some cases, meditation can worsen symptoms associated with certain mental and physical health conditions.

Meditation isn't a replacement for traditional medical treatment. But it may be a useful addition to your other treatment.

**Types of meditation**
Meditation is an umbrella term for the many ways to a relaxed state of being. There are many types of meditation and relaxation techniques that have meditation components. All these techniques share the same goal of achieving inner peace.

**Ways to meditate can include:**

- **Guided meditation.** Sometimes called guided imagery or visualization, with this method of meditation you form mental images of places or situations you find relaxing.

- You try to use as many senses as possible, such as smells, sights, sounds and textures. You may be led through this process by a guide or teacher.

- **Mantra meditation.** In this type of meditation, you silently repeat a calming word, thought or phrase to prevent distracting thoughts.

- **Mindfulness meditation.** This type of meditation is based on being mindful, or having an increased awareness and acceptance of living in the present moment.

In mindfulness meditation, you broaden your conscious awareness. You focus on what you experience during meditation, such as the flow of your breath. You can observe your thoughts and emotions, but let them pass without judgment.

- **Qi gong.** This practice generally combines meditation, relaxation, physical movement and breathing exercises to restore and maintain balance. Qi gong (CHEE-gung) is part of traditional Chinese medicine.

- **Tai chi.** This is a form of gentle Chinese martial arts. In tai chi (TIE-CHEE), you perform a self-paced series of postures or movements in a slow, graceful manner while practicing deep breathing.

- **Transcendental meditation.** Transcendental meditation is a simple, natural technique. In transcendental meditation, you silently repeat a personally assigned mantra, such as a word, sound or phrase, in a specific way. This form of meditation allows your body to settle into a state of profound rest and relaxation and your mind to achieve a state of inner peace, without needing to use concentration or effort.

- **Yoga.** You perform a series of postures and controlled breathing exercises to promote a more flexible body and a calm mind. As you move through poses that require balance and concentration, you're encouraged to focus less on your busy day and more on the moment.

- **The ritual of Prayer.** Reciting prayers are an excellent manner in which to clear the mind and learn to be wholly present in the moment. The discipline of prayer should be undertaken with an open heart and mind with the intent to connect with The Creator and not just as part of a daily routine. Making a connection with ‘The Higher Power’ allows greater healing to take place.

**Elements of meditation**

Different types of meditation may include different features to help you meditate. These may vary depending on whose guidance you follow or who's teaching a class. Some of the most common features in meditation include:

- **Focused attention.** Focusing your attention is generally one of the most important elements of meditation.

- Focusing your attention is what helps free your mind from the many distractions that cause stress and worry. You can focus your attention on such things as a specific object, an image, a mantra, or even your breathing.
- **Relaxed breathing.** This technique involves deep, even-paced breathing using the diaphragm muscle to expand your lungs. The purpose is to slow your breathing, take in more oxygen, and reduce the use of shoulder, neck and upper chest muscles while breathing so that you breathe more efficiently.

- **A quiet setting.** If you're a beginner, practicing meditation may be easier if you're in a quiet spot with few distractions, including no television, radios or cellphones.

- As you get more skilled at meditation, you may be able to do it anywhere, especially in high-stress situations where you benefit the most from meditation, such as a traffic jam, a stressful work meeting or a long line at the grocery store.

- **A comfortable position.** You can practice meditation whether you're sitting, lying down, walking, or in other positions or activities. Just try to be comfortable so that you can get the most out of your meditation.

**Everyday ways to practice meditation**

Don't let the thought of meditating the "right" way add to your stress. If you choose to, you can attend special meditation centers or group classes led by trained instructors. But you can also practice meditation easily on your own.

And you can make meditation as formal or informal as you like, however it suits your lifestyle and situation. Some people build meditation into their daily routine. For example, they may start and end each day with an hour of meditation. But all you really need is a few minutes of quality time for meditation.

**Here are some ways you can practice meditation on your own, whenever you choose:**

- **Breathe deeply.** This technique is good for beginners because breathing is a natural function. Focus all attention on your breathing. Concentrate on feeling and listening as you inhale and exhale through your nostrils. Breathe deeply and slowly. When your attention wanders, gently return your focus to your breathing.

- **Scan your body.** When using this technique, focus attention on different parts of your body. Become aware of your body's various sensations, whether that's pain, tension, warmth or relaxation. Combine body scanning with breathing exercises and imagine breathing heat or relaxation into and out of different parts of your body.

- **Repeat a mantra.** You can create your own mantra, whether it's religious or secular. Examples of religious mantras include the Jesus Prayer in the Christian tradition, the holy name of God in Judaism, or the om mantra of Hinduism, Buddhism and other Eastern religions.

- **Walk and meditate.** Combining a walk with meditation is an efficient and healthy way to relax. You can use this technique anywhere you're walking, such as in a tranquil forest, on a city sidewalk or at the mall. When you use this method, slow down the pace of walking so that you can focus on each movement of your legs or feet. Don't focus on a particular destination. Concentrate on your legs and feet, repeating action words in your mind such as lifting, moving and placing as you lift each foot; move your leg forward and place your foot on the ground.

- **Engage in prayer.** Prayer is the best known and most widely practiced example of meditation. Spoken and written prayers are found in most faith traditions. You can pray using your own words or read prayers written by others. Check the self-help section of your local bookstore for examples. Talk with your Sheikh/Imam, Rabbi, Priest, Pastor or other spiritual leader about possible resources.

- **Read and reflect.** Many people report that they benefit from reading poems or sacred texts, and taking a few moments to quietly reflect on their meaning.
You can also listen to sacred music, spoken words or any music you find relaxing or inspiring. You may want to write your reflections in a journal or discuss them with a friend or spiritual leader.

- **Focus your love and gratitude.** In this type of meditation, you focus your attention on a sacred object or being, weaving feelings of love, compassion and gratitude into your thoughts. You can also close your eyes and use your imagination or gaze at representations of the object.

**Building your meditation skills**

Don't judge your meditation skills, which may only increase your stress. Meditation takes practice. Keep in mind, for instance, that it's common for your mind to wander during meditation, no matter how long you've been practicing meditation. If you're meditating to calm your mind and your attention wanders, slowly return to the object, sensation or movement you're focusing on.

Experiment, and you'll likely find out what types of meditation work best for you and what you enjoy doing. Adapt meditation to your needs at the moment. Remember, there's no right way or wrong way to meditate. What matters is that meditation helps you reduce your stress and feel better overall.

**DBM PROTOCOL – ADJUNCT THERAPY - MEDITATION**

**Recommendations**

The practice of meditation should be undertaken every day. Begin with a few minutes and build up to at least 15-20 minutes. More if the patient is able to.
Medicago sativa
Alfalfa

Overview
The alfalfa herb is used for kidney conditions, bladder and prostate conditions, and to increase urine flow. It is also used for high cholesterol, asthma, osteoarthritis, rheumatoid arthritis, diabetes, upset stomach, and a bleeding disorder called thrombocytopenic purpura. People also take alfalfa as a source of vitamins A, C, E, and K4; and minerals calcium, potassium, phosphorous, and iron.

Alfalfa can be used for:
- Cleansing the blood
- Helping alleviate allergies
- Aids in blood clotting
- Promotes healthy digestion
- Can easy morning sickness
- Is helpful in reversing tooth decay and remineralising teeth
- Great source of Vitamin K
- Supports the pituitary gland
- Supportive during nursing
- Helps ease morning sickness
- Helps ease gout
- Aids with all forms of arthritis

Alfalfa is used in alternative medicine to reduce cholesterol and blood pressure. The high concentration of alkaloids in Alfalfa make it useful in reducing blood sugar levels.
It is also commonly used as a blood detoxifier and for any types of arthritis or joint problems. It is a great source of many nutrients and is generally considered safe for children, adults and pregnant/nursing mothers.

The one caution about alfalfa is not to use in combination with blood thinning agents or medications as it is so effective it can interfere or amplify the effects of these.

**Modern Research**

Studies on alfalfa tea have shown mixed results. For example, according to MedlinePlus, there is insufficient evidence alfalfa is a viable treatment for its traditional uses, as well as a treatment for prostate issues, asthma and diabetes. Smaller studies have indicated that alfalfa seeds can reduce the amount of cholesterol in the body for those with high cholesterol, but more research is required.

A study published in 2012 by the Institute of Soil Science and Plant Cultivation in Poland, however, suggested that preclinical research indicates that alfalfa leaf extract enriched with vitamin C supports the human body in fighting malnutrition, ischemic diseases and various disorders of the digestive tract, as well as supporting and enhancing immunity. Ischemic diseases restrict blood supply to different organs.

**Alfalfa Nutrition Fact and Health Benefits You Must Know**

There are many health benefits that we can get from alfalfa. Since the 6th century, alfalfa (Medicago sativa) has been used by the Chinese to treat kidney stones, gastrointestinal and bloating. Initially, the world of traditional Chinese medicine often uses Alfalfa leaf, to treat diseases related to the digestive tract. Then developed to help cleanse toxin in the blood or the so-called detoxification and treatment of joint inflammation. While in the treatment of India (Ayurveda) for the treatment of gastrointestinal illness. Alfalfa is also believed to be very beneficial in reducing the symptoms of arthritis.

Alfalfa is included in the legume family. This plant can grow up to one meter and has a small purple flowers. Alfalfa plants have very deep root systems to reach about 4.5 meters. Therefore, the plant is known drought resistant. Believed too, that the root system makes alfalfa can absorb minerals that are not commonly found on the surface of the soil. This makes this plant special so called alfalfa by the Arabs, which means father of plants.

Alfalfa is commonly consumed in the form of sprouts, stems, or dried leaf. Alfalfa food supplements are available in tablet, powder, or tea. In the United States and Australia, young fresh alfalfa leaves are mixed into a salad. In China has been used as an herbal remedy or as a soup mix.

**Nutrition Fact of Alfalfa**

Alfalfa is known as one of the plants with high nutritional content. The content of calcium, chlorophyll, carotene, and vitamin K, which fairly high, making alfalfa as a supplement that is often used for human consumption.

Another advantage alfalfa is rich in vitamins and minerals fairly complete. Vitamins are contained in alfalfa are: vitamin A, thiamine (vitamin B1), riboflavin (vitamin B2), niacin (vitamin B3), vitamin B5, vitamin B6, vitamin C, vitamin K, and folic acid. Mineral seed, namely calcium, iron, magnesium, phosphorus, copper, and zinc.

Alfalfa leaf is a source of chlorophyll, four times higher than ordinary vegetables. There have been many scientific studies done on the efficacy of chlorophyll, such as cleaning the body, forming blood cells, regulating the body's acid-base balance, enhancing durability, as well as the replacement of damaged cells.

**Health Benefits of Alfalfa**

1. **Control Blood Cholesterol**
Alfalfa is useful to control blood cholesterol by removing bad cholesterol from the body. Alfalfa plant plays a very obvious role in preventing cholesterol levels from reaching all-time highs, it indirectly also plays a role in the reduction of the risks of heart diseases.

2. Overcome Digestive problems
It’s effective in eliminating digestive problems that include nausea, stomach ulcers, gastritis and indigestion. This apart, alfalfa can also help improve your appetite.

If you suffer from digestive conditions such as diverticular disease or chronic constipation, alfalfa sprouts may help to ease some of your symptoms. A serving of alfalfa sprouts contains roughly one gram of fibre, which is three percent of an average adult’s daily need. Try including alfalfa sprouts in your daily diet to improve your digestive regularity.

3. Remove toxins from the body
The alfalfa plant is known to possess detoxification properties. This only means that with regular consumption of the plant you will be able to rid your body of toxins that can do more harm than good.

4. Get rid of alcohol addiction
Facing a problem with an alcohol addiction or drug addiction? Are you looking forward to getting the better of your addiction? Then, the alfalfa plant is what you need. It is a known fact that the alfalfa plant can help persons suffering from an addiction to alcohol or drugs to cope with the same.

5. Reduce the symptoms of menopause
In women, the alfalfa plant has been known to help neutralize the signs and symptoms of menopause. This, in a way, makes it an indispensable source of medication to counter the signs and symptoms of menopause.

6. High in Vitamin K
The alfalfa plant contains vitamin K and helps a person who suffers from slow clotting blood.

7. To relieve asthma
From time immemorial, the alfalfa plant has been used to provide relief to people suffering from asthma and other such respiratory ailments. The chlorophyll present in the plant also helps wage effective wars against bad breadth.

8. Prevent Cancer
The alfalfa plant, as hard as it may seem to believe, can provide assistance in the prevention of the occurrence of cancer. This is mostly because of the presence of an amino acid called canavanine in the plant. The plant also has a proven ability to bind carcinogens within the colon.

9. Diuretic properties
The alfalfa plant is a diuretic and this helps it to assist in the prevention of kidney disorders and water retention. Alfalfa is also blessed with properties that help in the prevention of the occurrence of a ‘Urinary Tract Infection’ or UTI.

10. To treat Anaemia
Alfalfa has been known to be extremely useful in the treatment of anaemia.

Additional benefits
The alfalfa plant has beneficial healing properties against bad breath, sore or achy joints, imbalanced skin conditions, and it even increases immune system functionality. When consumed regularly, it acts as an alternative to over the counter pain medicines for headaches or migraines because of its high calcium and magnesium levels. As anyone can see, consuming alfalfa herb on a routine basis has an abundance of positive health results.
• Getting alfalfa into one's diet is not at all complicated. It can be taken in many different forms.
• A popular way to get this herb into the system would be to drink brewed tea daily.
• For added benefits and a better taste, a helpful suggestion would be to brew alfalfa tea with another flavoured tea, as while the health benefits of this herb are extremely apparent, the taste can be slightly bland.
• This herb can also be taken in capsule form.
• Dried Alfalfa is as good, if not better, than fresh Alfalfa.
• Alfalfa can also be mixed in with different foods. Salads, soups, casseroles, as an example.
• The alfalfa herb is very mild in flavour and because of this, it can be used in many different ways.

DBM PROTOCOL – ADJUNCT TREATMENT – MEDICAGO SATIVA/ALFALFA

1. Alfalfa Sprouts

2. Alfalfa Tea

Ingredients
1 teaspoon of dried alfalfa leaves
2 cups clean spring/borehole water

Instructions
• Steep dried leaves in boiling water for ten minutes.
• Strain and drink
• Honey may be added
• As alfalfa leaves are fairly bland patient may choose to blend two teas together

Alfalfa Side Effects
Possible side effects of alfalfa.

Can cause Autoimmune Side Effects
Long-term use of the seeds may cause a condition called systemic lupus erythematosus according to the National Institutes of Health. Symptoms of this autoimmune disorder may include chronic inflammation in the joints causing pain and generalized fatigue. Notify your health care provider with any of these symptoms.

Make a sensitive skin
Large doses of alfalfa may increase your sensitivity to sunlight. This would leave a person vulnerable to sunburns and skin irritations. When taking alfalfa with certain medications, the risk of sensitive skin is even greater. A protein substance called canavanine found in alfalfa causes this skin condition. When spending time outside in the sunlight, proper sunblock should be worn. If skin problems develop, seek your health care provider.

Pregnant women and nursing mothers should avoid alfalfa
Using alfalfa in larger than food amounts is possibly unsafe during pregnancy and breast-feeding. There is some evidence that alfalfa may act like estrogen, and this might affect the pregnancy.
Melaleuca alternifolia

*Tea Tree*

Tea Tree (*Melaleuca alternifolia*) is best known for its ability to fight infections. It has antiviral, antibacterial, antifungal and antiparasitic properties and is used primarily as an essential oil due to its high cytotoxicity. To explore the characteristics, medicinal uses and prescribing considerations of this herb in more detail, check out the references indicated.

**Characteristics**
- **Common Names:** Tea tree, Ti tree
- **Family:** Myrtaceae
- **Habitat:** *Melaleuca alternifolia* is native to Australia.
- **Parts Used:** Leaves
- ** Constituents:** volatile oils (terpinen-4-ol, cineol)
- **Medicinal Actions:** antimicrobial (bacteria, viruses), antifungal, antiparasitic, antiseptic, immunostimulant

**Historical Uses:**
*Melaleuca alternifolia* was used by aboriginal Australians for coughs, colds, and skin infections as infusions or inhaled.

**Medicinal Uses:**
• Infections
  o infections such as wounds, infected rashes, impetigo, infected seborrheic dermatitis, furuncles, acne, warts, fungi (ringworm, athlete's foot), vaginal yeast infections (suppositories or douche), throat infections, oral thrush (gargle and spit)
  o chronic infections including cystitis and postviral fatigue syndrome.
  o Tea Tree Oil is effective against bacterial, fungal, viral and protozoa infections.
  o **Caution with tea tree oil is required as it has a high level of cytotoxicity.**

**DBM PROTOCOL – ADJUNCT TREATMENT – MELALEUCA ALTERNIFOLIA**

The information provided is intended to augment the treatment. Although most herbs are generally safe, it is recommended that patients avoid self-prescribing especially when there is an underlying ongoing medical condition, if they are on any prescription medications or if pregnant or breastfeeding.

**Formulations and Preparation**

• Infusion - 1/2 tsp per cup of water three times daily
• Oil - may be used topically; dilute in carrier oil if burning of skin occurs (due to cineol low quality oil has more)

*Products should contain 30% or more terpinen-4-ol and less than 15% cineol.*

**Safety**

The safety and prescribing considerations for this herb include:

• Generally regarded as safe.
• Side-effects are potential allergic hypersensitivity may occur with internal use, external use, or inhalation due to the volatile oils; skin irritation.
• Caution should be taken with oral administration.
• Drug-Herb Interactions.
  o **Aminopyrine** - Increased clearance of drug may occur due to induction of hepatic enzymes.

**Meridian Tapping Technique (MTT)**

*Also called Emotional Freedom Technique [EFT]*
As bizarre as MTT seems, MTT / EFT really does work and it won’t cost the patient a cent, except a few minutes of their time. MTT / EFT works exceptionally well for insomniacs.

What is MTT?
- MTT is a powerful mind/body “tapping” therapy that clears electrical blockages that are causing both emotional and physical issues – these blockages otherwise prevent energy from flowing through your body’s meridians
- MTT is used for just about any emotional or physical problem *

<table>
<thead>
<tr>
<th>EXAMPLES OF MTT APPLICATIONS</th>
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<tbody>
<tr>
<td>√ Pain relief</td>
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<td>√ Allergies</td>
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<td>√ Weight Loss</td>
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<td>√ Trauma</td>
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<td>√ Migraine</td>
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<td>√ Fear of public speaking</td>
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<td>√ Respiratory problems</td>
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<td>√ Anxiety</td>
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<tr>
<td>√ Women’s Issues</td>
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<tr>
<td>√ Sexual Performance</td>
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<tr>
<td>√ Implement positive goals</td>
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*Warning: for serious psychological conditions, such as multiple personalities, paranoia, schizophrenia, MTT should be supervised by those experienced in dealing with such conditions.

- MTT specifically addresses the concept that all negative emotions are caused by a disruption in the body’s subtle electromagnetic energy system - and not DIRECTLY by memories or thoughts.

- MTT restores mind/body balance essential for optimal health and the healing of physical disease – a concept not given much credence by Western healing methods, MTT is based on the premise that unresolved emotional issues are the cause of about 85% of physical health issues, due to the inherent connection between the body's subtle energy flow, emotions, and health; 

- No matter how dedicated one is to a healthy diet and lifestyle, it is to no avail if one is carrying “emotional baggage” - emotional stress can contribute to pain, disease and physical ailments, such
that until one deals with the electrical blockages formed as a result of negative thoughts or distressing memories, the body will not achieve an ideal state of health.

- **Physicians Should Overcome Their Scepticism** – ingrained doctrine and non-acceptance of unconventional approaches to healing cause many to find the idea of MTT both amusing and absurd. However, considering that the use of MTT is spreading rapidly because of its very high rate of success, it would be an injustice to your patient to not suggest such a simple ‘harmless’ adjunct therapy, considering the great amount of success practitioners and patients alike are experiencing.

- MTT involves tapping with the fingertips on specific acupuncture points on the head and chest together with thinking about your specific problem and voicing positive affirmations.

- MTT is a form of acupuncture without the needles – based on the 5,000+ year old Chinese practice of **treating physical and emotional ailments** using traditional acupuncture to clear the body’s energy meridians (electrical circuits). There are 12 main meridians named according to organs or functions in which bio-energy (called Chi by the Chinese) flows vertically in the body. There are 6 female YIN meridians in which energy flows upwards, and 6 male YANG meridians with energy flowing downward. Unhindered energy flow yields harmony and health, but slowed or stopped energy flow interferes with associated organ function resulting in sickness or tiredness.

- Thinking about one’s problem with positive affirmations allows the body to identify and correct the energy disruptions involved.

- Tapping on acupuncture points unblocks those pathways with reduced energy flow.

**MTT is simple, quick and painless:**

- A round of MTT takes less than a minute
- Frequently, problems disappear permanently in minutes or hours - some problems can reappear later as a different aspect of the original problem, which can then be dealt with at that time;
- The memory of a distressing event does not go away, just the “sting” that went with it
- The patient briefly recalls, not relives, their memories - during MTT, there is no need for a “Tell me your life-story” approach, which can sometimes create more electrical blockages;
- No pills are required
- Neither the patient nor the ‘prescribing’ physician need to believe that MTT will work! - and although it is better to say things with feeling and emphasis, saying it routinely will usually accomplish the task.
- It is better for the patient to speak out loud, but if they prefer to mutter under their breath or even express themselves in silent thought, it will be just as effective.
All negative emotion is the result of a disruption in energy flow caused by a distressing memory
The body is a network of electrical circuitry used to communicate between cells. E.g.

- To transmit a pain message when you touch something hot
- Electrical activity in the brain is measured as an EEG, and the heart by an ECG
- Electric currents are used to enable you to feel, taste and smell
- A distressing memory causes an energy blockage in the body’s electrical circuits (also called meridians)
  - which results in a negative emotion, such as fear, anxiety, depression, anger or grief;
- If a distressing memory doesn’t cause a disruption in the body’s energy system, then any associated negative emotion cannot occur - some people are better able to deal with negative experiences than others.
- MTT overhauls the body’s whole energy system to fix the disruption without needing to identify its exact location – although there are methods available to diagnose the body’s particular “faulty circuit”;

MTT produces effective results about 80% of the time

- MTT does not work for everyone – but most people have significant results within a couple sessions; there are even some who have experienced spectacular “1-minute miracles”;
- For best results, MTT needs to be applied to specific events or problems in one’s life – i.e. reduce general problems down to a number of more specific smaller problems.

Affirmation Phrases – Patient Information
Affirmation phrases should build you up, not beat you up – positive statements to make or do something, or create a specific goal. You control your thoughts, not your emotions, so choose nurturing and supportive thoughts;
Affirmation phrase has the general format that it must:

(1) Acknowledge the problem – note that unlike many conventional psychoanalytical methods and self-help books, which stress positive thinking but leave the root problem untouched, MTT necessitates
uncovering the negative problem (but without dwelling on it), so that its underlying electrical blockages can be eliminated. This will allow the positive to genuinely and freely reveal itself.

(2) Create self-acceptance despite the existence of the problem – self-love is at the core of most of our problems and we need to stop criticizing ourselves; People who have problems loving themselves always seem to have problems being able to forgive others i.e. holding a grudge prevents self-love. When you forgive others, you open the doorway to your own self-love.

(3) Be in the present - avoid future tense; E.g. I am going to . . . or I will have . . .

Example affirmation phrases
The self-acceptance phrase “I deeply and completely accept myself" has a good track record of success:

- "Even though I have this fear of public speaking, I deeply and completely accept myself."
- "Even though I have this headache, I deeply and completely accept myself."
- "Even though I have this war memory, I deeply and completely accept myself."
- "Even though I have this headache, I deeply and completely accept myself."
- "Even though I have these nightmares, I deeply and completely accept myself."
- "Even though I have this craving for alcohol, I deeply and completely accept myself."
- "Even though I have this fear of snakes, I deeply and completely accept myself."
- "Even though I have this depression, I deeply and completely accept myself."
- "Even though I feel alone when my husband works long hours, I deeply and completely accept myself."
- "Even though I have this anger towards my father, I deeply and completely accept myself."

Make it personal, not “Even though my husband works long hours . . .” or “Even though my father was a horrible person . . .” Don't try to fix someone else’s problem!
Try to aim at the specific emotional problem which may be underlying the physical problem.

Subsequent rounds of MTT
Sometimes 1 round is all that is necessary to completely resolve a problem or issue, however, if the problem doesn't decrease, or decreases to a level that is less than acceptable, then:
Repeat the round using a reminder phrase (a shortened version of the affirmation phrase). E.g. For "Even though I have this fear of public speaking, I deeply and completely accept myself", the reminder phrase could be “Fear of public speaking”.

At the end of a round evaluate any cognitive changes and reassess the level of intensity of your problem (rate on a score from 0-10).

- Seeing the problem from a new angle – often with a sense of surprise and insight. Often reveals new pathways for healing.
- You feel less guilt and self-blame, more hope, or a simple sense of relief in an area where there has never been relief before.

Do additional rounds to remove any newly surfacing aspects of the problem – sometimes a problem isn’t completely eliminated because tapping reveals a new aspect, usually a result or a cause, of the problem. This can be in the form of an image, conversation, interaction or any other form.

Persistence pays for problems for which it is difficult to identify the specifics - You could begin with - “Even though I have this feeling ...”, and during MTT, your subconscious mind will usually have its own way in revealing the specifics.

Doing about 10 rounds of MTT / day maximizes success of the therapy - allowing you to reap its benefits on many issues

Fine-Tuning the Therapy
Addressing the possible impediments to perfection attains better results - consider doing these if you do not achieve success with the “Basic MTT Recipe”.

- Various shortcuts suffice as you become familiar with the basic therapy.
- Tap while staring at your own eyes in the mirror - seems to provide a deeper connection with your subconscious.
- Pay attention to what you “hear” - especially if they are negative messages that could be blocking your progress. Acknowledge, don’t dwell on the negative angles, and then do MTT on them with a positive outcome affirmation.
- Forgive yourself – E.g. “Even though I was mean, I forgive you, I will do my best not to do it again” – whilst looking into your own eyes in a mirror this has quite a powerful effect.

Keep well hydrated
Keeping hydrated enables your body to conduct electricity efficiently.

An example of using more specific affirmation phrases for Insomnia:

- First identify the underlying issues in your life that may be causing your insomnia - there is always a physical and/or emotional CAUSE for a sleep disturbance. What have you been thinking about while lying awake? Does it relate to a problem you are having? Do you need an expedited answer to a specific problem? When did the sleep difficulties begin? – maybe there was some traumatic event at that time?
- Suggested affirmation phrases for different problem concerns - one of which may sound applicable to your situation:
  o Responsibility - The purpose here is to address the concern with a clear head after being well rested.
  o "Even though I feel a great responsibility for (describe any responsibilities that weigh on your mind when you are lying awake at night) … I acknowledge that any thoughts on this are better left until after I sleep".
  o Anxiety – from obsessively anxious thoughts over the outcome of something, or fear of what will happen if you don’t have an immediate solution for a situation; the goal is to find peace and confidence that a satisfactory solution will emerge A good tip is to keep a paper and pen next to your bed to jot down any ideas that do present themselves in the night – just enough to help with memory recall in the morning;
  o “Even though I’m anxious about (what worries you), I choose to be calm and confident”.
  o Anger – sleep and anger are often incompatible and the goal is to achieve peace; be honest with yourself and address all resentment against the situation or people involved;
  o “Even though I’m angry with/at (person/situation), I choose to be calm and confident”. Do as many rounds as needed to reduce distress, after which you will naturally fall asleep.
- Problem solving habit – the goal is to release yourself from “Thinking duty”; instead of physical tapping you can tap mentally or just touch tapping points to avoid physical disturbance at a time when being still is more conducive to sleep:
  o “Even though I can’t get to sleep, I choose to be pleasantly drowsy”
    Or
  o "Even though my thoughts seem so important right now, I know that they’ll be there tomorrow when I wake up."

Create a positive YOU by doing MTT morning and night using positive affirmation statements

- Before going to bed – allows your subconscious to work all night on the “better you”; even more powerful when affirmation statements are integrated with prayer;
- First thing in the morning – sets you up for the day;
- Say the positive affirmations even if they don’t feel true at first – eventually they will become true; E.g. “I am a happy person and I deeply and completely accept myself”

For More Information, go to website: Gary Craig’s free EFT (original name for MTT) tutorial: http://www.emofree.com/eft/eft-tutorial.html
For more specific information on:
- Using MTT on Fears and Phobias
- Using MTT on Traumatic Memories
- Using MTT for Addictions
- Using MTT for Physical Healing
- Using MTT to Enhance Your Self Image

See Gary Craig’s site at: http://www.emofree.com/

Gary is now retired, but is the person responsible for making this therapy better known.

Tips & Tricks for Using Advanced Affirmation Statements

http://www.mercola.com/forms/eftcourse5.htm

(see chart on next page)
Emotional Pain Chart
Mental Thought Patterns That Form Our Experiences

Pain Areas and Probable Causes:

Neck: Refusing to see other sides of the question. Stubbornness, inflexibility.

Shoulders: Represent our ability to carry our experiences in our life joyously. We make life a burden by our attitude.

Spine: Represents the support of life.
Middle: Guilt, Stuck in the past. "Get off my back."
Lower: Fear of money. Lack of financial support.

Elbows: Represents changing directions & accepting new experiences.

Wrist: Movement and ease.

Hips: Fear of going forward in major decisions. Nothing to move forward to.

Knees: Stubborn pride and ego. Inability to bend. Fear. Inflexibility. Want to give in.

Ankles: Inflexibility and guilt. Ankles represent the ability to receive pleasure.

Bunions: Lack of joy in meeting experiences in life.

How It Works:
“Our body movement is reflective of our inner world.” We teach you how to live inside your body. To feel your feet when they strike the ground and know which way you need to turn your foot in order to align your body and work toward being pain-free. It allows you to be conscious in your body while instinctively bringing awareness to your body. Your mind and body have connected. We see this automatically, benefit the lives of our clients by helping them make decisions that are in the best interests of their health from choosing better foods to choosing a career that suits them better. A clearer mind helps you to expend less energy every day and use that energy toward a life you love.

Other Connections:

Find Your Center

Chart by Louise Hay
Methylsulphonylmethane

MSM - Methylsulfonylmethane

A Review
MSM is an abbreviation of methylsulphonylmethane, an organic form of sulphur. The chemical formula of MSM is CH₃SO₂CH₃. It is the form in which sulphur appears in nature in all living organisms, and in which it is biologically active. MSM is an odourless, white, crystalline powder that is highly soluble in hot water and in a wide range of organic solvents. Biologically active sulphur has incredible preventive and therapeutic properties. The medicinal properties of biological sulphur are profound, and they are also based on obvious principles. Because of these characteristics, the discovery of biological sulphur’s role in health, and the process that enabled its successful delivery in supplemental form, are generally considered among the biggest advances in orthomolecular medicine in the second half of this century.

- MSM is the bioactive, organic form of sulphur in all living organisms and a potent antioxidant/anti-inflammatory agent
- MSM has the same health benefits as DMSO.
- It is found in many plants – MSM used to be in all of our fruits and vegetables when the top soil was rich with nutrients.
- MSM is composed of the amino acids Methionine, Cysteine and Cystine which can be found in cellular proteins of all living organisms.
- It is available for oral consumption – as powder, capsules, crystals, flakes, tablets;

DBM PROTOCOL – ADJUNCT TREATMENT – MSM - TRANSDERMAL
Being critically important in many aspects of health, MSM is usually given in supplemental doses. MSM Water to be used in conjunction with DMSO application for Transdermal OCC Protocol.

DBM PROTOCOL – ADJUNCT TREATMENT - MSM WATER – For Use in IMMUNOCLEAN Transdermal Protocol

Ingredients
2 Tablespoons MSM powder
250ml clean spring / borehole water

Instructions
- Dissolve MSM powder into the water
- Store in a glass container in the fridge
- Shake well before use

DBM PROTOCOL – ADJUNCT TREATMENT – MSM - ORAL

Oral Doses of MSM

To avoid the bitter taste of bulk MSM - Take a teaspoonful of the powdered MSM and place it on the tip of your tongue. Wash it down with a large amount of liquid. Juices will mask any small taste, especially Cranberry Juice. When placed on the tip of your tongue, MSM is tasteless. It is when it dissolves that the taste is very bitter. Consuming MSM in this manner will allow nearly all of the MSM to dissolve in your stomach, far away from your taste buds.

Oral Dosage [5g = 1 teaspoon on average]
- Most people will take between 5 and 25 grams per day, depending on whether they are in a prevention mode or a treatment mode.
- For brain cancer, however, a typical dose is 40 grams / day for a 200-pound person.
- Toxic dose – is over 100 grams/day for a 200 pound [90.7kg] person.
- A single oral dose of MSM is not usually effective - MSM is administered in spaced dosages, either periodically throughout the day for several successive days, until anticipated benefits occur E.g. 2 - 21 days or longer. Ingested MSM accumulates in the body tissues and fluids to reach an effective level.
- Start slowly with 5g /day for a week and build up in successive weeks – sulphur is a detoxifier, and our body’s cells need to release waste substances slowly enough into the bloodstream for your kidneys and liver to handle them without poisoning you. It is necessary to hydrate well with clean spring water in order to assist the body in flushing out the toxins.
- E.g. For arthritis, back or muscle pain – begin with 1 tsp/day of powdered MSM. If you do not experience a dramatic reduction in pain within two days, continue to increase the dosage up to 4 heaping teaspoons / day (20 grams).
- First time users should take MSM with meals to help prevent heartburn.

DBM PROTOCOL – ADJUNCT TREATMENT – MSM - TOPICAL

- As lotion and gel. Applied externally, MSM also penetrates through the skin (or scalp), but not as effectively as DMSO. It is suitable for improving the health of the area where it is absorbed.
- Mixing MSM with DMSO, takes advantage of DMSO’s ability as a penetrating carrier.
- While MSM is an important source of organic sulphur, it also has other unique properties.
- MSM combined with Glucosamine is better for Arthritis Pain - Doctors found that when their patients combined MSM with 1500 mg of glucosamine that it provided more pain relief than either the MSM or glucosamine alone.

Source: Book - The Miracle of MSM - The Natural Solution for Pain
Mindfulness

Linked to Meditation, Breathing and Even Eating – Being Consciously Aware!

Patient Information

- Have you ever forgotten someone’s name the second after you heard it?
- Can you think of a time when you asked a question without listening to the answer?
- Have you ever been thinking about work at home only to find yourself at work thinking about home?
- How much of your day would you say is spent in the actual moment, rather than reflecting on the past or planning for the future?
- Even though we all have the natural ability to be present most of us only stay connected briefly before turning right back into our thoughts.

This lack of attention leads to a lot of unwanted effects like bad mood, stress, conflicts and a lack of focus that makes us less effective in general.

Luckily there is a way out of this vicious circle, and it’s called mindfulness.

What is Mindfulness – Information for patients

“It’s good to have an end in mind but in the end what counts is how you travel.”

Orna Ross

Most of us have a hard time appreciating our everyday lives. Instead of being grateful for what we have, we are constantly chasing new goals thinking that somewhere ahead there will be something better waiting.

We think that if we’re successful enough somewhere down the road we will find happiness. But happiness works the other way around.

When you think about it, this very moment is all that we have. We can’t change the past nor control the future so why not focus on what’s actually within our control?
This is what mindfulness is all about. It’s a way of waking up to life. A way of leading your life in an open, curious and accepting way where you constantly choose to be present in the moment. In that way mindfulness is the very opposite of the everyday disconnectedness we’re usually in.

Why Is This Important?
When we go about our lives in a mindful way we have a general sense of heightened awareness, peacefulness and physical relaxation. These are certainly great reasons to practice mindfulness in themselves, but the benefits go far beyond that.

A study made in 2011 showed that the cognitive and psychological benefits reported by mindfulness practitioners may come from actual physical changes in the brain structure. In the study, 16 participants had MR images taken of their brains before and after they took part in an 8-week Mindfulness-Based Stress Reduction Program. After spending an average of 27 minutes each day practicing mindfulness the participants had increased the grey-matter density in the hippocampus (which is known to be important for learning and memory). The same changes were observed in structures associated with self-awareness, compassion and introspection. On top of that the researchers also noticed a decrease in grey-matter density in the amygdala, which plays an important role in handling anxiety and stress.


Thanks to the plasticity of the brain and the practice of mindfulness, we can actually play an active role in changing the brain and deliberately increase our well-being and quality of life.

Mindfulness Misconceptions & Mistakes to Avoid
- As you start practicing mindfulness, you’ll likely feel discomfort and become restless fairly quickly. Know that this is perfectly normal.
- Your mind is simply not used to so few incoming stimulus and will protest by sending you these signals. When you feel this slight discomfort, stay in control and refuse to immediately give in to the temptation to quit.
- A lot of people have the misconception that meditation is about emptying your mind completely and get increasingly annoyed each time a thought steals their attention. This is not true.
- In fact, sucking at meditation is actually good for your self-control and willpower. The more you lose focus, the more you practice your willpower each time you bring it back.
- If you’re just starting out, you’ll likely feel awkward and that you’re probably doing it wrong. That’s all right.
- You won’t be a great meditator right out of the gate so don’t expect to be. Just know that any mindfulness practice is way better than none at all and that you will get better with time so have fun with it.

The practice of mindfulness is divided into meditation practice and everyday exercises.

Meditation Practice
1. Pick a time and trigger. This doesn’t have to be an exact time of day. Pick a general one like in the morning when you wake up or during lunch. The trigger should be something you’re already doing like brushing your teeth, eating lunch or something else that’s a part of your regular routine.
2. Find a quiet spot. This could be a room in your house or out on a park bench. It doesn’t matter where you are as long as you get a couple of minutes of undisturbed alone time.
3. Get comfortable. Find a position that’s comfortable to you, whether it be sitting or lying down. Sitting is preferred if you have a tendency to fall asleep while meditating (and don’t want to do that). Loosen your belt and unbutton your pants so that nothing gets in the way of your breathing.
4. Clarify your intention. A couple of words or a sentence is enough. As you start out you can use the basic intention in mindfulness practice:” My intention is to be awake, open and attentive in the present
moment without judging what I’m paying attention to”. Some other examples of intentions can involve reducing stress, lead a calmer life, raise the awareness of your feelings and so on.

5. **Focus on your breath.** Become aware of your breathing. Follow a couple of deep breaths all the way in and all the way out. Either focus your eyes softly on a particular spot or let them close. If it helps, think to yourself “inhale...” as you breathe in and “exhale...” as you breathe out. When your mind starts to wander, gently bring it back to your breath. Practice for a couple of minutes as you start out and add more time to your meditation practice as you get into the habit.

**Every day Exercises**

Combine your meditation practice with one of the following everyday mindfulness exercises and they will help you become more aware in the present moment. As you get comfortable with one of the exercises you can add the next one and so on. Preferably start each one of the exercises by following three deep breaths in and out while paying attention to how each breath feels in your body. Also, remember to clarify your intention before you begin.

**Morning exercise – Waking up**

Use your newly awoken state to create a conscious start to your day. 
**Suggestion of intention:** “My intention is to wake up to this day.”
1. Connect to your breathing as your waking up.
2. Pay attention to possible sounds inside and outside of the room.
3. Note the quality of the light or dark inside and outside of the room.
4. If you want you can try to put a smile on your lips and see what happens.

**Daytime exercise – Starting your computer**

Turning your computer on can be your trigger to start your working day from a state of calm. 
**Suggestion of intention:** “My intention is to learn to work from a place of calm and stillness.”
1. Connect to your breathing.
2. Turn on the computer.
3. Count how many breaths you can follow in and out before the computer is ready.

**Evening exercise – Doing laundry, washing dishes & cleaning**

Intention suggestion: My intention is to become calm and peaceful in my everyday tasks.
1. Try dishwashing, cleaning and doing laundry a little bit slower than you usually do.
2. Try focusing your entire attention on what you’re doing and be aware of your body movements.
3. Pay attention to when your mind wanders.
4. Go back to what you’re doing and become aware of your body movements.
5. Repeat if necessary.
6. Pay attention to possible after-effects.

As you can see, mindfulness can be practiced on anything so let these three exercises be an inspiration for you to develop more of your own.

**What’s Next?**

1. Start building the habit of mindfulness into your life and tell us in the comments how you’re going to commit to it.
2. Think of two friends that could benefit from mindfulness practice and email this article to them.
3. Smile, breathe and go slowly.
**Mucous Cleanse**

*Steam, Netipot Rinse, Food*

Chronic Sinusitis is an inflammatory disease of the sinus cavities and has become one of the most commonly reported diseases. Sinusitis rarely exists without the presence of nasal inflammation (rhinitis) as well. The causes of chronic sinusitis vary but all result in swelling of the mucous membranes lining the nasal and sinus passageways. As the swelling blocks the narrow openings from the nose into the sinuses, the sinuses are unable to drain and mucous and debris from the lining of the sinuses build up, all of which establish an ideal breeding ground for bacteria leading to an infection. Allergies to inhaled environmental particles, viral infections (colds and flu) and other diseases are important factors leading to chronic sinusitis.

Curing a sinus infection naturally builds up the immune system because one is allowing it to do the work it’s supposed to, rather than letting antibiotics take over.

**How can humans produce so much phlegm or mucous?**

A runny nose is a sure symptom of a cold, but also allergies can turn your nose into a leaking faucet. Winter is coming and people will start suffering from colds. One symptom of the seasonal cold is the runny nose. There seems to be no end to the fluid flowing out of the nose and the pile of used paper tissues are growing bigger by the hour.

Niels Christian Stenklev is an associate professor at the University of Tromsø and a specialist in otolaryngology, (Ear/Nose/Throat Specialist) states: “When we catch a cold we are usually infected by a virus. It takes about two days from being infected until you start to feel the symptoms. The virus has spent this time migrating into the mucous membrane cells of your nose, multiplied itself and created an inflammation reaction in the mucous membranes. Inflammation is the body’s protective mechanisms against foreign organisms and material.
As a part of this process a number of signal substances are released the mucous membranes of your nose. These lead to increased production of mucous, more blood is channeled to these membranes and more body water is leaked out between the cells of the mucous membranes,” says Stenklev. We experience this as having a stuffy nose and a lot more mucous runs out than usual.

**How To Explain The Process Of Elimination Through Mucous To Your Patient:**
Mucous is actually a collective designation for everything that comes out of your nose, with the exception of when you have a nosebleed.

When you are healthy it runs out as mucous. If the mucous is dried you get encrusted clumps. When you catch a cold the production increases and the phlegm and body water run from your nose. If you have a bacterial infection you get also get pus – a mixture of dead tissue, bacteria and leukocytes.

**The colour of Mucous can tell us show sick we are:**
Clear and colourless mucous is okay, yellow or green indicates a viral or bacterial infection. Your body is sending leukocytes to the mucous membranes in your sinuses to fight the infection, and the aftermath of this battle gives it colour.

Mucous is a kind of garbage removal system. Our nasal hairs catch bacteria, viruses, grains of dust and pollen and other unwanted foreign elements, so that they don’t easily follow the air into our lungs. Mucous transports it out again through the nose or down into your stomach.

**DBM PROTOCOL – ADJUNCT THERAPY – NASAL RINSE – NETI POT**

**How to Use a Neti Pot with No Danger**
A Neti Pot is used for Jala Neti, a very old cleansing technique of the Hatha Yoga tradition of India. The literal translation of the Sanskrit term means "water cleansing". The newly established modern word for Jala Neti is nasal irrigation.

The Neti pot is filled with a body-warm saline solution of the same concentration as the body fluids. With this solution the nasal cavities are rinsed so that the salty water goes in through one nostril and comes out to the other.

A more advanced technique is letting the water in through one nostril and out through the mouth. This is hardly felt if the salt concentration, water temperature and technique are good, for sure there is no pain or uncomfortable feeling involved.

**Saline Solution**
Use only pure sea salt or salt that does not have additives such as fillers and iodine. Industrial salt has added chemical anticaking agents. Our recommendation is pharmaceutical salt which can be purchased in health stores or pharmacies.

The solution used should be 0,9% of salt, similar to body fluids. Some Neti Pots have a spoon to measure this exactly. If one is not available, take 500cc of clean water or distilled water and add one teaspoon of salt, [approximately 5g] this is about 0,9%. Once the patient experiences this solution, they will understand how it should ‘feel’ and adjust the solution according to their needs. An easier solution is to taste the fluid to ensure the same concentration every time.
Take body-warm water for Jala Neti. Pour some drops on the inside of your wrist to see if the water has the right temperature, the hands are not sensitive enough. It is better to have the water a little bit too warm than too cold. Mix well so that the salt is diluted completely. You will find all this out with growing experience; it differs from person to person. Some like a higher saline solution, some even do it without salt. The tissue of the nose is very sensitive and reacts immediately if something is not right. This shows you if everything is fine. If you take the described solution and temperature, there should be no uncomfortable feelings at all.

**Technique - How to Use a Neti Pot**

**Most Common Method - Sideways**
- Fill your Neti pot and stand in front of the sink.
- Bend over the sink and breathe naturally through your mouth. By opening your mouth wide enough, the passage from the nose to the mouth is closed, ensuring that no water can get into your mouth or throat.
- Don't talk or laugh, no air should come into your nose now. There won't be a feeling of having water in the airways if you pay attention to this.
- Now put the nose cone into your right nostril and seal it with some gentle moves so that no water is coming out of this nostril.
- Then gently bend your head forward and roll it to the left side. The left nostril should be the lowest point. Forehead and chin should be about the same level.
- You need to experiment with the posture of your head. Once the water is coming out of your left nostril, hold your head and only move the Neti pot to keep the water pouring in.
- You should start with half a pot per side. For this wait about 20 seconds and remove the nose cone out of your right nostril. If you practiced with half a pot for some time, you can use one pot per side.
- Bring your head to the middle and let all the water flow out. Blow gently with both nostrils. You should not close one nostril now and you should not blow hard. This will bring the water up into your ears where it will not dry correctly.
- Repeat the procedure with the left nostril, doing everything in the opposite direction.
- When you are finished let all the water flow out again and gently blow the water out of both nostrils. You can roll your head in every direction and let it hang and move it then to get all the water out. Drying up the nose is very important and should not be neglected!
- If you have a mucus blockage you can go back and forth for some times. Make sure that the water which has entered the nose does not flow back in the Neti pot. Therefore, put the cone in your nose, pour some water in, remove the pot and let it flow out again.
- If you have problems doing this alone, you can ask people who practice yoga or give yoga classes to show you. Most yoga practitioners will know this technique.
- If you try it for some time and the water does not come out of the other nostril, you should ask a doctor for advice. There could be some type of anatomical blockage.

**Advanced Method - Backwards - No Danger**
- This is called Vyutkrama Kapalabhati or sinus bellowing and cleanses a part where the water cannot flow just by using the sideways technique. It is a more advanced and more powerful technique. It has a better effect on some diseases and problems such as sinusitis, snoring or throat problems. You should only try this if you have mastered the sideways technique.
- Always start with by cleaning your nose with one or two pots using the sideways technique.
- Then start just as if you would do the sideways technique. Gently sniff some water back into your mouth and spit it out.
- Even though there no danger you should try not to swallow the water.
- You do not need to dry your nose between the two techniques but you should pay extra-attention on cleaning your nose afterwards as the water reaches deeper and in more places than just by using the sideways technique.

**Benefits**
removes dirt and infectious microorganisms from the nasal cavities and passageways
• reduces the frequency and duration of colds
• reduces allergic problems such as hay fever
• improves your nose breathing generally and therefore reduces diseases such as asthma and bronchitis
• moistens dry nasal cavities and passageways
• reduces the symptoms of chronic sinusitis
• flushes the tear ducts and increases eye sight
• improves your sense of smell and taste, is therefore very good if you want to stop smoking
• can be beneficial for some types of ear disorders
• stimulates Ajna-Chakra
• has a harmonizing and calming effect on the mind

**DBM PROTOCOL – ADJUNCT TREATMENT - STEAMING**

**Using Steam to Clear Mucous**

- **Breathe steam.** You can do that just by taking a hot shower, of course. Or pour steaming-hot water into a bowl and lean over it, draping a towel over your head. Inhaling the steam will help loosen the secretions in your lungs.

- To make the steam treatment even more effective, **add a few drops of eucalyptus or pine oil to the water.** Eucalyptus helps to soften mucus in obstructed airways and has some antibacterial properties. (If you want to use eucalyptus leaves, simply boil them in a pot of water, then remove from the heat and inhale the steam.) Pine oil acts as an expectorant, so it will help you “bring up” phlegm from the bronchial tubes.

- **Run a humidifier** in your bedroom when you’re sleeping to moisten the air you breathe. But be sure to follow the manufacturer’s directions for cleaning the humidifier. Otherwise, bacteria and mold can accumulate in the works.

- If you have an ultrasound, cool-mist humidifier, add the contents of a one-pint bottle of 3% hydrogen peroxide and a quarter-cup of water. The hydrogen peroxide works to thin mucus and may even help get the infection under control. You can leave the humidifier running day and night so you’re constantly breathing in the vapours.

**DBM PROTOCOL – ADJUNCT THERAPY- DIET**

**Natural ways to thin mucus**

- To thin mucus and help you cough it up more easily, **drink lots of water**—at least eight 250-mL glasses each day. And **avoid alcohol** and caffeinated drinks, which dehydrate your system and make the mucus tougher to dislodge.

- **Eat chili peppers, hot spicy salsa, or dishes prepared with cayenne pepper.** Fiery foods don’t just make your nose run—they also thin the mucus in your lungs, helping you cough more productively.

- **Drink mullein tea.** Mullein, a traditional folk remedy for respiratory ailments, offers another way to clear mucus from your lungs. It contains saponins, which help loosen phlegm, along with a gelatinous mucilage that soothes raw mucous membranes. Boil a cup of water, remove from the heat, and drop in two teaspoons dried mullein leaves. Let the tea steep for 10 minutes, then strain out the wet leaves and drink the tea. You can drink up to three cups a day.

- **Avoid milk products.** Cow’s milk contains lactalbumin, which stimulates the production of mucus in the upper and lower respiratory tract and in the intestines. (Young calves, with four stomachs, need this extra mucus to help protect their intestinal tracts from strong stomach acids...but you don’t!) When humans drink cow’s milk, the result is excessive mucus production.

**DBM PROTOCOL - MUCOUS CLEANSE: #1 IMMUNOCLEAN - STEAM INHALATION**

Support the removal of toxins which the body is secreting through mucous out the nose.

**Ingredients**

- 20 drops IMMUNOCLEAN Drops (activated)
- 1-2L filtered or spring water
- 1 crystal of menthol crystal
### Special Equipment
- Deep bowl
- Hand towel

### Instructions
- Activate 20 drops IMMUNOCLEAN Drops in a small glass container crystal to
- Fill a large bowl with 1 – 2 Litres of boiling hot water, and add activated drops to the water
- Add 1 menthol crystal
- Place your face over the bowl and drape a towel over your head to trap the steam
- Hold your face there as long as possible and take slow, relaxed normal breaths
- Keep your eyes closed throughout this process

### DBM PROTOCOL - MUCOUS CLEANSE: #2 - STEAM INHALATION WITH ESSENTIAL OILS

#### Ingredients
- Pure eucalyptus essential oil – 3 drops + tea tree oil + 3 drops peppermint oil
- 1-2L filtered or spring water

#### Special Equipment
- Deep bowl
- Hand towel

#### Instructions
- Take a large ceramic bowl of boiling water and add essential oil to it.
- Gently swirl the bowl to blend the oils
- Take a towel and drape it over your head
- Lean over the bowl and breathe deeply
- Keep your head over the steam as long as possible and repeat the process by taking small intervals
- Performing this procedure regularly will help to clear the mucus from your chest

### DBM PROTOCOL - MUCOUS CLEANSE: #3 - STEAM INHALATION WITH ESSENTIAL OILS

#### Ingredients
- Pure eucalyptus essential oil – 5 drops + 3 drops peppermint + 2 drops rosemary
- 1-2L filtered or spring water

#### Special Equipment
- Deep bowl
- Hand towel

#### Instructions
- Take a large ceramic bowl of boiling water and add essential oil to it.
- Gently swirl the bowl to blend the oils
- Take a towel and drape it over your head
- Lean over the bowl and breathe deeply
- Keep your head over the steam as long as possible and repeat the process by taking small intervals
- Performing this procedure regularly will help to clear the mucus from your chest

### DBM PROTOCOL - MUCOUS CLEANSE: #4 CHEST CONGESTION

Internally, onion is a stimulant, an expectorant (loosens phlegm), and a diuretic (increases urination to flush impurities out of the body). Onions, especially the skins, contain high amounts of quercetin. Onions have anti-inflammatory and anti-allergy properties, stabilize membranes (and is a proven anti-viral.)
(6) It’s metabolized quickly—within a couple of hours, the blood concentrations peak... so if you’re using an onion remedy, be sure to take that into consideration and re-apply or sip on some broth every couple of hours. (See References)

**Ingredients**
1 picking onion (small onion) or 5-6 shallots
1 teaspoon honey (to taste)

**Directions**
- Chop the shallots
- Add honey and chew well along with sugar at night time before going to bed
- Or you can use big onions sautéed or curried to treat this problem.
- This process is one of the effective remedy for chest congestion.

**DBM PROTOCOL - MUCOUS CLEANSE: #5 CHEST CONGESTION**

**Ingredients**
1 picking onion (small onion)
4 tablespoons lemon juice
2 tablespoons honey
2 tablespoons clean spring water

**Directions**
- Chop the onions well then grind to a smooth paste
- Then extract its juice by pressing the paste and retrieving the liquid that rises and place in a small pot
- Add the water to the extracted onion juice in the pot
- Add the fresh lemon juice and honey to that mixture
- Stir it well and heat it for few minutes until to lukewarm
- Drink whilst still warm
- Repeat 3 x daily

**DBM PROTOCOL - MUCOUS CLEANSE: #6 TURMERIC - CHEST CONGESTION**

Turmeric has natural antioxidants and anti-inflammatory properties that help in curing the several internal and external problems of the body especially respiratory problems.

*Note: Do Not Use Milk From Cows. Patients With Cancer Should Not Be Given This Protocol*

**Ingredients**
½ teaspoon turmeric powder
1 cup fresh goats milk / almond milk
1-2 teaspoons honey (more or less to taste)
1 large pinch of ground black pepper

**Instructions**
- Add turmeric to milk and warm gently in a pot on the stove, until it is at desired temperature.
- No need to boil the milk
- Add pinch of black pepper
- Remove from heat and when ready to drink add 1 or 2 teaspoons of honey (to taste)
- Stir well and drink it whilst still hot
- An alternative to turmeric would be Goats Milk with Saffron: Both milk and saffron contain properties of introducing heat to the chest, which can then help to get you rid of chest congestion.
- Drink at bedtime
**DBM PROTOCOL - MUCOUS CLEANSE: #7 CHEST CONGESTION**

**Ingredients**
- 2 tablespoons turmeric powder
- 2 tablespoons apple cider vinegar

**Instructions**
- Mix both ingredients well and drink the mixture
- Repeat 3 x daily

**DBM PROTOCOL - MUCOUS CLEANSE #8 – THYME TEA - CHEST CONGESTION**

Thyme is an expectorant.

**Ingredients**
- 1 cup clean spring water
- ½-1 teaspoon dried thyme
- Honey and lemon to taste – optional

**Instructions**
- Boil the water, pour into a cup.
- Add the thyme and allow to steep for 5 minutes
- Add honey and/or lemon slices/juice to taste
- Sip whilst still hot

**DBM PROTOCOL - MUCOUS CLEANSE #9 – LEMON TEA - CHEST CONGESTION**

Lemon contains citric acid that helps to cut through phlegm. The vitamin C in lemon helps to improve the immune system, helping to fight against the virus or bacteria that causes the mucus and cough. Honey is well known as a cough suppressant, so it helps to reduce chest congestion and cough. Honey also acts as anti-bacterial to reduce the infection of the respiratory tract.

See Recipe on Foods for Life page - Teas

**DBM PROTOCOL - MUCOUS CLEANSE #10 – GINGER TEA - CHEST CONGESTION**

Ginger has anti-inflammatory property that helps to reduce the inflammation in the respiratory tract. It also has antibacterial and analgesic properties that help to clear chest congestion and treat cough.

See Recipe on Foods for Life page - Teas

**DBM PROTOCOL - MUCOUS CLEANSE #11 - CHEST CONGESTION**

Both honey and pepper are effective in reducing the thickness of the phlegm and also help in easily removing the phlegm from the respiratory tract and from the lungs. Honey also helps in reducing infections, thanks to its antiseptic properties

**Ingredients**
- ½ teaspoon ground black pepper
- 1 teaspoon honey

**Instructions**
- Mix honey and black pepper well, to a paste
- Swallow
- Repeat 3-4 times daily

**DBM PROTOCOL - MUCOUS CLEANSE - #12 – GARGLE - CHEST CONGESTION**

Gargle breaks down the mucus in the airways, helping to clear chest congestion.
**Ingredients**
- ½ cup clean spring water
- 1-2 teaspoons of Himalayan salt
- Large pinch of turmeric

**Instructions**
- Take warm water and add the salt and turmeric to it
- Stir the mixture so the salt is completely dissolved
- Use the mixture to gargle thoroughly for about 2 – 3 minutes
- Repeat this procedure at least 3 – 4 times a day

**DBM PROTOCOL - MUCOUS CLEANSE - #13 – DECONGESTANT SALVE**
Decongestant salve is easily blended at home

**Ingredients**
- ¼ cup coconut oil
- 1 tablespoon virgin olive oil
- 8 drops eucalyptus essential oil
- 5 drops peppermint essential oil
- 3 drops camphor essential oil

**Equipment**
- 1 small glass jar with lid

**Instructions**
- Heat the oil the coconut oil gently in a stainless steel pot, until it is liquid
- Then the olive oil to the molten coconut oil
- Mix it well and then add eucalyptus oil, peppermint oil and camphor essential oil to the mixture
- Stir it well with a sterile, clean spoon, but make sure to use a separate eye dropper for each oil
- Now pour this oil mixture in a 6 oz. cosmetic jar and cover the container
- Allow the oil mixture to harden in the refrigerator for an hour
- Apply this salve to your chest and neck whenever you feel discomfort in breathing
- The best time to apply this recipe is before going to bed
- After usage, store it in a cool, dry place and you can continue using it for up to six months

**DBM PROTOCOL - MUCOUS CLEANSE - #14 – SUPPORTIVE SOUP**
Mucous Support #1: Garlic and Lime Soup

See Recipe on Foods for Life page - Soups

**DBM PROTOCOL - MUCOUS CLEANSE - #15 – SUPPORTIVE JUICE**
Mucous Support – Lung Cleanse

See Recipe on Foods for Life page - Juices
“We believe that nutrition involves more than simply eating a healthy diet. It is about nourishment on every level. It involves relationships with family, friends, the greater society and the world. Choices about nourishment are very much linked to other human beings and other life forms on this planet, so healthy (and unhealthy) decisions have great impact. The food we eat gives our bodies the "information" and materials they need to function properly. If we don’t get the right information, our metabolic processes suffer and our health declines.

If we get too much food, or food that gives our bodies the wrong instructions, we can become overweight, undernourished, and at risk for the development of diseases and conditions, such as arthritis, diabetes, and heart disease. In short, what we eat is central to our health.

Consider that in light of Webster’s definition of medicine:
“The science and art dealing with the maintenance of health and the prevention, alleviation, or cure of disease.” Food acts as medicine, to maintain, prevent, and treat disease.” – Carolyn Denton LN

Doctors Beyond Medicine prescribe meals that are based on Whole Foods, that are Plant Based and which essentially are Vegan / Vegetarian.

THINGS TO REMOVE FROM YOUR DIET – FOR BETTER HEALTH
These Are DBM’s The Time-Tested Recommendations For Food Or Drink Choices:

- Natural, unprocessed and organic - chemical/GMO-free;
- No added sugar - except such as a small amount of honey, maple syrup or molasses. Under certain circumstances, the use alternative sweeteners such stevia or xylitol is acceptable.
- Avoid unhealthy artificial sweeteners, such as NutraSweet™ and Splenda™
- Select foods grown in your native environment - i.e. locally grown and seasonal
- Unpasteurized Goat/Sheep dairy products (if recommended by Practitioner) and fermented foods;
- Try to eat at least one third of your food raw;
- Ensure healthy fats in your diet - Omega-3 fat, with balanced intake of Omega-6 fat (Eliminate typical grocery store polyunsaturated vegetable oils).
- Choose Foods containing High-Energy Electrons

It is of the utmost significance to our health that our diet contains the right fats in correct balance. This is a complicated topic, but to help you understand which fats to eat and why, see:

Nutritional Supplements
Unfortunately, in today’s world, numerous factors have caused a depletion of available nutrients in our food supply. Therefore, unless you have food sources from reliable nutrition-minded food producers, or are responsibly growing your own food or keeping your own hens for eggs, it has become necessary to include some daily supplements to ensure needed nutrients:

Our World of Food Today
It is a shocking fact that ~90% of the money spent on food in the U.S. is spent on processed foods [Fast Food Nation by Eric Schlosser, 2002, Penguin Books]- most of us eat and drink only for enjoyment and sustenance, giving little attention to whether we are obtaining needed nutrients in the correct balance to maintain health. Although America is the richest country in the world, it takes the “prize” for having the highest
obesity rate (See Hand Outs) (30% of the population). With some effort, however, it is possible to make healthy choices that also fulfill our desire for pleasure when filling our stomachs.

The average American eats almost 1 ton of food per year – according to 2011 USDA data; this includes leftovers (food bought, served but not eaten); and of the 415 pounds of vegetables, a high proportion of these are starchy corn and potatoes.

For more information on Daily Nutrition or Food for Life – Visit the Nutrition Page
Oral Cleanse

Amalgam Removal, salt water rinse

Warning, if patient has cancer ensure that appropriate ‘cleaning’ protocols are in place after the removal of amalgams. DBM does not support the indiscriminate use of high doses of Intravenous doses of ascorbic acid. Speak with your DBM Physician.

Amalgams

The use of INTRAVENOUS VITAMIN C (Ascorbic Acid) during the removal of mercury fillings, is often used. HOWEVER, if the patient has CANCER, it is vital that appropriate measures be put in place to ensure that ripened trophoblasts, as a result of high doses of Vitamin C, are removed appropriately.

Patients suffering from Mercury sensitivity may develop an allergic reaction during the removal of their mercury fillings as a result of the mercury vapours which are released. This allergic reaction may be lessened or completely prevented by the SIMULTANEOUS administration of intravenous ascorbic acid. Ascorbic Acid has an antihistaminic action in the body thereby reducing or totally eliminating an allergic reaction. In addition, any mercury absorbed into the body during the mercury fillings removal will be more readily eliminated in the urine if the ascorbic acid I.V. is administered. The ascorbic acid will also help eliminate any mercury which has accumulate in patient’s body as a result of the mercury vapours which are released each time person chews. There are numerous papers in the literature, dating back to the 1930’s and 1940’s showing that ascorbic acid has a detoxifying effect on both organic and inorganic chemicals in the body (Stone, Irwin: The Healing Factors, Vitamin C against Disease. Pedigree Books, New York 1982) Mercury is among those chemicals which ascorbic acid helps to remove from the body.

Oral method of taking various nutritional supplements that may help in the detoxification. Recommended program is to begin with the oral supplementation one week before the first session.

1. Mercury filling replacing by BIOCOMPATIBLE dental material
2. Arrange for rubber dam, rubber dam clamps. This is a square of latex rubber stretched on a frame. It isolates the tooth or teeth being worked on. The rubber dam prevents the patient from swallowing ground out amalgam particles and accidentally inhaling mercury fumes. Dam frame precaution to minimize the ingestion during the drilling of amalgam, this exposure is greatly reduced by pulling away well over 95% of your potential contamination during the removal procedure. Mercury fillings are arranged for sequential removal. Current information indicates that it is better to replace only a few amalgams at a time.

3. The use of high volumes of cold water both from the drill and separate irrigation by the assistant, who should also be simultaneously using high volume suction evacuation of the vapour and particles resulting from the removal procedure. The assistant should hold the high-volume evacuator next to the tooth being worked on until all of the cut filling and cavity have been cleaned out. It is the volatility of mercury that necessitates all the precautions and correct techniques. Mercury vapour pressure doubles with every ten-degree centigrade rise in temperature. High powered vacuum - suction oral evacuator / aspirator tips. Precaution to minimize the ingestion of the amalgam water soup, this exposure is greatly reduced by pulling away well over 95% of your potential contamination during the removal procedure.

4. The office and operatory should be well ventilated. Now I installing central vacuuming systems in their offices. This provides an additional high vacuum suction source, drawing out mercury vapour and mercury aerosol generated during the removal process. Air filters, Ionizers, face cloth.

5. One acceptable procedure that minimizes extensive grinding involves sectioning the amalgam into chunks versus just grinding it out. Amalgam cut into four pieces (not drilled out) Measure amperage and polarity the amalgams and remove in order of the least path of resistance per quadrant (highest negative, lowest negative, highest positive, lowest positive. Sequential removal requires the dentist to measure and chart the electrical current of each filling and to remove/and or replace the amalgam fillings based on the charted information starting with the highest negative readings. Replacement fillings by quadrant, thus removing the largest source of mercury first.

6. High speed hand piece with 15 RPM (Regular 30 RPM)

7. Local anaesthesia without epinephrine or vasoconstrictor

8. Mercury filling removal with oxygen nose tubes precautions to minimize the mercury vapour inhalation.

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**DR. DIETRICH KLINGHARDT DETOX-AMALGAM REMOVAL PROTOCOL**

**Two Months Prior to Removal Do the Following Four Items:**

1. Vitamins and minerals. Start on vitamin E 400 units per day and use a high quality mineral supplement. Selenium 2-400 mcg should be part of the mineral replacements. Deficiencies of hydrochloric acid will impair mineral absorption. One should check for adequacy of hydrochloric acid secretion and take the appropriate acid supplement if indicated. The sternal reflex point described above is a useful tool in this determination.

2. Start on chlorella. Establish the highest tolerated level. If excessive mercury is mobilized, the patient will become symptomatic with nausea, heartburn, diarrhoea, a flu-like illness, and headache. The lower the tolerated amount, the more intracellular mercury toxicity is present. The tolerated level
ranges often from 1/10 teaspoon to one tablespoon (1/2-14 capsules). Give no more than one tablespoon (14 caps) /day initially. Stay on the daily dose days 1-8. On day 9 and 10, take ten-fold that amount, but no more than 3 tablespoons (60 caps) /day. On day 11 and 12, pause. And then, start over. Take with meals in divided doses.

3. **MSM**

4. Cilantro, make cilantro the first known substance that mobilizes Mercury The CNS. The active principle is unknown. Dried cilantro does not work said Dr. Dietrich Klinghardt, which suggests that the active substance is in the volatile fat- soluble portion of the plant probably and aromatic substance. When autonomic response testing is used rapid changes in the brain and spinal cord after cilantro consumption can be demonstrated, also the appearance of mercury in tissues where it was no previously found., i.e., liver, intestines, as a result of mobilization in the nervous system. I suggest fresh cilantro or pesto. Parsley also works, but often has gastrointestinal side effects at appropriate doses.

### The Day of Removal and Afterwards

1. If the patient were compromised it would be best to remove only one filling and observe how they tolerate the procedure. If they tolerate the removal they can then proceed to one or two quadrant removal based on the number of fillings present.

2. The day of the dental work (amalgam removal), take 20 caps Chlorella immediately before dentistry. After the fillings are removed, open 2 capsules, sprinkle onto teeth, mix with saliva, and keep in mouth for 10 minutes to mop up metal residues. Don't swallow. Instead, spit out and rinse mouth. Repeat both steps after procedure is over. Repeat again that night. Then resume regular program. Also, take extra MSM and chlorella.

3. The mercury /tin/silver antibody titer may rise over 2-6 weeks after the first removal. Don't remove more fillings during this time in order to avoid acute “immune breakdowns.” Either finish all 4 quadrants in the first weeks or have a session every 2-3 months.

4. Don't stop detox program until patient is asymptomatic. This can be as long as 3-4 years in some cases.

### Amalgam Removal

Dentists routinely remove amalgam fillings every day and replace them with other amalgam fillings. The ADA's own statistics are that 75% of all restorations replaced are amalgam. The average life of an amalgam filling is 5.5 to 11.5 years. Most fillings are replaced because of decay under the filling, excessive corrosion, fracture, etc. The procedure is so commonplace that the insurance companies will pay for replacement of an amalgam filling after only one year. The primary risk to a patient's health is the competence of the dentist, his/her ethics and integrity in taking the requisite precautions to protect their patients and staff. Newer materials are so much more flexible and advantageous to work with that, in many instances, teeth can be saved that would otherwise be lost if amalgam were the only material available.

There are special techniques used by your dentist to remove amalgam fillings. If done properly, there is minimum exposure to increased levels of mercury vapour caused by the removal procedure. The correct protocol requires the use of high volumes of cold water both from the drill and separate irrigation by the assistant, who should also be simultaneously using high volume suction evacuation of the vapour and particles resulting from the removal procedure. The assistant should hold the high-volume evacuator next to the tooth being worked on until all of the cut filling and cavity have been cleaned out. It is the volatility of mercury that necessitates all the precautions and correct techniques. Mercury vapour pressure doubles with every ten-degree centigrade rise in temperature. One acceptable procedure that minimizes extensive grinding involves sectioning the amalgam into chunks versus just grinding it out.

During amalgam removal, the dentist and assistant are at greater risk from exposure to mercury aerosol spray and vapour. They will be wearing special clothing, masks and surgical gloves. These actions protect them from excessive exposure to mercury during repeated removal operations. Some dentists utilize a
rubber dam during the amalgam removal procedure. This is a square of latex rubber stretched on a frame. It isolates the tooth or teeth being worked on. The rubber dam prevents the patient from swallowing ground out amalgam particles and accidentally inhaling mercury fumes. The office and operatory should be well ventilated. Many mercury-free dentists are now installing central vacuuming systems in their offices. This provides an additional high vacuum suction source, drawing out mercury vapour and mercury aerosol generated during the removal process. Current information indicates that it is better to replace only a few amalgams at a time.

Some individuals may experience reactions to the mercury released during the removal procedures. These are described as flu-like and can last from 1 to 7 days. Symptoms may include fever, nausea, headaches, etc.

**Amalgam Replacement**

The vast majority of individuals who have undergone amalgam replacement and the reduction of their mercury body burden have experienced improvements in health that have ranged from minor to startlingly dramatic. Dentistry has relied on and utilized potentially toxic metals in the oral environment because there were no acceptable alternatives available. But, today, there is a surplus of options available for consideration. The most common composite material used is called white stuff. The white composite is all made with petroleum derivative resins and often with aluminium dioxide, which is quite toxic itself. Unlike aluminium trioxide or sand, aluminium dioxide can have very strong reactions in the body. The newer materials available on the market today are referred to as bonded resin ceramics, composite resins or just composites. Although there are several types available, their composition is essentially one of a quartz-filled Bis-GMA resin. The data produced by studies on these materials indicates a very high degree of biocompatibility when properly placed.

A key feature of composite plastics is their extremely large molecular size, which prevents penetration of body cells. However, some composites contain elements such as aluminium, which can be harmful if they're not bound to the material. The newer composites being used haven't been around long enough to be subjected to years of wear with longitudinal studies. However, there are several 5-7 year studies that indicate wear characteristics are as good, if not better, than amalgam. Some benefits of the composite materials are:

1. They do not contain mercury.
2. They are aesthetically pleasing. When you smile, people do not see black, grey, or silver areas. All they see is what looks like natural tooth colour.
3. They do not generate any electrical currents and therefore do not help to corrode any other metallic fillings or restorations you may have in your mouth.
4. There is less loss of your natural tooth structure because the dentist doesn't need extensive preparation for the new materials.
5. The end product using these materials can truly be called restorations rather than fillings.

**Composite Materials**

Which composite your dentist uses is very important. Many people seeking mercury removal are sensitive to other chemicals. Some chemicals may be in one composite and not another. helping to determine which composite or other dental material might be better for you is the purpose of compatibility testing. There are many methods including blood testing, kinesiology, electro acupuncture as per Voll (EAV), or electro-dermal screening. Individual dentists may use the most chemically inert filler for composite filling materials, which is quartz. Most new composites do not use quartz, but various glasses and ceramics that contain heavy metals which are added so the fillings show up on x-rays, making it easier for dentists to tell the difference between the tooth, filling, and possible new decay.

The heavy metals added are barium, strontium, the most common being barium. Barium does leach out of the fillings and is associated with breast cancer. In the mouth, everything leaches. If you really wish to be metal-free, then the composite you use must be metal-free. There aren't too many composites without
heavy metals because dentists want them to show up on x-rays. They're used to seeing the mercury fillings on x-rays and it's more comfortable for them to see the composites the same way. The goal of the ADA and manufacturers is to have a composite that handles just like mercury fillings so dentists can switch effortlessly. Amalgam doesn't restore anything.

Composites are bonded to remaining tooth structure, are thermally insulating, and, with the bases and bonding agents used to place the composite, there is much more protection for the pulp and enamel structure of the tooth. In fact, tooth strength increases, and the tooth can be restored to up to 98% of its pre-decayed state. Today, there is a much wider selection of materials available in dentistry that can be used as suitable alternatives to the metal. For example, there are products available that are heat and pressure cured, which differs different structural and finishing properties to the final product. These types of materials are excellent for metal free crowns and for cosmetic dentistry applications such as thin laminates that can be bonded to teeth to cover bad stains, or to cover diastemas (spaces between teeth). There are also porcelain laminates and veneers being used for cosmetic applications; and there are metal-free ceramic and/or glass crowns available.

There is now a metal-free partial denture material available. These fluoropolymer thermoplastic materials are chemically inert and possess remarkable stability.

We have in our mouths (1) oxygen, which can cause metal to give up electrons by oxidation; (2) strong and weak acids from our food and drinks, such as coffee, tea, colas and citrus juices that can cause a chemical action to occur in the metals. (3) Heat and temperature differences caused by friction and from chewing as well as from the hot and cold food and drinks that we ingest.

All of these are capable of exciting or generating activity in metal. Where do we stand when we have metal in our teeth like amalgam, or Nickel or chromium or aluminium, etc.? What we have, is a potential electrical generating plant. Everything needed for electrons to flow from point to point is present. We also have tissue composed of millions of cells that all have some of the electrolytes around them or inside of them. We also have nerves that, for this over-simplified description, can act as transmission lines carrying electric charges to other parts of the body. When an amalgam filling is placed in a tooth, it is subjected to all the chemicals we put in our mouths (which are part of our normal intake of food and drink), and also to some of those produced by our own bodies. The acid or alkaline status of our saliva will vary with our food intake and individual body chemistry.

All of this starts corroding or rusting away that amalgam as soon as it is installed. That's one reason why you periodically have to have amalgam fillings replaced when they become loose and fall out. Besides the chemical corrosion in our mouths, we also have the corrosion that can be caused by the electrical activity previously discussed. We have both of these factors increasing the corrosion of the amalgam, which, in the process, is releasing metal ions into our saliva. This corrosion may also reduce the strength of the filling and cause increased marginal breakdown of the amalgam. There are processes by which mercury (and other metals) is continually being released as vapour and abraded particles. Electrogalvanic activity associated with metal in the mouth is not a new discovery or phenomenon. Dr. Henry S. Chase of St. Louis and Dr. S.B. Palmer of Syracuse N.Y. first discussed it in scientific literature in 1878. There have been a tremendous number of studies published since that date, all confirming the electrical discharge phenomenon associated with metals in the mouth.

"If you have something that's been put in your mouth that you can't dispose of in a waste basket without breaking environmental protection laws, there's no point in keeping it around, there's no point in taking that type of risk - there's no point in exposing people to any level of mercury toxicity if you don't have to....... .....there is no doubt in my mind that low levels of mercury present in the brain could cause normal cell death, and this could lead to dementia which would be similar to Alzheimer's disease.... We can't go inside a living human being and look at their brain, so we have to work outside, and do scientific experiments such as we've done. And to the best that we can determine with these experiments, mercury is a time-bomb in the brain, waiting to have an effect. If it's not bothering someone when they're young,
especially when they age it can turn into something quite disastrous." -- Dr. Boyd Haley, Professor of Medicinal Biochemistry, University of Kentucky.

**Mercury Vapour**

Silver mercury fillings are not stable. These fillings emit mercury vapour at a rate of 2.8 micrograms per cubic meter of air breathed in the resting state, and their emission rate accelerates dramatically (as high as 49 mgs) after minimal mechanical, chemical, and temperature stimulations. It is also very volatile. This means that "metallic" mercury gives off mercury vapour when agitated, compressed or exposed to increases in temperature. Mercury vapour—which is colourless, tasteless and odourless—if inhaled into the lungs, passes into your bloodstream for distribution to all body tissues. It is at this point that biotransformation begins. Some of the mercury vapour remains unchanged, and some of it is oxidized. (This means to remove a pair of hydrogen atoms and to combine with oxygen. Chemically it means the increase of a positive electrical charge and the decrease of the negative charge, which in effect ionizes the vapour). The unchanged portion exists dissolved in the blood lipids (fats). The toxic effects are produced by that portion that is oxidized into mercuric ions which occurs partly in the blood, partly in the tissues but mainly in the red blood cells.

Hg vaporizes and corrodes in the presence of more noble metals, gold, through all surfaces of the fillings. Most enters the blood stream of the jawbone directly. All kinds of stimulation release it: Chewing, chewing gum, tooth brushing, - cleaning, - polishing and bruxism. Five years old fillings have lost 25%, after 10-15 years half the Hg has left them.

It easily passes the intestinal wall, helped by emulsified fat, oxidizes quickly in body fluids is by far the main source of free radicals splitting any compound hit. It creates oxidative stress. It attacks sulphur containing proteins, enzymes, some hormones and DNA and sets them out of action. Selenium similarly, e.g. in the enzyme that generates our most important antioxidant glutathione.

It forms cytotoxic organic Hg. Our streptococci in the plaque directly on the fillings, in the throat and alimentary canal do it. It penetrates protecting barriers, cell membranes, blood/brain and blood/retina, the placenta and the mammary glands. It accumulates in the brain of the foetus/baby.

The final compounds are deposited anywhere in the body. They are extremely water insoluble. Several researchers, beginning with Jernelov in 1969, have demonstrated the microbial conversion or methylation of mercury by various microorganisms. This was demonstrated in the laboratory as well as inside the bodies of animals. In 1975, Edwards and McBride demonstrated the methylation of mercuric chloride in human faeces. It was also in 1975 that Rowland, Grasso and Davies determined that most strains of staphylococci, streptococci, yeasts and escherichia coli found in the human intestine (these are bacteria and yeasts of different forms and shapes that are normally present in the human gut) were capable of methylating mercury. It was in 1983 that Heintze and his associates made the startling discovery that saliva can also methylate mercury being released from the amalgam fillings.

Confirmation of the escape of mercury vapour and ions from amalgam dental fillings is provided by The World Health Organization (WHO) Environmental Health Criteria 118 document (EHC 118) on inorganic mercury. It clearly states that the largest estimated average daily intake and retention of mercury and mercury compounds in the general population, is from dental amalgams, not from food or air. Mercury vapour inhaled into the lungs is absorbed almost 100 percent and immediately passes into the bloodstream. It takes approximately four minutes before mercury is converted or oxidized into an ionic state from its elemental vapour state. While in its elemental form, mercury vapour is lipid (fat) soluble and readily passes through the blood-brain barrier or the placental membrane.

It can also accumulate in other organs and tissues of the body. The estimated average daily intake of mercury from dental amalgams is 3.8 - 21 micrograms per day. Two-thirds of the body burden of mercury is derived from the mercury vapour released from amalgams. The static, unstimulated release of mercury vapour from amalgam fillings, which goes on 24 hours a day, 365 days a year, is a major contributor to
total mercury body burden. Large amounts of mercury vapour are released during chewing. After only
ten minutes of gum chewing, there is an average increase in mercury release of 15.6 times more than
during the resting state in test subjects. That converts to a 1,560% increase in mercury release.

"The World Health Organization has calculated that the average human daily dose of mercury from
various sources are: Dental amalgam = 3.0-17.0 mg/day (Hg vapour) Fish and Seafood = 2.3 mg/day
(methylmercury) Other food = 0.3 mg/day (inorganic Hg) Air & Water = Negligible traces (NOTE mg =
Micrograms)" (World Health Organization Figures, from Environmental Health Criteria 118: Inorganic
Mercury, Geneva, 1991. These figures confirm Amalgam as #1 average source for Environmental Mercury
exposure.)

"You wouldn't take a leaky thermometer, put it in your mouth, and leave it there 24 hours a day, 365 days
a year. Yet that’s exactly what happens when an amalgam filling is installed in your mouth."--Dr Michael
Ziff.

**Mercury Vapour Analyser**

The Jerome 431-X Mercury Vapour Analyser uses a patented gold film sensor for the detection and
measurement of toxic mercury vapour in the air, including the air in your mouth. It is a portable hand-held
unit, weighing only seven pounds that can easily be carried to locations where there is a concern about
mercury. It is the same unit used for chemical toxicology testing by OSHA and the EPA to monitor
industrial hygiene, mercury spill clean-ups and mercury exclusion testing. It is also suitable for monitoring
mercury concentrations in a dental office during a daily routine.

The simple push-button operation allows users to measure mercury levels in just seconds. The detection
range is from 0.000 to 0.999 mg/m3 Hg. The gold film sensor is inherently stable and selective to mercury,
eliminating interference common to ultraviolet analysers, such as water vapour and hydrocarbons. When
the sample cycle is activated, the internal pump in the 431-X draws a precise volume of air over the sensor.
Mercury in the sample is adsorbed and integrated by the sensor, registering it as proportional change in
electrical resistance. The instrument computes the concentration of mercury in milligrams or nanograms
per cubic meter, and displays the final result in the LCD readout.

The 431-X includes features not available in older Jerome models. When attached to either a data logger
or computer, the analyser automatically regenerates the sensor when it becomes saturated and then
resumes sampling. An improved film regeneration circuit makes the sensor last even longer. It can
operate up to six hours on a fully charged nickel-cadmium battery.

This analyser can easily be used to measure mercury vapour concentration on a patient before and after
chewing a piece of gum for 5 minutes. Chewing, or tooth grinding, increases the heat between teeth and,
thus, enhances the release of mercury from amalgams.

This is an insightful eye-opener for those sceptical dentists who still refute the possibility of mercury
leaking out of dental amalgams and their own health and their patients’ health being in jeopardy by their
refusal to acknowledge something that is clearly visible with this machine.

Some reported measurements of dental patients’ oral mercury vapour have been twice the OSHA
standard of 50 µg/cubic meters which would place them in violation of the OSHA standard based on an
employee’s 8-hour work exposure for a 40-hour work period seven days a week. Once measurements are
taken, you will realize that the most toxic spaces may not be at one of the EPA’s superfund sites, but
simply right under your nose.

Mercury vapour is released when you chew or grind. Additionally, minute rusted particles of the amalgam
are being abraded and taken up by your food or saliva and swallowed. Intestinal enzymes and bacteria
both produce methylmercury, an even more toxic form than elemental mercury, may act upon these
minute particles of mercury filling. Although several sources contributing to the domestic mercury
concentrations have been identified, human wastes (faeces and urine) from individuals with dental
amalgam fillings are believed to be the most significant source--greater than 80 percent. Conventional
amalgam was routinely placed until 1976, when the new state-of-the-art amalgams (50% mercury and 30%
copper) were introduced. They emit up to 50 times more mercury than the earlier, conventional amalgam fillings. That means that every new high-copper amalgam filling placed today has the effective toxic equivalent of fifty of the older amalgam fillings. If other fillings are in the mouth, such as gold crowns, nickel crowns, and removable bridges or braces, the mercury emission further increases from the amalgam. This is due to the electrical current generated by the presence of dissimilar metals in an electrolyte such as saliva. Heat will reliably increase the rate of escape of mercury vapour from amalgam fillings. Vapour detectors, held above amalgams, revealed an increase from 3 micrograms to over 500 micrograms ten seconds after a hot drink was swallowed.

"Worldwide there are over 4000 research papers indicating mercury is a highly toxic substance. How can dentists be so thoughtless as to place one of the deadliest toxins in existence *two* inches from our brain?" – Tom Warren

"The mercury uptake from amalgam is the dominating source for inorganic mercury in the central nervous system and is the major source of total mercury uptake in the population."

– Maths Berlin, a leading Swedish toxicologist
Fresh Cilantro
Make Cilantro the first known substance that mobilizes Mercury from the CNS. The active principle is unknown. Dried Cilantro does not work in my experiences, which suggests that the active substance is in the volatile fat-soluble portion of the plant probably an aromatic substance. When autonomic response testing is used, rapid changes in the brain and spinal cord after Cilantro consummation can be demonstrated, also the appearance of Mercury in tissues where it was no previously found, i.e., liver, intestine as a result of mobilization in the nervous system.

- Parsley also works, but often has Gastrointestinal side-effects at appropriate doses.
- We suggest fresh cilantro blended with fresh fruits such as pineapple, orange juice.

Clinical Interventions
1. Minimize exposure! Prevention is always better than treatment of symptoms. Be aware of your environment, what you eat and drink, what you apply to your skin and chemicals used in the home or at work. If a mercury thermometer or mercury switch breaks, carefully clean up the metallic mercury residue. Waste disposal facilities usually have a way to dispose of toxic substances.
2. With special laboratory tests, experienced health care professionals can evaluate the mercury load within the body. This can be done by measuring whole blood levels. Urine can also be used and but hair is valid only for mercury. This should be performed by a reputable laboratory, on the order of and under the supervision of a licensed health care professional. When urine is measured, no chelator should be given that could increase provoked excretion and cause false positives.
3. DMSA can be used to remove mercury and is taken by mouth. DMSA binds with mercury, arsenic, lead, and probably with antimony, bismuth, and gold, hastening excretion from the body. The usual adult dose for mercury removal is 500 mg DMSA (five 100 milligram capsules) on an empty stomach on first arising in the morning with a glass of water or juice, and no food for another 30 minutes. This dose is taken 3 days per week with at least one day between each dose. Monday, Wednesday and Friday is a convenient schedule. This is continued for 3 months. Then wait another month without DMSA before retesting mercury levels in the body, allowing mercury to equilibrate with blood and body fluids.
4. EDTA has little or no effect on mercury in the body, probably because mercury binds more tightly to other molecules and is present as organic methyl mercury. Mercury removal is the one problem for which oral treatment is the best choice, using DMSA by mouth.
5. Nutritional supplements magnesium and selenium, along with a wide variety of other essential micronutrients, can act as partial antidotes to mercury and other metallic toxins.

Education
Educating yourself about toxicity and related dental practices will help you understand why it is important to take care of your overall health and common dental procedures. You may want to educate yourself on dental toxicity by reading some of these recommended books.

A partial list includes:
- It’s All in Your Head, by Hal Huggins DDS, MS
- Solving the Mystery, by Hal Huggins DDS, MA
- Uninformed Consent, by Hal Huggins DDS, MA and Thomas Levy MD, JD
- Root Canals: Saviour or Suicide? By Hal Huggins, DDS MS
- Root Canal Cover-up, by George E. Meining DDS, FACD, FICD

Detoxing From Mercury:
Eat coriander, parsley, 2 eggs, fresh, raw garlic, chlorella, brazil nuts (selenium), fulvic acid, wheat grass to help the body chelate mercury – eat these foods in high quantities especially a week prior to any dental work, daily and at least 10 days’ after
Questions To Ask Your Dentist
(To determine whether he is equipped to remove the mercury)

- How do you prevent mercury residue from entering the mouth?
- Do you use a rubber dam?
- Do you use an ionizing system or high volume vacuum system?
- Do you provide the patient with an oxygen air supply delivered nasally?
- Do you provide or recommend the patient take anything before, during & after the procedure?
- Do you cross the mid-line during a single treatment if you are not using IV conscious sedation?
- Do you do electrical testing? If so, do you remove the amalgams in electrical order? By quadrant?
- How do you drill out the amalgam? Do you use low speed drilling?
- Do you irrigate the filling with water to keep it cool during drilling?
- Do you use a high volume evacuator to remove air from the mouth such as a “Clean Up” tip from Bio Probe?
- Do you check under old crowns to see if any mercury is present? Do you replace old crowns with biocompatible ones?
- Do you do Biocompatibility testing to select the replacement material?
- Do you recommend follow-up chelation and detoxification protocol, recommend an MD?
- Do you follow the 7-14-21 day rule if not removing all the mercury on the same day?

Synopsis of Amalgam removal (see more detailed instructions below):

- High-powered vacuum
- Continuous cold water and suction
- Medical grade air, provided through nose tubes (oxygen not necessary)
- Face cloth over eyes
- Air filters to remove mercury vapour & ionizers to remove mercury in surrounding office air
- Amalgam cut into 4 pieces (not drilled out),
- IV Conscious sedation (for those who want it), Vitamin C IV drip. Intravenous conscious sedation along with IV vitamin C (nothing else added), is the best practice and the least traumatic way of having dentistry. IV-C is started just prior to dentistry and maintained during dentistry for the best effect on healing.
- Follow biocompatibility charts, measure amperage and polarity of amalgams and remove in order of the least path of resistance per quadrant (highest negative, lowest negative, highest positive, lowest positive), acupressure to rebalance energetics and lymphatic massage after treatment.

Things to patients should remember during the dental revision and for chelating afterwards

The mercury amalgam removal protocols must be strictly adhered to. If the dentist is not willing to do so, or tries to cut corners find another that will support you properly in this process. The Huggins protocol suggests you remove all your mercury fillings at once, under “conscious sedation” (intravenous drug like Valium for sedation) and using intravenous Vitamin C during the process, or at least within 30 days of each other.

The removal should be in a specific order, using electrical measurements as a guide. These measurements are taken by a device called a RITA meter, and it measures the amperage and polarity of amalgams which are then removed in order of least path of resistance per quadrant “Sequential removal of the fillings requires that the quadrant containing the highest negative current filling be removed first.

Many dentists fail to protect themselves from the repeated exposure to mercury (with an alternate air source, filtering and ionizers etc.) which often implies that they don’t take the risks and recommendations seriously. Considering dentists and their staff are exposed to mercury and its vapour on a daily level, if they don’t protect themselves adequately are they likely to protect you?

Make sure ALL of your amalgams are removed. A lot of people including your dentist may ASSUME that all the mercury is out only to find some hidden under a metal crown, or in a appecectomy root canal, or
amalgam ‘tattoo’ lodged somewhere in the mouth at a later stage. X-rays can’t see through metal crowns – that is one of the reasons why you are advised to have ALL the dental metal out, including metal crowns. You can’t chelate with ANY amalgam left at all, and will make your condition much worse if you try. Replace amalgams with metal-free and bio-compatible compounds.

Following amalgam removal oral chelation should be followed to chelate remaining mercury out your body. Mercury will stay in the blood about 6 weeks ‘looking for trouble’. Some of it is excreted, but the more of it you capture in the first 6 weeks and expel the better. After 6 weeks, mercury settles in your organs such as the brain, intestines, kidneys, liver, eyes, etc.

**During Removal:**
Activated Charcoal is used as a once-off at the time of removal. It only helps with current ingestion of toxins and is not to be taken regularly. Charcoal works for ingested toxins and not inhaled vapours. Inhaled mercury vapour is still present in a dentist office that use mercury/or removers mercury. Activated charcoal literally soaks up poison in the gut in case of accidental swallowing. It is not to be taken regularly. Take 500mg fifteen minutes before the dental appointment starts and another 500mg after. Expect black coloured stools. Activated charcoal is not absorbed nor digested.
For the period after the removal of amalgams, and for at least the next 6 weeks, it is recommended that additional parsley and coriander be added to all juices and green smoothies, as well as eaten raw – added to salads.

**The Real Scientific Truth of Amalgam**
The behaviour of Mercury in the body causing chronic diseases:
Amalgam is the largest non-controlled experiment ever, completely out of step with medical standards. To observe what happens to a cohort of humans, now close to old age, forced to go through life with implants in their mouths leaking mercury, Hg, in intolerable amounts with open access to the brain. Their teeth contain up to 10 grams of Hg, while poisoning requires micrograms, only. Authorities do not worry about people getting sick, how to help them; some of their diseases are not even accepted. That experiment must be stopped and systematic restoration started.

While the results of fighting infectious diseases and of surgery are excellent, chronic diseases lag in spite of enormous efforts. They accelerate in both the old (1) and in the young generations, and innovative thinking is urgent. This paper deals with the problem of amalgam in the correct way, different to that of the Establishment: To study the impact of amalgams is to study Hg-chemistry. Logically it starts with the chemical and physical properties of Hg laid down by Nature; it uses Science of Nature and logical thinking to betray its attacks and its pathogenesis. It ends with methods of cure. This science is unchangeable, non-disputable; its validity is similar to that of e.g. the law of gravity. Thus man-made clinical results are wrong, when diverging. It calls the attention to the fact, that some of the claims of mercury being safe are based on scientific blunders. Conclusion: The claims of ADA are wrong.

Most of the chemistry of mercury, Hg, has been documented 100 years ago and needs no further documentation. It includes:

Amalgam is claimed a stable alloy. No, it is highly unstable above the melting point of Hg, 39°C. It is a liquid with a significant vapour pressure. Air saturated with Hg holds about 50,000 µg/m³ at 37°C, 2,000 - 5,000 times the limit for working areas. Although the vapour pressure of amalgam is lower and the inhaled air does not get saturated, vapours from fillings have a terrible impact on a person, not 5 x 8, but 7 x 24 hours a week, life-long from the first filling until its removal. Hg-vapours in the mouth are easily measured and made visible.

All amalgam constituents corrode when more noble metals as gold, platinum or palladium are present in the same mouth. The electric element generated together with the saliva provides for that. The toxicity of more heavy metals is highly synergistic. Every pipe fitter knows not to mix different metals to avoid corrosion.
All transition metals, able to exist in more valences, generate a large number of free radicals, including the most powerful ones, the hydroxyl radicals. So does Hg.

Hg shows an extreme affinity with sulphur containing compounds; most important are the amino acids cysteine and methionine placed in active centres of life important compounds and in proteins. Bacteria of the streptococcus family in plaque, i.e. in direct contact with the fillings, too, and in the GI tract transform Hg to fat soluble methyl-Hg, MeHg, considered 100 times more toxic than Hg itself. This process is common to Nature from algae upwards and the reason, why marine animals are always contaminated with MeHg, not with elementary Hg.

Questions Patients Frequently Ask

1. Do all Mercury amalgams (Silver Fillings) Leak?
   Perhaps a better term would be vaporise. Mercury vaporizes off the surface of amalgam fillings 24/7. Mercury also infuses into the pulp chamber of the tooth and enters the blood stream. The interaction of 5 metals constantly keeps amalgam giving off mercury as well as copper and other corrosion products (16 of them). Chewing food is but one way that mercury release in increased by hundreds up to thousands of percent. It has several different routes in which it can enter the body. None are healthful.

2. Why should I not have a ROOT CANAL done?
   Root canals are recommended when a tooth has been fractured, or when decay has entered the nerve chamber and created much pain. Often the body calcifies the tooth membranes, and allows it to remain. Unusual as it sounds, the body does not like dead structures in it, and a healthy body will try to reject it. Pain requiring antibiotics and pain pills are frequently used until the immune system stops working in that area. Root canals produce toxins that can increase or create many autoimmune diseases.

3. Are implants considered a safe replacement for my teeth?
   As Professor Doug Swartzendruber of the University of Colorado once said, "anything implanted into bone will create an autoimmune challenge. The only difference is the length of time it takes for a disease to appear." We have personally seen numerous diseases with an unknown origin that may have been created by implants. It is a popular dental treatment, but not recommended for people interested in maintaining the best health.

4. Are there symptoms and diseases that are related to dental materials and procedures?
   There are dozens of diseases and hundreds of symptoms that have been related to various dental materials. Toxicity is not generally considered when manufacturing dental materials. Durability in the hostile environment of the mouth is of more concern. Mercury is a good example, as are copper, beryllium, zinc, nickel, root canals and cavitations.

5. Is laser treatment for cleaning of root canals and cavitations considered a safe treatment?
   In both root canal sockets and cavitation linings, the big concern is the anaerobic bacteria. These are ones that live in the absence of oxygen. Botulism and gangrene are examples of anaerobic bacterial action. Bad bugs. If laser can kill all the bacteria, who is going to remove the dead bacteria, or the dead bone lining the sockets? There is no blood supply here. Laser only kills, does not clean debris. Other techniques are required to leave a clean area that can fill in with bone and new blood vessels.

6. Will having dentistry alone solve my problems?
   Removal of toxic dental materials will cut off the supply of toxins, but that does nothing toward healing and repair. Balancing the body chemistry is required to supply the proper raw materials to bring about healing.

7. After starting my revision how soon should I get it completed?
   Observations have shown that if all the removal procedures (this does not count placing crowns and bridges) are accomplished within less than 30 days, healing is good. The longer over 30 days the procedures take from the initial removal, the less positive response one can expect. Frequently, when
more than 6 months lapse between start and finish, the patient may find that they are worse off than when they started.

8. Why is vitamin B-12 as a supplement or additive dangerous?
Many Universities have published articles on the ability of Vitamin B-12 to convert mercury vapour into the much more deadly "Methyl mercury". Methyl mercury knows no barriers, and creates far more havoc than other mercury chemicals, because of its ability to travel anywhere in the body without inhibitions. Sometimes the effects of high doses of Vitamin B-12 (over 50 micrograms) take months to correct. Whilst vegans that have been tested as being deficient are recommended to take a B12 supplement to maintain health, it is wise to first attend to the removal of amalgams before they do. In the interim nutritional yeast will suffice.

9. What are my nutritional needs and requirements after being affected by mercury and root canal toxins?
We seek a client's "Ancestral Diet", or foods that the past 2000 years of ancestry that produced you. Your blood chemistry will divulge how much carbohydrate, protein and fat your specific body requires, as well as telling how well you digest these foods. In addition, blood tells us which supplementation (if any) that you need.

10. What is the first step for a dental revision?
As with any adventure, it is best if one becomes educated in the process and expectations that dental revision and balancing body chemistry would do for you. You cannot test drive the results, so you should familiarize yourself with these aspects through reading books, asking professionals in the business and talking to people who have been through the processes when they are available. Even though any mercury is damaging to adjacent tissues, search to see if your diseases and symptoms are similar to those seen to improve upon correcting your body chemistry and doing dental revision.

11. When and what should I do for detoxify?
Foremost, remember that Detoxification is Retoxification. We have seen disasters precipitated by over detoxification with too strong a medications and too large a dosage. Detoxification, or releasing mercury from stores in the body is no real trick. The secret is in elimination. Just because you have moved mercury from your arm bone to your brain does not mean you have detoxified properly.

12. I feel fine; do I really need to balance my body chemistry?
So often people say, "Why wasn't I told?" It is easy to avoid buying life insurance until the third engine of the airplane you are on stops. This is your choice. Want to avoid the problems we hear about daily, or strengthen your immune system now? Sort of pay now, or pay later - only later may be with a part of your life that you did not want to lose. Look over the diseases and symptoms. This could help you make your choice.

13. How do I know how much mercury is in my body?
This is tough. Cremation is about the only accurate method, but, it really does not matter. You will never get it all out, and that that is in storage is not bothering as much as that that is in circulation. The answer is to have mercury going out of the body just a few micrograms faster than it is coming in. We are all exposed to mercury daily in air, food and water. We excrete in sweat, urine and faeces. Maintaining the balance in favour of more excretion than intake will keep you feeling good, and keep your chemistry looking good. Textbooks say the body has 13 milligrams in it. We have known of several people who went on doctor controlled fasts and eliminated a quarter cup of mercury rectally at one time. That is pounds, not thousandths of a gram.

14. Why is it important to choose Huggins protocol when it comes to dental revision?
There are many mistakes which can be made in balancing body chemistry and removing dental fillings. Huggins made many of these mistakes in the 1960’s, and avoids those errors today. The current Protocol is a combination of using what works, and avoiding what harms. Remember, 63% of the people who just
have fillings replaced randomly end up with symptoms or diseases that they did not have prior to filling removal. Try not to make the figure 64%. Become educated and select a trained dentist.

15. Can my dentist follow Huggins protocol?
Your dentist can take the training and follow the Protocol. This protocol is not taught in dental school, for schools teach that mercury is safe in the mouth, root canals are "Preventive dentistry", and that cavitations do not exist. By not following the Protocol, a dentist is apt to make the mistakes that Huggins made back in the 60's. Others can learn by his experience.

16. What are considered safe materials and do they have to be metal free?
"Safe" dental materials are those that do not produce toxins, and do not react adversely to your immune system. A special blood test can determine which dental materials react with your personal immune system, and which ones do not. Dental materials that create what are called "antigen-antibody complexes" are forming clogging particles that can get lodged in your kidney, lungs, heart or brain. These blockages of proper blood flow through critical organs can create problems that you may not want. Some metals are toxic in any form, like mercury, while others, like calcium or titanium, may not create a toxic reaction in your body. Blood tests (compatibility testing) will tell the story.

17. Are there any auxiliary therapies that I should follow?
Many auxiliary therapies can be helpful in regenerating the toxic injured body. Some of these are called "body disciplines". Acupressure has been especially helpful in people with neurological diseases. Acupuncture also. Trager, massage, Feldenkrais, and reflexology have their places also. Each has something to offer that can be seen in the blood chemistry. Intravenous Vitamin C is a major assistance post dental as well as during dental procedures. Again, each should be evaluated individually.

18. Are there any health issues that I have to be aware of before I have my dental revision?
Perhaps a better question would be are there any health issues you have that your doctor should know about. Yes, there are medications that people take that might alter the doctor’s decision as to which procedures to use and which to avoid. Be totally honest with your physician and dentist about any conditions that you may have.

19. Is 'Candida' related to my amalgams (silver fillings)?
Strangely enough, Candida is there to save your life. It changes methyl mercury to a less toxic (but still toxic) form. Bacteria change it back to methyl mercury, and the system goes back and forth. If Candida were eliminated while you have amalgam in your mouth, your health will not be as good as if it were there protecting you. Complex, but yes, there is a relationship.

20. Should I begin a nutritional or a detoxification program before I have my dental revision?
Detoxification is a good idea, if done properly. Which means, please do not overdo it with drugs that are too strong for your condition. To a certain extent, it is like drying off while you are standing in the shower. It may not hurt anything, but, if you eliminate an atom of mercury that will be replaced in less than a second, you have not gained much. It is more beneficial if designed into a total program.

22. Should I remove my root canals or have my amalgams removed if I have to choose between the two?
This is like saying, should I have the left or right wheel of my airplane on the runway when landing? You are begging for a crash, and will likely have your wish granted.
The Behaviour Of Mercury In The Body.
The release by vaporization and corrosion takes place from all visible and invisible surfaces that are 3 - 5 times larger. There is sufficient room between the filling and the tooth to allow for the transport. It is increased by heat, acid liquids and the electric current generated by noble metals. Moreover, wear adds heavily: Chewing, chewing gum, and bruxism, tooth brushing, cleaning and polishing.

Most Hg is released through the larger invisible surfaces via the teeth and jawbone directly into the blood. 20% of the vapour is expired; the rest is swallowed as is the corroded Hg. Metallic Hg is short-lived. It is either oxidized to Hg++ in blood or changed into MeHg. A minor portion of Hg-salts remain in the intestines for excretion, the urine carries what has been able to pass the kidneys. Hg++ attacks in 2 ways:

Among the sources of free radicals, heavy metals are the only ones acting perpetually, and Hg from amalgam is by far the dominating source. It generates one radical/atom, often the most aggressive and most toxic hydroxyl type, which splits any substance hit. It recycles all the time: Hg++ -> Hg+ -> Hg++ a.s.o. The effect is increased multiple times and the person gets "oxidative stress". It is the metal fixing most avidly to sulphur in the SH-group of cysteine in DNA and other proteins; they may be deformed and lose their function. Also in enzymes, glutathione, one of our most potent antioxidants, in some hormones etc.

Tragedy No. 1:
Cysteine is placed just in the active sites of enzymes etc. controlling our metabolism and all biological reactions in the body. Hg immobilizes them and their activity gets lost.

We have no protection against MeHg. It penetrates cell membranes and barriers blood/brain, blood/retina, in the placenta and the mammary glands. It shows many destructive properties, i.e. a strong affinity for brain tissue and its ability of cell killing should be emphasized.

Tragedy No. 2:
The foetus/infant gets MeHg during the pregnancy and the nursing period and never more. It is the time of the formation of the brain and, if a girl, of her eggs. Just as bad: Hg in mothers' blood concentrates in the umbilical cord and breast milk up to 8 times, as demonstrated by indisputable radioactive analyses. The small being gets Hg in proportion to the amount of blood and milk, but the damage is per unit of brain weight, so development is extremely affected during the first months of the pregnancy. It is evident that Hg blocking active sites in the fast cytogenesis of the brain will change or stop the process: The brain will be more or less incomplete. Ethyl-Hg ex Thimerosal in vaccines behave likewise. Its relation to autism has been made probable. The reagent contains 50%Hg, the same as amalgam.

The load on the population differs widely and two age groups are severely hit: The victims of the systematization in the 1930'es to 1960'es - now old age - got 12-14 fillings on average, in extreme cases 22 with up to 10 - 12 g Hg a few cm. below the brain with open access to it.

Do dentists not learn anatomy?
During the 1960'es protection against caries was successful. However, in the late 1970'es unstable high copper amalgam came into use, and the advantage of few fillings got lost. This type was preferred due to convenience and used in children, "it kills bacteria better". It was the most fatal and non-controlled decision ever: The women now transfer methyl-Hg to the brains of their children and the mental defects in the next generation and their escalation are explained.

Tragedy No. 3:
All of it escalates contemporarily in both ends of the ages and the damage is going to remain during the new century if not counteracted now by rational means. The final pollutants, Hg-cysteine and MeHg are extremely insoluble in our body liquids and our biological problem is that we have no means to get rid of them. The half times are very long, in the CNS > 25 years.
Such a simple analysis as determining the rest of Hg in old fillings shows that half of Hg has disappeared in 10-15 years, i.e. $>1.000 \mu g/day$. 3 grams are still in depots, i.e. $>100m$. Hg-atoms in every single cell on average, mainly in the brain, the CNS, the pituitary, thyroid, other glands, kidneys, liver, lungs and heart. The immune system, sex cells, ovaries, testes and retina are also affected. Such a load suspending the activity of vital substances controlling our health may interfere with all processes, and Hg ought to be hypothesis number one for any non-explained disease.

**Generated Symptoms and Diseases.**

Hg accumulates from the first filling and nervous tissue is the main target. When hurt some get ill insidiously, some at once. Some mental symptoms of this origin are well-known to poisoned patients and after replacement they disappear over the years.

**An incomplete list is:**

- Depression
- Anxiety
- Shyness
- suicidal thoughts
- headache
- fatigue
- tremors,
- muscle and joint pain
- nervousness
- vertigo
- numbness
- tingling of lips and fingers
- irritability
- visual disorders
- lack of concentration
- loss of memory
- cold extremities
- frequent colds $\rightarrow$ sinusitis,
- insomnia
- loss of appetite $\rightarrow$ loss of weight
- increased blood pressure
- cholesterol
- heavy menstrual pains

This relationship appears to be unknown. The patients having these chronic disorders are not hypochondriacs, they are Hg-poisoned. Very often our papers are dealing with one or the other of these problems and the experts interviewed have no explanation.

It is remarkable that highly qualified biochemical science has documented antioxidants to help chronically ill in general. The connection was confirmed in two *JAMA-reviews (2)-(3) and (4).*

Thus the following diseases are mostly a consequence of "oxidative stress":

Senile dementia, Parkinson's and Alzheimer's dz., MS and ALS, schizophrenia, fibromyalgia, epilepsy, migraine, tinnitus, chronic fatigue, atherosclerosis, cancer, osteoporosis, some rheumatic dz, and some allergies:

- Asthma and psoriasis, cataract, AMD, other age-related eye diseases, reduced quality of sperm.
  Bacterial resistance to antibiotics due to Hg has been found. Several excellent investigations indicate a strong relation to Alzheimer's disease. An aorta from a by-pass operation had $> 3.000$ times, and a biopsy of a patient with idiopathic dilated cardiomyopathy showed $20.000$ times the normal Hg-figure (5). How much is needed for a proof or a simple suspicion?
- The mental retardation of many children, reduced IQ, demand for social assistance and special education, DAMP-children, autism, diabetes-2 at school age, hyperactivity, violence and criminality.

Dr. Hal Huggins, the US-dentist most experienced in correct amalgam replacement, reports to have cured i.e. leukaemia, epilepsy, fibromyalgia, hypertension and hypercholesterolemia. Hypertension may appear as a result of Hg blocking some of the oxygen transport. The body creates more red blood cells to replace the capacity lost, viscosity increases and so does the pressure necessary for the circulation;

- Summing up the numbers of patients suffering from the diseases above will show some 20% of the population. 80% seem genetically resistant, i.e. they do not feel worse, than they think it belongs to life. It is very urgent to find out why, because the tremendous number of people to be restored requires priorities. Some ideas of the genetic difference are at hand.

Hg is not claimed the only cause of chronic illness, but the major contributor. Thus many of these sufferings are man-made and per se superfluous. Our health depends on the power of attack and defence, and a disease develops depending just upon which part of the individual defence, that has been overrun.

More than half of the brain weight consists of lipids, many of which highly unsaturated and therefore especially susceptible to attack by free radicals. This is in line with the response of neurologic diseases to antioxidants. Add to this cysteine-destruction, cell killing MeHg. Damage of DNA by free-radical-splitting and Hg blocking its cysteine may lead to mutations, the first step on the way to cancer. A review on wildlife also tells of humans: Chromosome breakage, demyelination, dose dependent reductions in T-cell proliferation and constriction of the visual field. In mammals it concentrates selectively in the foetal brain, causes mental defects reduced fertility, foetal malformation and death (6). Is human Hg-chemistry different?

HARDLY….

The other amalgam metals, silver, copper and tin, are released due to corrosion and their chemistry and impact are similar, but less considered. They show strong synergy. Methyltin comes into existence similarly to MeHg. It is related to killing agents as TBT in boat paintings and is much more toxic.

Dentistry says: "During 150 years no diseases have been scientifically documented due to amalgam". This reasoning is baseless. A mistake is a mistake irrespective of age. It is correct to say: "For 150 years we have not understood the problem, but have unintentionally poisoned our patients’ incl. children having got Hg from their mothers". Universities are to blame. It has led to an enormous waste of resources: Wrong treatment and medication, hospitalization and operations, absence from work, too early ageing and retirement, misdirected medical research, neglected biochemical science a.s.o. The study reveals a majority of our most serious and costly health problems: Escalating amalgam toxicity occupies about half the expenditure of the health and care sectors.

The Laws of Nature cover the whole area. Diseases of chemical origin are to be cured by removing the source and administering drop of chelating substances for the Hg++-compounds to be removed from depots, unfortunately only partly, and suitable sulphur and selenium containing supplements. So simple and yet a revolution.

About 1960 chemistry showed its relentless power, as thalidomide caused birth of 10.000 malformed children. The eternal and ubiquitous Laws of Physics and Chemistry controlling health, now show up again. The target is keeping people mentally alert and healthy until the end. The biochemists consider this a short time goal, see fig. Correct, provided the problem of Hg is tackled in the right way. The off-hand change to the unstable type was a turning point. Now the young generation and their children are hit, so the problem will stay during the whole new century. It is the last minute to turn around, ban the poison and start the tremendous clean-up. The correct procedure must be used and learned. Some know how to do. It will be an unpleasant decision, but the horror of to-day is self-inflicted.

The Official Defence for Amalgam Is Under Pressure
In response to my questions to the Danish government it admits: "Inorganic Hg is neurotoxic, organic Hg strongly neurotoxic causing extensive damages to the CNS and peripheral nerves. But these severe chronic toxicities cannot be compared to the minimal amounts released from fillings and stored in the organism". This reservation is not correct. In 1981 the controlling authority NIOM, Oslo, Norway, found the new high copper type to break down 50 times faster, releasing cadmium, too. The stability of amalgam became a disclosed lie. Since the late 70's it has been popular due to convenience. New guidelines in Norway advise against amalgam, because Hg was found in unwanted places: In the brains of dead people, in the foetus and in breast milk it correlates with the number of fillings of the mother. Acceptable composites exist for all teeth and purposes.

The Danes say: There is a demonstrable relation between Hg in the foetus and infant and the number of fillings of the mother. Prof Maths Berlin described his conclusions at the Congressional Hearings on May 8. Recently UNEP expressed very serious concerns on all uses of Hg including amalgam. In a short time, the defence of amalgam is going to vanish and the authorities' border on criminality when not stopping its use now.
Salt Water Mouth Rinse
Adapted from an article by Mercola.com

The mouth routinely harbours about 300 different varieties of bacteria, however it has been scientifically proven that the troublemakers are spirochetes, motile rods, and cocci. Reduce these "nasty" bugs below certain levels and...

The Body Heals Itself!
Once a person realizes how easy it is to understand the cause of gum disease, a little additional thinking then allows one to understand the decay process... the same mechanism applies here, only here it's the acid part or the toxic waste products that eats holes in the teeth. The notches that many people have at the necks of some teeth are almost always caused by a build-up of toxic waste products below the gum line "before" the gums recede.

Dentists always want to blame the patients for improper tooth brushing... That's not true. The notches and the receding gums are both caused by the same problem. All doctors are alike; dentists, medical doctors, etc. When there are good results taking place they immediately take all the credit. When bad results are happening, they blame the patient!

When searching for an answer, while the origin of the problem is unknown, ALL potential solutions are at best... Guess Work.

The Solution
The bottom line on the problem of gum disease is simply that the neck-of-the-tooth is not given proper attention. Dentists are directly to blame because they concentrate all of their efforts on the crowns of
the teeth...they fill them, inlay them, bridge them, etc. That's where the big money is! Therefore, the public never learns that the main "trouble spot" is the crevice at the neck of the tooth. The solution lies in cleansing this crevice of the toxic waste products from harmful bacteria.

Early in life this can be accomplished with a toothbrush and Clean-Between, plus...a device to flush out the crevice. If some gum disease has set in so the crevice is rapidly becoming a crevasse, then a "Special Tip" is required ...the Special Tip squirts a stream of salt water that is much more directional than the ordinary tips.

If the disease is even more advanced, then more sophisticated tips and methods, and therapeutic rinses, may be necessary.

These self-help methods of controlling gum disease have been used successfully for over 20 years. The reason that the results are so dramatic is that this approach is aimed at stopping the cause of the problem...other methods are an attempt to control the symptoms.

One should be cautious however, in his thinking about these methods. The more severe the gum disease the more difficult these methods become. It may be necessary to retain the help of a dentist who has been specifically trained in helping people to help themselves. Doctor-dependent treatment such as gum surgery is rapidly being replaced with self-help methods aimed at eliminating the cause.
Intrinsic Factor

As a final consideration in understanding the etiology of gum disease, it is well to keep in mind that no two human beings are exactly alike. There is a wide variation of people's resistive ability when it comes to fighting off gum disease.

In a large sample of people whose general health would be considered good, a few would have such strong resistance that their gums and supportive bone stays healthy even if they were very neglectful of oral hygiene, eating habits, etc. Another small group would be highly prone to gum deterioration even if they were very conscientious. A large group in the middle would suffer what might be called typical gum disease.

Also a certain number of people will suffer from what could be called "magnified" gum problems. Gum disease can be exacerbated by many conditions, including immunosuppression, malnutrition, or other general debility, endocrine abnormalities, etc. Therefore, anyone who has been using all the right methods of eliminating the cause of gum disease but still having problems, should analyse the possibility of some Intrinsic Factor that might be complicating the overall health picture.

Being treated medically for a variety of problems can also have side effects complicating the gum disease situation. For example, about 500 different commercially prepared drugs have side effects that can cause a reduction in the amount of saliva flow. Reduced salivary flow can have an extremely damaging effect on the gums and supportive bone.

Some of the most common drugs that produce the dry mouth syndrome are:

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<tr>
<th>Actifed</th>
<th>Benadryl</th>
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<td>Chlortrimeton</td>
<td>Compazine</td>
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<td>Dimetane</td>
<td>Donnatal</td>
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<td>Librax</td>
<td>Ornade</td>
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<td>Sudafed</td>
<td>Thorazine</td>
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<td>Valium</td>
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One cannot be too careful when it comes to good nutrition. This is probably more important than any single factor. A 25-year empirical study has lead the staff at the People's Dental Association to a determination of certain basic nutritional needs. It seems that those who's gum tissue and bone stay healthy have been eating well and adding additional nutrients included in a "Defense Mechanism Formula".

This 25-year empirical study has found that when lacking any of the nutrients in the "basic" ... Defense Mechanism Formula, almost everyone will suffer some degree of gum and bone disease. Some people need a few additional nutrients over and above the Defense Mechanism Formula, which is a matter that requires individual investigation and decision. As with all dental and health matters, personal consul can be obtained by phone or otherwise from the People's Dental Association.

For many years...almost 300 years, it was falsely believed that gum disease was caused by plaque in general. Therefore, people who didn't clean well could expect gum disease and those who cleaned well were protected...Wrong. So is it any wonder that we have so many disillusioned people suffering an unwanted disease today?

About 10 years ago the light at the end of the tunnel began to appear. Research studies by Socransky at Forsyth Dental School in Boston, and by Loesche at the University of Michigan began to indicate that the cause of gum disease was much more "specific" than the old plaque theory. In fact, the new technology
described at least five different types of gum disease based on the specific nasty bugs involved in the infectious process.

This new evidence is probably best understood by thinking of an old disease we all know and understand..."strep throat". A reddened throat, inflamed, and infected by betahemolytic streptococci, and you have..."strep throat". This is a very specific disease, with a very specific cause, and needs very specific treatment.

So it is with gum disease, seen in light of today's knowledge. Gum disease is a very specific disease, with a specific cause, and needs specific treatment. The presence of plaque and tartar are only incidentally related...they are NOT THE CAUSE!

Healthy gums: gram-positive facultative rods and cocci-predominately Actinomyces species and streptococci.

Sick gums: gram-negative anaerobic rods primarily Bacteroids and Fusobacteria.

GI-aids: A diseased condition of the gum tissue characterized by lowering or reduction of the strength of the immune system to resist bacterial invasion of the gums, further manifested by an allergic-like reaction of the supportive jawbone to the toxic waste products produced by the bacteria. This progressive deterioration of supportive bone is a very insidious disease. This disintegration of the bone results in such a sea of pus and infection that it encapsulates the teeth and destroys them.

As previously mentioned warm salt water used in an irrigating device is probably the best all-around protection when one wants to rinse away toxic waste products produced by harmful bacteria. It cannot be stressed enough that brushing and flossing are not enough!

For situations where the gum disease is more advanced, the therapeutic rinse of choice is sanguanaria extract (SaE). For many centuries various herbs have been used to help create oral health. Sanguinaria, an herbal extract, is an example of a beneficial rinse used for centuries by native cultures. It is a well-recognized homeopathic remedy. The extract is principally a mixture of benzophenanthridine alkaloids, the chief constituent alkaloid being sanguinarine (Sa).

It seems very strange that in many cases native cultures using herbal methods were able to accomplish a much higher degree of health than so called Modern Medicine. The reader has probably learned of many other - personal examples in their own lives.

The only significant factor in today's world are the irrigating devices... These undoubtedly have a beneficial effect in delivering the salt water or Sanguinaria extract to the right spot... the neck of the tooth, namely the gum crevice around the neck of the tooth.

This no-man's-land of trouble, the neck of the tooth must be brought to the public's attention so that they... the people can take over and solve this problem. Those who are waiting for dentists to "carry the banner"... will have a long wait. Most teeth won't last that long. Now is the time for people to take charge of their own dental destiny.
How to Eliminate the Dentist from Your Life... Using Self - Help Methods

Life's most valuable asset is health... and yet in today's world it is frequently valued only after it is lost. Very few people today have escaped the problems of dental cavities and gum infection. The few who are totally free of gum disease, no cavities, no fillings, and no gum problems at all enjoy common ingredients in their health picture.

Good nutrition is a key factor among the group who enjoy freedom from any dental problems. Teeth, like bones, are made up of primarily calcium and phosphorus. Individuals who, at any time in their lives have been short-changed of these two valuable elements in their diet, will most likely suffer adverse dental effects... soft teeth, weak bone support for the roots, etc. The saliva that is produced for us by glands in and around the moth contains calcium and phosphorus in solution, along with various enzymes.

The calcium and phosphorus ions help to keep teeth strong by depositing themselves in the outer layers of the teeth. Therefore, under the "right conditions", teeth are constantly being hardened or mineralized. This condition is a factor enjoyed by all "decay immune" people. Those experiencing decay can, if they so choose, reverse the decay process (demineralization) and bring about remineralization, thereby eliminating the need for drilling and filling, or pulling of the teeth.

Sound too good to be true? Not really if you possess the proper KNOWLEDGE, and are willing to take ACTION. Many people simply do not know exactly how teeth and gums get into trouble, so if one lacks knowledge, it's possible to take corrective action.

SOLUTIONS do not come to those who do not understand the problem.

Teeth and supportive jawbones are weakened by improper nutrition, or by toxic waste products produced by bacterial colonies collecting within the mouth. The toxic waste products raise havoc with the calcium and phosphorus of the teeth and they cause inflammation of the gums.

Cavities appear in areas of greater concentrations of the acid-like waste products and if inflammation of the gums is allowed to persist for any length of time, it leads to infection of the gums.

Loose, puffy gums is the next step in the deterioration process. Prolonged loosening, flabby gums, destroy the connective fibres that hold our gums tight to teeth and bone. Then a space develops between the neck of the tooth and encircling gum tissue. This "abnormal" space is commonly called a pocket. As the space (pocket) deepens, it then erodes away the bone that holds the teeth in place. This is commonly referred to as pyorrhoea. More teeth are lost due to pyorrhoea than due to decay. About 98% of all Americans have at least some areas of diseased gum tissue in their mouths, over half of these are also experiencing a progressive "bone loss". Fortunately, cavities and pyorrhoea (gum disease and bone loss) are both 100% preventable and both are reversible.

Most health oriented people these days know a good diet from a bad one. The so-called "secrets of nutrition" are really NOT secret at all to the nutrition conscious individuals who care about themselves and their minds and bodies. The building blocks of all body tissues are similar.

A diet lacking in essential elements will suffer consequences throughout the body, not just in one organ or tissue. The building blocks of both teeth and bone are calcium and phosphorus, but shortages of these two ingredients will cause other problems as well.

Those who enjoy good nutrition but still suffer dental problems are generally suffering the ravages of toxic waste products stemming from an overabundance of bacterial colonies within the mouth. For many people brushing and flossing is not enough to completely control dental problems, especially those who...
have already developed pockets at the necks of the teeth. Conventional cleaning is simply not enough to rid the mouth of the toxic waste products responsible for all the trouble.

For years' dentists and gum tissue specialists have recommended gum and bone surgery to cut away loose, flabby gums and infected bone. Supposedly after healing, the mouth can then be "again" kept clean by brushing and flossing. This is seldom the case, however, and most people wind up in the same condition in a short time and are told that surgery is necessary again and again.

The reason for this is that the real "cause" of the problem is not being attacked. A "cut job" is not the solution to the problem. The solution is hidden in a common sense approach to eliminating the toxic waste products; a solution, by the way, recommended by Dr. Levi S. Parmly in a book; "A Practical Guide To The Management Of The Teeth", published in 1819!

Most schools of thought today give Dr. Parmly credit for being the first dentist (scientist?) to discover and report the real cause of cavities and gum infection. The majority of the American public lack this KNOWLEDGE, therefore cannot take ACTION.

Once pockets form (98% of Americans have early, moderate or severe pocket formation), brushing and flossing alone cannot remove toxic waste products from these "below the gum line spaces". The only way known to accomplish this flushing away of the disease-producing toxins is by use of an oral irrigator, i.e. Via-jet or Water Pik. If the pockets are shallow, the regular Via-jet or Water Pik Tip is adequate. If the pockets have become moderate (even in limited areas), then a "Special Tip" or elongated directional (cannulae) tip is necessary.

When the toxic waste products that are being trapped in "below the gum line spaces" are flushed out daily with warm salt water, the body's normal reparative processes set in and heal the diseased gum tissue. In most cases, once the gum disease begins to heal, the bone follows suit, growing back new bone where it's been lost and tightening up loose, wobbly teeth (self-help healing of pyorrhoea). In mouths where bacteria toxins run high, the decay process is also represented, so by eliminating the bacterial waste products from the teeth and gums the decay process stops, as well as gums and bone healing.

The saliva can then return to its intended condition of healing fluid rather than a sewage-transmission fluid. Only when this "healing fluid" state is achieved can cavities harden (remineralise). When toxic waste products abound, everything gets worse, not better. The human body normally produces approximately one quart of saliva each day.

**When this saliva exists under such environmental conditions to be in the "healing fluid" state, then and only then will:**
- Cavities heal (remineralise)
- Gums heal (rejuvenate)
- Bone heals (tightening up loose teeth)

**NOTE:** When the saliva is of "healing fluid ability" an interesting phenomenon occurs: the calculus or tarter that builds up on teeth (deposited) is slowly dissolved, eliminating the need for painful and expensive scraping of the teeth by the dentist or dental hygienist. Purifying the saliva and mouth can be speeded up today with new "state of the art" products. A rinse of a solution of highly concentrated calcium and phosphorus ions (with a remineralising catalyst) has recently been developed by a biochemical company here in this country.
To combat the build-up of bacterial colonies (producers of toxic waste products) a new teeth cleaning substance has been developed to retard the bacterial colonies from growing in the first place. Yet another rinse is available to kill off high concentrations of bacteria when a saliva test has shown them to be excessively high.

It is important to note here that the 2% of the public who are immune to cavities and gum problems, do not need these products, and diligent and effective removal of all bacterial colonies will, in time, produce the same beneficial effects. These products are only intended to hasten the process in cases where conditions are considered moderate to severe.

**Healing Properties of Salt Water**
The use of salt also promotes healing, so it’s ideal to use it 24 hours after minor dental surgery to help your mouth recover, according to Delta Dental. It’s an isotonic solution, which means it contains the same salts and minerals our bodies do in equal concentrations. For this reason, it doesn’t irritate the mucous membranes as a medicinal mouthwash might, which is why many dentists recommend it as a gentle healing aid after a procedure.

**Making a Salt Water Mouth Rinse**
It’s actually easy to make a personal salt water-based mouth rinse. Add ½ a teaspoon of salt to a cup of warm water, as recommended by Adirondack Oral & Maxillofacial Surgery. Rinse your mouth every two to three hours for the first few days after surgery, then use it three to four times a day thereafter. You can use the rinse to:
- soothe and heal mouth sores.
- benefit a sore throat caused by strep, tonsillitis or even a common cold.
- provide emergency dental hygiene in the event you don’t have your regular mouthwash or toothpaste handy.

**How to Use Salt Water as Mouth Rinse**
Use a salt water rinse the same way you would use a traditional mouthwash.
1. Sip a bit of the liquid and hold it in your mouth, gently swishing it against the gums.
2. You can swish it through the rest of the mouth more vigorously.
3. Swish the salt water in your mouth for around thirty seconds and then spit it into the sink or our repository of choice.
4. If you like you can use a second sip to rinse for another thirty second round afterward. This motion will help remove build-up on the teeth and gums that appears when you eat or as bacteria grow in the mouth.
5. Once this is finished you can continue brushing your teeth and flossing as necessary.

**Warning:**
After healing has taken place in the mouth and/or the program is complete, do not use salt water as mouth rinse too frequently as salt water is acidic in nature, which could erode the teeth if used every day. The acidity could soften the teeth enamel, making them susceptible to chipping, wearing and cavities.

See Body Cleanse page for the Oral Cleanse
There are numerous pancreas-related health problems, although three in particular are well-known, including pancreatic cancer, pancreatic insufficiency, and both acute and chronic pancreatitis.

Pancreatic cancer is a life-threatening illness. The National Centre for Biotechnology Information states that, in over 80 percent of patients, your pancreatic cancer has metastasized, or spread to other parts of the body, by the time one is diagnosed.

Pancreatic insufficiency is a condition in which the pancreas no longer produces sufficient levels of insulin often causing a secondary chronic illness, diabetes while pancreatitis is the inflammation of your pancreas. The pancreas requires periodic cleaning and prevention. The most appropriate time to carry out cleaning the pancreas is the second half of the year.

Thereafter, approximately 4 weeks later they can begin with rectifying the pancreatic functions. Before recommending a pancreas cleanse, patients must first undergo a liver cleanse.

**DBM PROTOCOL – ADJUNCT TREATMENT – PANCREAS CLEANSE/DETOX**

**How to Cleanse/Detox the Pancreas**

The pancreas is an essential organ in the digestion and enzyme production process. If it is toxic or inflamed, it is difficult to digest food well, which is why it is to do a depurative diet once in a while.

**Depurative Diet for the Pancreas**
Diet is always the first factor that can cause one or more of the body’s organs to fail. Also, the external elements from the environment can change its functionality. All this can lead to hormonal imbalances in the pancreas and diseases such as diabetes.

1. Remove Toxins with Medicinal Plants
The first step in beginning a pancreas cleanse is to ensure patients have eliminated alcohol, tobacco, and all junk food from their diet. This includes the removal of the consumption of white flour, sugar, sweets and other processed foods.

**Medicinal plants to help cleanse the pancreas:**
- **Ginger tea:** Reduces inflammation, cleanses your body, is a sedative and a good antioxidant.
- **Green tea:** Start drinking a cup of green tea every day during breakfast or in the afternoon – you will get a great dosage of fantastic antioxidants to cleanse the pancreas.
- **Licorice infusion:** This is a very digestive root that boosts the production of bile to digest food. It is great.

2. Water and Good Juices
- Ideally a depurative diet should be done for at least 10 days a month.
- Patients should start the day with a glass of lemon juice and warm water, a kiwi, and a cup of oatmeal.
- Drink two litres of water a day and eat fruit and vegetables especially during those days.
- Increase their intake of leafy green vegetables, rich in vitamin B, and fruit rich in antioxidants and vitamins like papaya, oranges, and strawberries.
- Pineapple and papaya juice are important for the health of the pancreas, although one of the best fruits for the pancreas is in fact the kiwi.
3. The Benefits of a Hot Shower or Bath
Taking a hot shower or bath every day stimulates the digestion and improves the health of your pancreas. It stimulates and activates its functioning. Ideally patients should take a hot bath before going to bed. It will relax them an allow them to fall asleep better and will reactivate the functionality of the pancreas.

4. Patients Should Resolve Emotional Issues and Reduces Stress
Keep in mind that going through periods of anxiety or stress will raise levels of the cortisol hormone. Negative emotions and worries change one’s basic functions and affect digestion for example, which increases the risk of the intestines and colon becoming inflamed. All of these factors cause the pancreas to worsen and release enzymes into the stomach. Patients should try various methods to relax, seek time for themselves, walk and eat well.

Pancreas Support
Aspects to consider when creating an eating plan for patients with chronic diseases as well as pancreatic cancer. Recommend the following to your patients:

#1: Ensure glucose levels remain stable.
Carbohydrate containing foods affect blood sugar levels. Foods that have a high GI rating have been linked to the development of pancreatic cancer. This link is thought to be related to the ability of high GI foods to stimulate the production of insulin and insulin-like growth factor (IGF), two hormones that have been shown to stimulate tumor proliferation and progression and to speed up the spreading of pancreatic cancer within the body. Most legumes, non-starchy vegetables, and fruit have a low GI rating, while most refined carbohydrate containing foods are rated high on the Glycemic Index.

#2: Avoid Excess Protein
More than hundred years ago John Beard, a Scottish doctor, discovered that one of the body's best defense mechanisms against cancer is pancreatin, a mix of enzymes that are also involved in the digestion of proteins. High protein diets keep the pancreatic enzymes busy digesting protein, and therefore these enzymes cannot focus on their other key task, the eradication of cancer. While a certain amount of protein is necessary for the proper functioning of the body, you should avoid protein from animal sources if you want to reduce your risk of pancreatic cancer. Some nutritionists suggest that the body needs a protein-free period of approximately 12 hours a day in order to effectively fight cancer, such as pancreatic cancer. A WFPB diet provides the body with sufficient protein daily. Adding protein in the form of 'meat' increases the risk of cancer.

#3: Ensure a Sufficient Intake of I3C
Cruciferous vegetables — such as broccoli, cabbage, cauliflower, kale and Brussels sprouts — are well recognised for their anti-tumor and anti-cancer properties. These properties are largely attributable to indole-3-carbinol (I3C), a natural compound that occurs in cruciferous vegetables when the plant cell walls are broken through chopping, crushing, or chewing. I3C helps detoxify harmful substances, such as carcinogens that could cause pancreatic cancer, and destroy free radicals.

#4: Ensure a Sufficient Intake of Curcumin
Curcumin is a phenolic compound that gives turmeric its bright yellow color. Curcumin has been used, in the form of turmeric, in traditional Chinese and Indian medicine for centuries to prevent and treat a wide range of health problems. In recent years, also western medicine has started to pay greater attention to this extraordinary phytochemical which, according to recent research, can provide protection against almost any type of cancer, including pancreatic cancer.

In one study, researchers found that curcumin could inhibit the production of interleukin-8, a special protein produced by white blood cells that contributes to the development of pancreatic cancer. Furthermore, curcumin has been shown to effectively destroy free radicals and to prevent nitrosamine formation (nitrosamines are considered potential human pancreatic carcinogens).
#5: Consume Foods That Provide Ellagic Acid
In the battle against pancreatic cancer, ellagic acid might well be the patient's best weapon. According to research, ellagic acid can activate detoxifying enzymes in the liver, resulting in the clearing of cancer-causing substances in serum. It can also prevent carcinogens from attaching to cellular DNA. Furthermore, ellagic acid has been shown to stimulate the immune system to more effectively fight cancer cells as well as to trigger apoptosis. Additionally, ellagic acid has antioxidant properties which allow it to attack potentially pancreatic cancer-causing free radicals.

Ellagitannin, which the body converts into ellagic acid, is present in many red fruits and berries, raspberries being a particularly good source of this extraordinary cancer combating compound.

#6: Avoid Foods That Contain Nitrates
Nitrates are natural substances that are present in the soil, air, surface water, ground water, and plants. Nitrates are also used to give processed meat products a deep red color. The nitrates in food can be converted by the body into nitrites, which in turn form nitrosamines. Nitrosamines have been found to induce pancreatic cancer in animals and are considered potential human pancreatic carcinogens. Luckily, nitrosamine formation can be inhibited by certain antioxidants, such as vitamin C and vitamin E. As most vegetables are packed with antioxidants, nitrosamine formation is usually not a concern when you eat good wholesome organic WFPB diet high in fruit and vegetables.

#7: Avoid Foods That May Be Contaminated with Aflatoxin
Patients should be careful when selecting Nuts, Grains and Legumes. Carcinogenic substances can occur in foods when certain fungi that grow on food produce toxins during processing and/or storage. These toxins include aflatoxins — poisonous substances that have been shown to cause liver cancer and that have been postulated to pose an increased risk for pancreatic cancer. Peanuts appear to be particularly susceptible to contamination with aflatoxins, (DBM does not include peanuts in any form in their programs) but also many other types of foods, including whole grains, legumes, nuts, and spices are vulnerable to the fungus producing aflatoxins. These poisons are resistant to cooking and freezing, but care in selecting their foods can greatly reduce the risk of exposure to these toxins:

- Only purchase fresh seeds, legumes, nuts and grains (or at least avoid last year's harvest)
- Look for signs of proper storage and avoid foods from countries that may adhere to substandard storage standards
- Throw away nuts that taste stale or look suspicious
- Eat green vegetables that are rich in chlorophyllin — chlorophyllin has been shown to reduce aflatoxins levels. Vegetables that are rich in chlorophyll are rocket, spinach, kale, watercress, parsley, lettuce, endive, chicory, broccoli sprouts and mustard sprouts.

#8: Ensure Sufficient Natural Vitamin D
Vitamin D is well known for its role in maintaining strong bones by promoting calcium absorption in the body, but in recent years vitamin D has also been heralded for its potentially protective effects against pancreatic cancer. The protective effect of vitamin D against pancreatic cancer is based on the vitamin's ability to block the proliferation of cancerous cells. The best vegan food sources of vitamin D include egg yolks. We however prefer the most natural source of all – the exposure to regular SUNLIGHT.

#9: Reduce Fat Intake, Especially from Animal Fat
A high dietary intake of animal fat has been associated with an increased risk of pancreatic cancer. One study found that the study participants with the highest intake of animal fat had a 43% increased risk of pancreatic cancer compared with the lowest intake group. One substance that is thought to play a major role in this context is arachidonic acid, a type of omega-6 fatty acids that is abundant in fatty red meats and organ meats. This omega-6 fatty acid appears to stimulate cancer cell growth and to facilitate the spread of pancreatic cancer within the body.
Evidence suggests that arachidonic acid may also be able to destroy cells of the immune system involved in the protection against pancreatic cancer. Omega-3 fats — found in salmon, mackerel, flaxseed, walnuts and a few other foods — are believed to inhibit the growth of pancreatic cancer. However, also omega-3 fats can be harmful if consumed in excess as all dietary fat stimulates the production of bile which may be converted into apocholic acid, a proven carcinogen, if a lot of fat stagnates in the large intestine for too long. This information has led us to recommend that you NOT eat red meat and restrict your total fat intake to approximately 20% of total caloric intake per day. A well-balanced combination of omega-3, 6 and 9 fats are essential but excessive amounts will throw this vital ratio out and cause more problems, health-wise.

#10: Ensure a Sufficient Intake of Vitamin C and E
Vitamins C and vitamin E scavenge free radicals and boost the immune system, which may reduce the risk of pancreatic cancer. In addition, vitamin C and vitamin E can inhibit the formation of nitrosamine, a substance that has been found to induce pancreatic cancer in animals and that may cause pancreatic cancer also in humans. However, the impact of vitamin C on nitrosamine formation might be relevant only if there is no fat in the stomach. Ensure that you eat a good range of vegetables and fruits that will provide you with a source of Vitamin C that is easily assimilated by the body. These fruits and veggies are: Bell peppers, guavas, dark leafy greens such as kale, broccoli, ORGANIC strawberries, citrus fruits such as oranges and grapefruits, cooked tomatoes, mange tout peas, papaya and spinach.

#11: Ensure a Sufficient Intake of B Vitamins
Vitamin B is a complex of several vitamins that often work together and co-exist in the same foods. Research suggests that a sufficient intake of the B vitamins, particularly of vitamin B6 (pyridoxine), vitamin B12 (riboflavin) and vitamin B9 (folate), could reduce the risk of pancreatic cancer for people who are at normal or below normal weight. However, evidence indicates that B vitamins may not be protective against pancreatic cancer when obtained through vitamin supplements. Therefore, it is important to include plenty of foods rich in these vitamins in the diet.

#12: Ensure a Sufficient Intake of A and Carotenoids
A large and compelling body of evidence suggests that there is an inverse relationship between the risk of cancer and the consumption of foods rich in vitamin A and carotenoids. Carotenoids, which are precursors to vitamin A, are found in many orange, yellow, and green fruits and vegetables including carrots, sweet potato, cantaloupe, spinach, kale, and collard greens. The most common carotenoids in the Western diet include beta-carotene, lycopene, zeaxanthin, and lutein. The protective effects of dietary vitamin A and carotenoids have been shown to be particularly strong for lung cancer, but also the risk of pancreatic cancer may be reduced by including a variety of carotenoid-rich foods in diet.

#13: Supporting the Pancreas with Tea / Infusions / tisanes
Besides good healthy clean food, another way to provide gentle on-going support to the pancreas is to drink Bay Leaf Tea, Ginger and green teas (reduces inflammation, cleanses the body and is a sedative and antioxidant for the pancreas). A simple licorice infusion is a digestive root that boosts the production of bile to aid in the digestion process.

14. Water and Supportive Juices. Ideally, a depurative diet for at least 10 days a month would optimise pancreatic function. However, a good start to this process is Lemon Tea (hot water with lemon juice).

**DBM PROTOCOL – ADJUNCT THERAPY – PANCREAS CLEANSE - TEA**
*This tea is the foundation of the pancreas cleanse*
Pancreas Cleansing Tea #1 – Bay Leaf
Bay leaves contain notable plant-derived compounds, vitamins and minerals that are essential for optimum health, detox and cellular regeneration. Bay leaves help in treating kidney infections and even kidney stones.  
*Avoid in pregnancy as bay leaf tea is a uterine stimulant*

**PANCREAS SUPPORTIVE FOODS AND FOODS THAT HELP PREVENT PANCREATIC CANCER**

This list of foods will help to prevent and fight cancer in the pancreas.

- Jalapeno Peppers
- Raspberries
- Green Tea
- Turmeric
- Carrots
- Salmon
- Kale
- Cabbage

**DBM PROTOCOL – ADJUNCT THERAPY – PANCREAS CLEANSE – SOUPS – FOOD FOR LIFE**

Pancreas Support #1: Beet and Carrot Soup  
Pancreas Support #2: Apple and Onion Soup  
Pancreas Support #3: Winter Pea and Watercress Soup  
Pancreas Support #4: Curried Sweet Potato Soup  

**DBM PROTOCOL – ADJUNCT THERAPY – PANCREAS CLEANSE – SALADS – FOOD FOR LIFE**

Pancreas Support Salad #1: Beet and Carrot Salad with Ginger  
Pancreas Support #2: Rocket, Avocado and Tomato Salad  
Pancreas Support #3: ACE Salad
Parasite Cleanse

General Information on why we do a parasite cleanse

Parasites are far more common than one would expect. It’s a myth that parasites only exist in underdeveloped countries. Parasites can cause a myriad of symptoms, only a few of which are actually digestive in nature.

Some examples of parasites include roundworms, tapeworms, pinworms, whipworms, hookworms, and more. Because parasites vary so greatly, they can cause a very wide range of problems. Some consume the body’s nutrients/food, leaving one feeling hungry after every meal and unable to gain weight. Others eat off of red blood cells, causing anaemia. Some lay eggs that can cause itching, irritability, and even insomnia. If the patient has tried countless approaches to heal their gut and relieve their symptoms without any success, a parasite could be the underlying cause for many of their unexplained and unresolved symptoms.

How Do You Get Parasites?
There are a number of ways to contract a parasite. First, parasites can enter your body through contaminated food and water. Undercooked meat is a common place for parasites to hide, as well as contaminated water from underdeveloped countries, lakes, ponds, or creeks. However, meat is not the only culprit. Unclean or contaminated fruits and vegetables can also harbour parasites. Some parasites can even enter the body by traveling through the bottom of your foot.

Once a person is infected with a parasite, it’s very easy to pass it along. If you have a parasite and don’t wash your hands after using the restroom, you can easily pass microscopic parasite eggs onto anything you touch — the door handle, the salt shaker, your phone, or anyone you touch. It’s also very easy to contract a parasite when handling animals. Hand washing is a major opportunity to prevent parasite contamination and transmission.

Traveling overseas is another way that foreign parasites can be introduced to your system. If you consumed any contaminated water during your travels, you may have acquired a parasite of some kind.

Symptoms of parasitic
- You have an explained constipation, diarrhoea, gas, or other symptoms of IBS
- You travelled internationally and remember getting traveller’s diarrhoea while abroad
- You have a history of food poisoning and your digestion has not been the same since
- You have trouble falling asleep, or you wake up multiple times during the night
- You get skin irritations or unexplained rashes, hives, rosacea or eczema
- You grind your teeth in your sleep
- You have pain or aching in your muscles or joints
- You experience fatigue, exhaustion, depression, or frequent feelings of apathy
- You never feel satisfied or full after your meal
- You’ve been diagnosed with iron-deficiency anaemia

The signs of a parasite can often appear unrelated and unexplained. As mentioned previously, there are MANY different types of parasites that we are exposed to in our environments. We typically see parasites causing more constipation in patients than diarrhoea, but some parasites are capable of changing the fluid balance in your gut and causing diarrhoea. Trouble sleeping, skin irritations, mood changes, and muscle pain can all be caused by the toxins that parasites release into the bloodstream.
These toxins often cause anxiety, which can manifest itself in different ways. For instance, waking up in the middle of the night or grinding your teeth in your sleep are signs that your body is experiencing anxiety while you rest. When these toxins interact with your neurotransmitters or blood cells, they can cause mood swings or skin irritation.

**Parasite Check List**
Parasites are organisms that live by feeding upon another organism. Parasites living in the human body feed on our cells, our energy, our blood, the food we eat, and even the supplements we take. There are many types of parasites from single-celled organisms that are only visible under a microscope to tapeworms that grow up to about 12 meters.

It is a common misconception that parasites exist only in third world countries. Over 200 types of parasites have been found in North America. Parasites are transmitted from person to person, pets, insects, soil, unfiltered water and even tap water.

Most parasites will cause noticeable symptoms, such as diarrhea, but some cause no noticeable symptoms. Because many will travel through the blood to any organ, parasites can cause problems that are often not recognized. A parasitic infection can often go undiagnosed or misdiagnosed. For example, a roundworm infestation in the stomach can give the appearance of a peptic ulcer. Chronic giardiasis can be an undetected factor or missing diagnosis in IBS and Chronic Fatigue Syndrome.

Bacterial and parasitic infections can result in many diseases and constitute the greatest cause of morbidity and mortality. The most common symptoms of parasite infections are:

<table>
<thead>
<tr>
<th>Abdominal pain</th>
<th>Memory loss</th>
<th>Dry cough</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allergies</td>
<td>Mucus in the stools</td>
<td>Fever and chills</td>
</tr>
<tr>
<td>Anorexia</td>
<td>Muscle pain</td>
<td>Flatulence</td>
</tr>
<tr>
<td>Appetite changes</td>
<td>Nausea</td>
<td>Gas</td>
</tr>
<tr>
<td>Arthritis</td>
<td>Poor appetite</td>
<td>Gastrointestinal symptoms</td>
</tr>
<tr>
<td>Asthma</td>
<td>Poor digestion</td>
<td>Headaches</td>
</tr>
<tr>
<td>Bloating</td>
<td>Poor immunity</td>
<td>Heartburn</td>
</tr>
<tr>
<td>Bloody stools</td>
<td>Rectal bleeding</td>
<td>Hives</td>
</tr>
<tr>
<td>Brain fog</td>
<td>Rectal itching</td>
<td>Insomnia</td>
</tr>
<tr>
<td>Cancer</td>
<td>Skin rash</td>
<td>Intestinal cramps</td>
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<tr>
<td>Colitis</td>
<td>Tapeworms</td>
<td>Irritable bowel</td>
</tr>
<tr>
<td>Constipation</td>
<td>Unexplained weight loss</td>
<td>Joint pain</td>
</tr>
<tr>
<td>Dermatitis</td>
<td>Malabsorption</td>
<td>Leaky gut</td>
</tr>
<tr>
<td>Diarrhoea</td>
<td>Lymph blockage</td>
<td></td>
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</tbody>
</table>

For the instructions on how to do a Parasite Cleanse – see Body Cleansing.
How to Eat Papaya Seeds
Source: WikiHow

Papaya seeds have recently caught attention as a potential health food, and while much of the evidence supporting the notion is unverified, the seeds are nontoxic and might be worth trying just in case. You can eat papaya seeds by treating them as a supplement and eating them whole, or you could grind the seeds up and use them when you would usually use pepper since the two tastes are fairly similar.

Part 1
Eat as a Raw Supplement

Choose a small papaya. Smaller papayas tend to have seeds with a milder taste, while the seeds of a large papaya tend to be more bitter. As you grow accustomed to the taste of papaya seeds, you can begin getting larger fruits instead of searching out small ones all the time. Starting with small papayas can help you get used to the flavor, though.
2. **Chew directly on a few seeds.** Papaya seeds can be eaten whole, but for the first week or so, only chew on one or two papaya seeds a day. If you eat too many at once, you could end up overwhelming your tastebuds and digestive system.

- The bitter, pepper-like taste of papaya seeds can be overwhelming at first, and if you rush yourself too quickly and eat too many at once, you might become discouraged from eating any more.
- Additionally, while papaya seeds are safe to eat, consuming anything in large quantities when your stomach is not accustomed to it can cause digestive upset. Starting slowly is the best way to avoid or minimize this upset.
3. **Work your way up to a larger amount.** Over the second week, gradually work up to 1/4 tsp (1.25 ml), then to 1/2 tsp (2.5 ml), and finally to a full 1 tsp (5 ml) daily.

- Make things even easier on your digestive system by taking the papaya seeds with a meal heavy in protein. Doing so will make it easier to get the maximum amount of benefits from the proteolytic enzymes in the seeds, thereby improving your digestive health.
Try eating the seeds with honey. If the stronger, bitter taste of papaya seed proves too strong for you, you could try taking whole papaya seeds with 1 tsp (5 ml) of honey to lessen the effect.

- When taking papaya seeds with honey, you should still chew the seeds a few times before swallowing them.
- Additionally, the combination of honey and papaya seeds is thought to be an effective treatment against parasites, so taking your papaya seeds with honey has possible health benefits, as well.

Part 2
Use as a Replacement for Pepper
1. **Crush the seeds.** Use a mortar and pestle to crush up to 1 tsp (5 ml) of papaya seeds at a time, grinding them into a fine or coarse powder.
   - Alternatively, you could add the clean, dry seeds directly to your pepper grinder instead of using a mortar and pestle, if desired.
   - For best results, opt for freshly crushed papaya seeds instead of seeds that were crushed some time ago.
2.

Use crushed papaya seed whenever you would use crushed peppercorn. Crushed papaya seeds work well as a substitute for black pepper and can be used in equal proportions.

- Note that the taste of papaya seeds is not exactly like pepper. Some have compared it to a blend between pepper and mustard, but when used in small quantities, the difference is not usually enough to negatively affect the food you use it on as a pepper substitute.
3.

**Try seasoning meat with papaya seeds.** One great way to use peppery papaya seeds is to season steak, chicken, or pork with the crushed seeds before you cook the meat.

- For instance, you could crush 1/2 tsp (2.5 ml) of papaya seeds and use them to season a single serving size steak. Rub the crushed seeds on the steak and let it sit for an hour before pan-frying in a little olive oil.
- The papain in papaya seeds acts as a meat tenderizer. The flavor itself adds flavor to the meat, and it can also help you digest the steak after it gets into your stomach.
4

Make a papaya seed salad dressing. Another popular way to use papaya seeds is to mix them into a vinaigrette dressing, similar to the manner in which you might prepare a pepper vinaigrette.

- For one version of papaya seed dressing, use 1 Tbsp (15 ml) papaya seeds, 1/4 cup (60 ml) papaya fruit, 1/4 cup (60 ml) red onion, 1/4 cup (60 ml) fresh cilantro, 1 clove garlic, 5 tsp (25 ml) ginger, 2 Tbsp (30 ml) apple cider vinegar, the juice of 1 lime, 1 tsp (5 ml) honey, 1/4 cup (60 ml) olive oil, 1/2 tsp (2.5 ml) sea salt, and a pinch of chili pepper flakes if desired.

- Blend all of the ingredients, minus the oil, in a blender until they form a liquid.
- Slowly pour the olive oil into the blender or food processor as it runs to blend it in thoroughly.
- This recipe produces 1 cup (250 ml) of papaya seed dressing. You can store it sealed and chilled for up to one week.

Part 3

Additional Usage and Storage Notes
1.

**Note the health benefits of papaya seed.** Now that you know how to eat papaya seeds, you might still be wondering why you should.

- For starters, papaya seeds contain high levels of oleic and palmitic acids. Both are believed to help protect your body against cancer.[3]
- In traditional Chinese and Japanese medicine, papaya seeds are used to detoxify and strengthen the liver.[4]
- The flavonoids in papaya seeds are believed to help prevent germs from causing infections and are also thought to protect the kidneys.
- In one study done with Nigerian children, 76.7 percent of the children got rid of intestinal parasites after consuming papaya seeds daily for one week.[5]
2.

**Scoop the seeds out of a fresh papaya.** The simplest, most effective way to get papaya seeds would be to buy or harvest fresh papaya and to scoop the seeds out of the fruit with a metal spoon.

- After digging the seeds out with a spoon, spread them out on one half of a clean tea or dish towel. Fold the towel over to sandwich them in the middle and rub the seeds quickly to remove any remaining, attached pieces of fruit.
- Place the seeds in a colander and rinse them under running water. Spread them out flat near a windowsill to dry in the sunlight for a few days.
- You could also dry the seeds using a dehydrator. Follow the manufacturer's instructions carefully to avoid drying the seeds out too quickly or not thoroughly enough. When using a dehydrator, however, the total amount of necessary drying time is usually cut from days to hours.
3.

**Store an excess in the freezer.** If you do not plan on eating or using all your papaya seeds within the first few days, you should place them in a freezer-safe, airtight container and store the seeds in a freezer.

- If you eat papaya seeds on a fairly consistent basis, you can store them in the refrigerator instead of relying on the freezer. If you do not think that you can go through your papaya seeds within a week or so, though, it is best to freeze some.
- When kept frozen, papaya seeds can retain their nutritional value for 6 to 12 months.
- Defrost the seeds in the refrigerator overnight before use. Alternatively, you could soak frozen seeds in hot water for a few minutes until they soften.
Avoid adding them to smoothies or similarly sweet foods. Even though you could technically use papaya seeds in a smoothie, many people agree that the bitter, pepper-like taste tends to be a fairly unappetizing addition.

- Additionally, in low quality blenders, papaya seeds may not be thoroughly ground. A mortar and pestle, food processor, or pepper grinder are your best options if you want to pulverize papaya seeds.

How can papaya cure a staph infection?
Papaya seeds are very potent and are excellent for killing bacteria and parasites and maintaining healthy vision and skin. Grind the seeds and mix them with one or two spoonfuls of honey. Take one spoonful a day or less of the mixture: it has a peppery mustard taste and may upset your stomach at first. Try for at least a week.

**Things You'll Need**

- Metal spoon
- Tea or dish towel
- Colander
- Blender or food processor (optional)
- Mortar and pestle (optional)
- Pepper grinder (optional)
Sources and Citations

Pelvic Floor Exercises

Pelvic floor exercises, also called Kegel exercises or pelvic floor muscle (PFM) training, are often used in the treatment of stress incontinence. These exercises are designed to strengthen and tighten pelvic floor muscles.

The pelvic floor muscles can become weakened due to pregnancy and childbirth or due to aging and being overweight. When the pelvic floor muscles weaken the pelvic organs descend and bulge into your vagina — a condition known as pelvic organ prolapse. The effects of pelvic organ prolapse range from uncomfortable pelvic pressure to leakage of urine. Kegel exercises can help delay or even prevent pelvic organ prolapse and the related symptoms.

**Conditions Treated**
- Stress Incontinence
  - When PFM training is initially successful, there is a 66% chance that the favourable results will persist for at least 10 years.
- Bladder prolapse
- Vaginal laxity
- Radical prostatectomy in elderly patients with prostate cancer.

**DBM PROTOCOL – ADJUNCT THERAPY - PFE**

**Procedure**

**Use the Correct Muscles:**
- The goal is to squeeze the muscles around your vagina and anus. These are the muscles you use to prevent gas from passing, stop the flow of urine and the muscles that contract during orgasm.

**Contract the Correct Muscles:**
- Think about trying to pull the muscles up and in (if your pelvic floor is weak, you will only faintly feel this contraction). You'll know you're doing these exercises correctly if you feel the muscles tightening but don't have movement in your abs or buttocks. Isolate your pelvic floor so if somebody looked at you while you were doing the exercise, they wouldn't think you were moving at all.
- *Don't . . .* hold your breath (you should be able to talk easily at the same time) tighten your abdomen, thigh or buttock muscles squeeze your legs together.

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Kegel Exercises:

Contract your pelvic floor muscles for three seconds, then relax the muscles for three seconds. Do this 10-15 times several times a day. Although shown here while lying down, these exercises can be done during a variety of daily activities, such as sitting in a meeting, while stopped in your car at a traffic light or when talking on the phone.

Picture Source: [https://www.inlifehealthcare.com/](https://www.inlifehealthcare.com/)
Types of Contractions:
The type of contraction that you use will determine the effect that you experience.

**Slow Contraction**
- Slow contractions help to increase the strength of your pelvic floor. They help your muscles to hold back the urine.
- Lift your pelvic floor muscles to a count of ten.
- Hold the muscles tight for 10 seconds. You may find at first that you can only hold the contraction for one or two seconds, so concentrate on lifting your muscles and holding the contraction for as long as you can. Gradually increase the time until you reach 10 seconds.
- Relax your muscles and rest for 10 seconds.
- Repeat the contractions up to 10 times.

**Fast contractions**
- Fast contractions help your pelvic floor to cope with pressure, for example when you sneeze, cough or laugh. This works the muscles that quickly shut off the flow of urine.
- Lift your pelvic floor muscles quickly.
- Hold the contraction for one second.
- Relax the muscles and rest for one second.
- Repeat the contractions 10 times.

**Frequency of Exercises**
- Try to do one set of slow contractions and one set of fast contractions six times a day when treating stress incontinence.
- Doing a fast contraction just before you cough, sneeze or laugh can prove very beneficial. Doing a fast contraction just before you get out of a chair can also be beneficial as the movement of getting up puts pressure on your bladder and pelvic floor.
- To strengthen the pelvic floor muscles in the absence of symptoms, do slow contractions 10 times, 3 times per day, three times per week.

**To know if you are doing them correctly**
- Put a couple of fingers into your vagina. You should feel a gentle squeeze when doing the exercise.
- Put your hands on your abdomen and buttocks to make sure you can't feel your belly, thighs, or buttocks moving.

There are several other simple exercises both men and women can do to ensure continued health of the pelvic floor muscles.
Cautions
You may initially practice Kegels by stopping the flow of urine while going to the bathroom, but it is not advised to do this frequently as stopping the flow of urine can cause backflow which may cause a urinary tract infection and can disrupt your pelvic muscle coordination.
Petroselinum crispum
Parsley

Parsley is an herb. The leaf, seed, and root are used to make medicine. Be careful not to confuse parsley with fool's parsley and parsley piert.

Parsley is used for urinary tract infections (UTIs), kidney stones (nephrolithiasis), gastrointestinal (GI) disorders, constipation, jaundice, intestinal gas (flatulence), indigestion, colic, diabetes, cough, asthma, fluid retention (edema), osteoarthritis, “tired blood” (anaemia), high blood pressure, prostate conditions and spleen conditions. It is also used to start menstrual flow, to cause an abortion, as an aphrodisiac, and as a breath freshener.

Some people apply parsley directly to the skin for cracked or chapped skin, bruises, tumours, insect bites, lice, parasites, and to stimulate hair growth.

In foods and beverages, parsley is widely used as a garnish, condiment, food, and flavouring. In manufacturing, parsley seed oil is used as a fragrance in soaps, cosmetics, and perfumes.

**How does it work?**
Parsley might help stimulate the appetite, improve digestion, increase urine production, reduce spasms, and increase menstrual flow.

Parsley is a good source of folic acid, one of the most important B vitamins. While it plays numerous roles in the body, one of its most critical roles in relation to cardiovascular health is its necessary participation in the process through which the body converts homocysteine into benign molecules.
Homocysteine is a potentially dangerous molecule that, at high levels, can directly damage blood vessels, and high levels of homocysteine are associated with a significantly increased risk of heart attack and stroke in people with atherosclerosis or diabetic heart disease. Enjoying foods rich in folic acid, like parsley, is an especially good idea for individuals who either have, or wish to prevent, these diseases. Folic acid is also a critical nutrient for proper cell division and is therefore vitally important for cancer-prevention in two areas of the body that contain rapidly dividing cells—the colon, and in women, the cervix.

While one study suggests that high doses of supplemental vitamin C makes osteoarthritis, a type of degenerative arthritis that occurs with aging, worse in laboratory animals, another indicates that vitamin C-rich foods, such as parsley, provide humans with protection against inflammatory polyarthritis, a form of rheumatoid arthritis involving two or more joints.

The findings, presented in the Annals of the Rheumatic Diseases were drawn from a study of more than 20,000 subjects who kept diet diaries and were arthritis-free when the study began, and focused on subjects who developed inflammatory polyarthritis and similar subjects who remained arthritis-free during the follow-up period. Subjects who consumed the lowest amounts of vitamin C-rich foods were more than three times more likely to develop arthritis than those who consumed the highest amounts.

**Medicinal Uses:**
Its leaves and roots are used as condiments and garnish in dishes, but the plant also has medicinal properties. Parsley seeds are used as carminative, the oil is used in the regulation of menstrual flow, the roots serve as diuretic and the leaves used in treating insect bites, lice and skin parasites. Parsley leaf herbal supplements are presented as capsules to be taken at two or three times daily at mealtimes. The maximum daily dosage is 6 g.
Beneficial Nutrients
Parsley leaf capsules make a good source of important minerals such as calcium, potassium, manganese and iron. They also contain vitamins A, B, C, E, D and K. Other important compounds found in parsley leaf capsules are essential oils such as eugenol and apiole; flavonoids such as apigenin, rutin and quercetin; amino acids such as histidine; and chlorophyll.

Digestive Help
The chlorophyll content of parsley leaf capsules makes it useful in maintaining a healthy digestion. These capsules are taken to strengthen and stimulate the digestive system when they are used to ease indigestion and flatulence. They also stimulate the appetite and contribute to efficient metabolism.

Diuretic
Apiol and myristicin in parsley are responsible for its diuretic activity. For this reason, parsley leaf capsules are taken to reduce bloat and improve urination. This diuretic activity makes the capsules great for detoxifying the body since improved urination contributes to faster elimination of toxins and gallstones in the body and prevents the re-absorption of salts in the kidneys. According to Drugs.com, the diuretic property of parsley is a result of its inhibition of the sodium/potassium pump.

Other Benefits
A study done at Brigham and Women's Hospital and Harvard Medical School in 2009 established that the flavonoid, apigenin, found in parsley reduces the risk of malignant ovarian disease by 20 percent. Parsley leaf capsules are also a good source of vitamin C, an immune booster; the iron content is essential for formation of red blood cells; the potassium content helps lower blood pressure while calcium and manganese are useful in the management of osteoporosis.

Preparations and Dosages
- Fluid extract root, 1/2 to 1 drachm.
- Fluid extract seeds, 1/2 to 1 drachm.
- Apiol (oil), 5 to 15 drops in capsule

Special Precautions & Warnings:
Source: http://www.webmd.com/

Contraindications
Pregnancy and breast-feeding: Parsley in food amounts is fine, but parsley in larger medicinal amounts is LIKELY UNSAFE when taken by mouth during pregnancy. Parsley has been used to cause an abortion and to start menstrual flow. In addition, developing evidence suggests that taking An-Tai-Yin, an herbal combination product containing parsley and dong quai, during the first three months of pregnancy increases the risk of serious birth defects. If you are pregnant, stick with using only the amount of parsley typically found in food. Not enough is known about the safety of using parsley in medicinal amounts during breast-feeding. It's best not to use more than typical food amounts of parsley.

Diabetes: Parsley might lower blood sugar levels. Watch for signs of low blood sugar (hypoglycaemia) and monitor your blood sugar carefully if you have diabetes and use parsley.

Surgery: Parsley might lower blood glucose levels and could interfere with blood sugar control during and after surgical procedures. Stop using parsley at least 2 weeks before a scheduled surgery.

Parsley leaf capsules should be avoided by pregnant women because parsley causes uterine contraction at high doses. If you have liver or kidney disease, you need to see your doctor before
starting on these capsules. Similarly, if you are allergic to carrots, celery or fennel, you could also be allergic to parsley and need to ask your doctor before taking parsley leaf capsules.

**Parsley Side Effects & Safety**
- Parsley is **LIKELY SAFE** when consumed in amounts commonly found in food.
- Parsley is **POSSIBLY SAFE** for most adults when taken by mouth as medicine, short-term. In some people, parsley can cause allergic skin reactions.
- Consuming very large amounts of parsley is **LIKELY UNSAFE**, as this can cause other side effects like “tired blood” (anaemia) and liver or kidney problems.
- Also, parsley seed oil applied to the skin is **LIKELY UNSAFE** as it can cause the skin to become extra sensitive to the sun and cause a rash. Not enough is known about the safety of applying parsley root and leaf to the skin.

**Moderate Interaction Be cautious with this combination**
- Warfarin (Coumadin) interacts with PARSLEY
  - Warfarin (Coumadin) is taken to thin the blood and slow blood clotting. Large amounts of parsley leaf might increase blood clotting. Taking parsley along with warfarin might decrease how well warfarin (Coumadin) works to thin the blood.
- Water pills (Diuretic drugs) interacts with PARSLEY
  - Parsley seems to work like a "water pill" by causing the body to lose water. Taking parsley along with other "water pills" might cause the body to lose too much water. Losing too much water can cause you to be dizzy and your blood pressure to go too low.
- Some "water pills" include chlorothiazide (Diuril), chlorthalidone (Thalitone), furosemide (Lasix), hydrochlorothiazide (HCTZ, HydroDIURIL, Microzide), and others.

**Minor Interaction Be watchful with this combination**
- Aspirin interacts with PARSLEY
  - Some people are allergic to parsley. Aspirin might increase your sensitivity to parsley if you are allergic to parsley. This has only been reported in one person. But to be on the safe side, if you are allergic to parsley do not take aspirin and eat parsley.

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DBM makes use of parsley in their [Kidney Support Teas](#).

See [Kidney Cleanse](#).
Rebounding
For Lymph Drainage and General Health

Exercise is one of the easiest ways to keep Lymphatic system working well. Optimal lymph moving exercise would be rebounding on a trampoline. You probably tried rebounding when you were a kid—without even knowing it. Rebounding is basically just bouncing on a trampoline or rebounder. Its low-impact aerobic exercise that can jump-start your metabolism (no pun intended)—oh, and P.S. It’s pretty fun! There are over 300 lymph nodes in the neck and head area alone. Your main lymph valves are in your arms and legs, that is why exercise such as rebounding will facilitate the lymph flow.

Rebounding is gentle enough for people who suffer from various chronic disorders, but it’s powerful enough to get your blood pumping and your body working. Plus, it helps your body detoxify by sweating out the toxins.

How to Use a Rebounder for Lymphatic Health
The best way to get the increased physical movement and exercise (in a way that’s very easy on your joints and internal connective tissues) is by gently bouncing. Your feet don’t even have to leave the trampoline. Start with a minute or two. Don’t push yourself yet—this isn’t a cardio exercise (although it can build up into one if you desire). Even an older individual might be able to very slowly work their way up to five or more minutes this way. Overall health, energy and vibrancy will increase and eventually you can build up to use the rebounder for longer periods of time. But
rest assured, as little as five minutes of rebounding per day is enough to greatly improve lymph circulation.

**Special Equipment**
Rebounder or mini trampoline

**Directions**
Simply bounce lightly on your rebounder or trampoline. Just ten minutes a day will work wonders.

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See also Manual Lymph Draining

Watch Open Source Video Link: [https://youtu.be/ZTIr903Ezg](https://youtu.be/ZTIr903Ezg) - Beginner Rebounding
Therapeutic salts are a range of mineral rich salts including alkaline salts, dead-sea salts and Epsom salts that are often added to a bath or to footbath for therapeutic effects.

**Type of Therapeutic Salts**

**Alkaline Salts**
- Alkaline salts help create the highest pH-level of all salts.

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**DBM does not recommend the use of alkalisising salts being used orally / internally. The risk of over-alkalising is great and can have serious repercussions. Speak to your DBM Physician.**

**DBM Use of Alkaline Salts**
- **Detoxification**
  - detoxifies and cleanses the body by stimulating the skin and the mucous membranes to eliminate acids and toxins
- **Skin Care**
  - activates the self-oiling process of the skin
  - tightens loosened tissue
  - useful for irritated or overexposed and sunburned skin
- **Muscle Relaxation**
  - helps to eliminate the lactic acid

**Procedure**
• Alkaline salts can generally be used in baths and foot baths, compresses, rinses, for inhalations, dental care and with alkaline face masks, alkaline stockings, sleeves or cuffs.

**Dead Sea Salt**
• Dead Sea salt comes from the bottom of the Syria - the lowest natural place on Earth.
• The waters of the Dead Sea are very unique, having a total salt concentration that is 10 times higher than ocean water, reaching 33% versus 3%. The composition of the brines is also unique, comprising magnesium, potassium and calcium chlorides, in addition to a high concentration of bromides.

**Uses of Dead Sea Salt**
• **Skin Care**
  o skin disorders such as eczema and psoriasis
  o produces smooth silky skin and slows skin aging
• **Arthritis**
  o rheumatic disorders including arthritis and osteoarthritis
  o eases muscular pain and decreases stiffness
• **Other Benefits**
  o whole body relaxation
  o strengthens bones and nails
  o aids in fluid balance within the body

**Epsom Salts**
• Epsom salts come from a bitter saline spring at Epsom in Surrey, England
• It actually is not a salt but a naturally occurring pure mineral compound of magnesium and sulfate.
• Studies have shown that magnesium and sulfate are both readily absorbed through the skin, making Epsom salt baths an easy and ideal way to enjoy the amazing health benefits.
• Magnesium is beneficial in regulating the activity of over 325 enzymes, reducing inflammation, helping muscle and nerve function and helping to prevent artery hardening.
• Sulfates help improve the absorption of nutrients, flush toxins and help ease migraine headaches.

**Uses of Epsom Salts**
• **Skin Care**
  o used to treat a number of skin problems
  o healing cuts
  o decreases foot odour
• **Muscle Relaxation**
  o soothing back pain and aching limbs
  o easing muscle strain
• **Other Conditions**
  o relaxing the nervous system
  o treating cold and congestion
  o helps prevent hardening of arteries and blood clots
  o relieves constipation
  o eliminates toxins from the body

**Procedure**
• The best way to experience the benefits of Epsom salts is to soak in a tub full of hot water with a few cups of Epsom Salts for at least 1/2 an hour.
See Hydrotherapy

**Epsom Salt Scrub for Increased Blood Circulation and Lymph Cleaning**

**Procedure:**
1. Oil a large soup bowl.
2. Fill with Epsom salts.
3. Wet it down with water. Salt should have the texture of wet sand (granular, not soupy)
4. Undress and stand or sit in bathtub. Make sure you are secure so you do not slip.
5. Take a handful of salt and rub vigorously in circular motion towards the heart (same routine as skin-brushing).
6. Do not skimp on salt.
7. After doing the whole body, repeat rubbing in circular motion, rubbing off the salt from the first application.
8. Now, shower with lukewarm water, going to cold. When water is cold, always make sure the heart and head are the last parts to be done so as not to shock the system.

Regular Salt Glows will help ease cases of constipation, swelling, skin conditions, poor circulation, fatigue, stiffness, headaches and arthritis.

See Hydrotherapy - Epsom Salt Foot Soak - To increase magnesium levels in the body
Sauerkraut
More Than Just Cabbage

Some of the health benefits of sauerkraut include its ability to increase your digestive health, boost your circulation, protect your heart health, provide you with quick energy, stimulate your immune system, strengthen your bones, reduce your overall cholesterol levels, eliminate inflammation, protect against certain cancer, and even improve your vision and skin health.

Although as a child, you may not have liked the taste or smell of sauerkraut (I know I didn’t), this slightly unique form of finely cut cabbage can be a major source of health benefits for you! Basically, sauerkraut is cabbage that has been fermented, which is where the distinct sour taste comes from. It is popularly used as a side dish or even as a condiment in certain cultures, which can be added to sausage or hot dogs. Fermented foods are commonly found in cultures throughout the world, but sauerkraut is one that has managed to find a global market, and is popular throughout Europe, Asia, and America.

Historical records point to its origin being somewhere in China, having been brought to Europe at some point during the Roman Empire. Pickled or fermented foods like sauerkraut were very valuable in the era before refrigeration, as it allowed food to stay fresh during long journeys. Many people now associate sauerkraut with Eastern European countries and Germany, which does feature it heavily in certain cultural dishes, but it is truly an international favorite. The fermentation process of sauerkraut is similar to the process of making kimchi or pickles, meaning that heat is not applied during the process, as this will kill the bacteria that makes the fermentation process possible. Besides being a delicious addition to a number of meals, sauerkraut also makes for a health addition to any diet. Let’s take a look at some of the nutritional elements that make this “sour cabbage” so important!
Nutritional Value of Sauerkraut
Sauerkraut contains high levels of dietary fiber, as well as significant levels of vitamin A, vitamin C, vitamin K, and various B vitamins. Furthermore, it is a good source of iron, manganese, copper, sodium, magnesium, and calcium, in addition to contributing a moderate amount of protein to your diet.

Health Benefits of Sauerkraut

Energy Production:
The high levels of iron found in cabbage (sauerkraut) can be very beneficial for the body in a variety of ways. First of all, iron helps to contribute to energy production, as it increases the body’s metabolism and also boosts circulation, which increases oxygenation of organs and cells. This increased blood flow is a result of more RBC, of which iron is a key component. High iron levels help prevent anemia (iron deficiency) and the side effects associated with that condition (headaches, fatigue, cognitive impairment).

Digestive Health:
Cabbage is famed for its high fiber content, which is well known as one of the key points in any diet for the benefit of digestive health. Sauerkraut obviously shares this benefit, and can help to move food through the bowels, eliminating constipation, bloating, cramping, and excessive gas along the way. By regulating your digestive and excretory system, you can also prevent more serious conditions, like gastric ulcers and even colon cancer.
Heart Health:
Fiber may be commonly consumed for digestive health, but it is also very important for the health of your heart. Fiber is able to scrape off dangerous cholesterol from the walls of arteries and blood vessels by binding with the fats and cholesterol and removing them from the body. Therefore, less cholesterol enters the bloodstream and your overall cholesterol level is balanced. This can prevent atherosclerosis, heart attacks, strokes, and a variety of other cardiovascular issues.

Eye and Skin Health:
Sauerkraut also contains quite a few carotenes and a significant amount of vitamin A. This essential vitamin acts as an antioxidant, as do the carotenes, and eliminate free radicals from the body’s systems, which are the dangerous byproducts of cellular metabolism that can cause healthy cells to mutate. Sauerkraut has been linked to improved eye health, as vitamin A reduces the chances of macular degeneration and cataract formation. Furthermore, in terms of the skin, vitamin A helps to maintain the integrity of your skin, slowing down the appearance of wrinkles, eliminate blemishes, and generally keeping your skin looking young and healthy, thanks to the free-radical neutralizing powers of sauerkraut!

Immune System Booster:
As most people know, when you’re feeling under the weather, have some orange juice, as it’s such a rich source of vitamin C. Well, a single serving of sauerkraut has 35% of your daily recommended intake of vitamin C, which is one of the most important elements of our immune system. Vitamin C stimulates the production of white blood cells and increases cellular regeneration and repair, while also playing a key role in the formation of collagen, a foundational component for almost every part of our body, including organs, blood vessels, skin, hair, muscles, and bones.

Inflammation Reduction:
If the many vitamins and minerals present in sauerkraut weren’t enough, there are also certain organic compounds found in this cabbage variant that work as anti-inflammatory agents. Phytonutrient antioxidants contained in sauerkraut can double as anti-inflammatory agents, reducing the pain and discomfort of joints, muscles, or other inflamed areas.

Cancer Prevention:
Although research is still underway to reveal the exact impact of sauerkraut on cancerous cells, the presence of antioxidant compounds in sauerkraut (as with all cruciferous vegetables) means that free radicals can be eliminated, which are one of the main causes behind cancerous cell formation.

Strong Bones:
The wide range of minerals found in sauerkraut make it ideal for building strong bones and preventing osteoporosis. The high level of vitamin K (23% of daily recommended intake in a single serving), which is a somewhat uncommon mineral, is particularly important for maintaining the integrity and strength of your bones, as vitamin K produces the proteins that regulate bone mineralization!

A Final Word of Warning:
Despite all of these health benefits, sauerkraut is very high in sodium, which can be a dangerous dietary addition to people suffering from various cardiovascular and renal diseases. Speak to your doctor about an appropriate level of sauerkraut consumption if you suffer from these types of health concerns.
For more information on the benefits of probiotics and sauerkraut – Nutrition and Food for Life

SUPPORTIVE PROBIOTICS
Probiotic Recipe #1: Sauerkraut – Green Cabbage
Probiotic Recipe #2: Sauerkraut – Red Cabbage

DBM PROTOCOL – ADJUNCT TREATMENT - NATURAL PROBIOTIC - SAUERKRAUT
- 7 x 15g taken prior to meals daily.
- 1 tablespoon (15g) should be taken during the cleanse programs 30 minutes prior to and after meals. Additionally, take 15g just before bed-time.
- Going forward after the cleanses, one should make it a way of life, but for at least the next year one should continue with at least 1 tablespoon before meals to stabilise the microbiome.
Why do we need selenium?
You might not know it, but your body needs selenium. Like all trace minerals, it’s essential for proper body functioning, though you need less of them than you do vitamins and minerals needed in larger quantities, such as calcium and iron. That is why it is referred to as a micronutrient.

Cell Protection
Your body uses selenium to make enzymes called selenoproteins. There are 25 of them, and some of them — such as glutathione peroxidases — work as antioxidants, which are molecules that prevent against cell damage. They protect cells by turning chemicals such as hydrogen peroxide into harmless products like water.

Lower Cancer Risk
According to some studies, selenium deficiency can lead to a higher risk of prostate cancer. Study found that people who took in higher amounts of selenium (159 micrograms (mcg) a day) had a lower risk than those with 86 mcg.

However, while supplements might lower risk of prostate cancer in people with low selenium levels, one study by the National Cancer Institute (NCI) found that for men with already high levels of selenium, supplements only increased the odds of prostate cancer.

Other studies also link selenium levels to lung cancer. In a study of over 9,000 Finnish men and women, low selenium levels were associated with an increased risk of lung cancer. The association was strongest among smokers.

Other Diseases
Some findings suggest that selenium can help lower the risk of cardiovascular disease, but the reasons for this link remain unclear. A study of older Danish men found them to be at risk when their levels were below 79 mcg.

Selenium might also help in the treatment of HIV/AIDS. According to the Linus Pauling Institute, people suffering from the disease normally have declining levels. This is sometimes associated with increased risk of death from HIV. There is not much research on the effects of selenium supplements on people with HIV. One study found that supplements helped to greatly lower hospitalization rates among people with HIV. Another found a decrease in one biological aspect of HIV progression.

**Where to Find It**

Selenium is important for good cell health, with potential benefits to people with certain conditions. The best sources of selenium are organ meats and seafood such as shrimp, crab, and salmon. Selenium content in plants varies and depends on the richness of selenium in the soil. Brazil nuts grown in Brazil and brown rice. While selenium is a necessary mineral, high amounts are toxic. The Food and Nutrition Board (FNB) has set the upper limit of selenium found through food and supplements to 400 mcg a day in adults. As with any supplement, check with a healthcare provider for a level safe for you.
In addition to protecting against various cancers, a host of clinical studies show that selenium plays a role in the prevention and treatment of a remarkable array of pathologies, including:

- Cardiovascular disease
- Osteoarthritis
- Rheumatoid arthritis
- Hypothyroidism
- Stroke
- Atherosclerosis
- HIV
- AIDS
- Alzheimer’s disease
- Amyotrophic lateral sclerosis
- Pancreatitis
- Depression

**DBM PROTOCOL ADJUNCT THERAPY - SELENIUM**

**Best Sources of Selenium?**
As well and being found naturally in the soil, there are a number of other ways to consume the mineral and enjoy the benefits of selenium.

**Foods naturally high in trace mineral selenium (percentages based on RDA of 55 mcg/day for adults):**

- **Brazil Nuts**
  1 cup: 607 mcg (1,103% DV)
- **Eggs**
  1 medium egg: 146 mcg (265% DV)
- **Sunflower Seeds**
  1 cup: 105 mcg (190% DV)
- **Chia Seeds**
  1 oz.: 15.6 mcg (28% DV)
- **Mushrooms**
  1 cup mixed: 15 mcg (27% DV)
- **Brown Rice**
  1 cup: 19.1 mcg (35% DV)
Skin Cleansing

Hydrogen Peroxide Bath; Detox Baths

A Review

The skin is the largest organ, acting as both a barrier and a waste removal system. It's porous and permeable, which allows it to aid in our bodies’ elimination processes, but also allows absorption of much of what we put on it and in the same way it digests nicotine through a patch, it absorbs toxins into the bloodstream, where the circulation propels them into contact with every single cell.

By entering through the skin, these toxins also bypass the detoxifying bacteria, selective cellular barrier, and sensitive immune system in the gut, meaning they can be deposited and even stored throughout the tissues before the liver has a chance to metabolise and detoxify them.

According to nutritional pioneer Dr. Hazel Parcells, 65% of body cleansing is achieved via the skin! “Bathing is viewed more for relaxation than detoxification as a general rule. The focus on bathing enjoyment can be observed worldwide by the plethora of artificially scented, hormone disrupting bubble bath concoctions sold year round.

I would venture to suggest that health cannot easily be maintained over the long term without the regular incorporation of detox baths. If traditional cultures valued therapeutic cleansing baths back when our world was pristine with clean water, air, and unprocessed, additive free food, one can only imagine how important a gentle and regular detoxification bathing protocol is today given our toxic soup world with chemicals and other biologically disrupting agents nearly everywhere!”
If the body is clogged up with toxins from the physiological stress of modern living and the chemical assault from every direction, it cannot properly utilize the nutrient dense food that is consumed.

To maximize the effects of the hydrogen peroxide bath we recommend that you perform the “Dry Brushing” protocol prior to your Hydrogen Peroxide or Detox bath. As hydrogen peroxide bath, as well as all bath therapies, are more effective when you utilize dry skin brushing on the entire body. Dry skin brushing removes the layer of dead skin that can block the absorption of energy and nutrients from this bath and also stimulates the blood and lymph fluids to rise to the skin to accept the healing effects of the bath.

Frequently asked Questions
To help keep the body oxygenated, we recommend a hydrogen peroxide bath. Start slowly and build up. Begin with a half cup then a day later a whole cup and work up slowly until you can manage NO MORE THAN a maximum of two cups. (More than one cup should not be used unless advised to do so by your practitioner).

Can I use 3% peroxide instead?
The peroxide available from the chemist is usually about 3% hydrogen peroxide. In order to equal ½ to one cup of 35% hydrogen peroxide you will need at least 6 to 12 cups of 3%. That will make it quite expensive. HOWEVER, it is not our recommendation that you use these peroxides.

Are there any side effects?
Taking a hydrogen peroxide bath is like giving yourself an oxygen supplement. Some people report problems such as headaches and loose stools after bathing with peroxide. These symptoms are seen as “detox reactions” – the body doing some housecleaning with the extra oxygen you've provided. That’s why we would not recommend using more than the recommended amount. At least not until you’re very comfortable with peroxide baths.

Why “35% food grade” peroxide
Because food grade peroxide doesn’t have the stabilizers that most other kinds of peroxide have. Food grade is "cleaner". You could use any kind of peroxide – various kinds have different stabilizers. (If using a different kind, be sure to check the percentage (concentration) so that you are using an equivalent amount.)

What else goes in the bath?
You can also use salt or essential oils, right along with the hydrogen peroxide. We often recommend the use of Epsom salts, essential oils, and herbal infusions for peroxide bath soaks.

Will the peroxide bleach your hair?
That depends on how much peroxide you use, and how long and how often you stay in the peroxide baths. But, yes, it could bleach your body hair as well as your head hair (if you put your hair in the water).

Other Benefits
Peroxide will kill any anaerobic germs in the water and on your skin. Use coconut oil on the skin after baths, if your skin feels a little dry.

Safety of Letting Peroxide-water Go Down the Drain or into Garden
It goes to the sewage treatment centre and kills a lot of anaerobic bacteria there, and, in the process, it will break down into water and oxygen.
If you happen to live in the country and your tub water goes out to the land or to a creek, depending on the concentration of peroxide in the water. It may be too strong to release directly into a stream, for example. If your bath water is going to your own septic system, it is likely to be good for it.

**Anything else to know?**
Taking a hydrogen peroxide bath is mildly drying to the skin. Using some natural body lotion in the form of coconut oil or tissue oil after your bath is recommended.

**How Detox Baths Work**
The reason water as hot as can be tolerated is typically used is because this initially draws toxins to the surface of the skin, as described by Dr. Hazel Parcells in her book “The Pioneer Nutritionist Dr. Hazel Parcells in Her Own Words”. Then, as the water gradually cools down, the toxins are pulled into the water via the principle of osmosis – the weak energy from the cooling water draws from the strong energy from the body heated up initially by the very hot water.

If the wisdom of cleansing baths appeals to you, below is a primer on four different types of therapeutic baths. Generally speaking, a cleansing bath 2-3 times per week with only one per day maximum works well for most people to keep elimination channels open and gently encourage the detoxification process on a regular basis. However, follow the recommended protocol provided to you by your practitioner as to which bath to use and how often.

| See also Hydrotherapy and Detox Baths |
Steps to Healthy Skin

- **Cut out all refined sugar.** Refined sugar (sweets, chocolates, cakes, biscuits, sodas) spikes your insulin levels, causing a burst of inflammation in the body (and on your skin). Inflammation is responsible for breaking down collagen and elastin, which keep your skin tight and wrinkle-free.

  **Add leafy greens to each meal.** The vitamins and minerals in leafy greens like kale, spinach, parsley and cilantro are essential during any kind of detox. Boost your smoothies and salads with extra kale because the beta-carotene delivers a youthful glow and neutralizes free radicals. Load up on spinach too. It’s a good source of omega-3s, potassium, calcium, iron, magnesium, and vitamins B, C, and E.

  **Drink a glass of lemon water each morning.** Lemon water boosts your metabolism and begins the body detox process immediately. As lemon water is alkaline, it helps balance the pH levels in your body, reducing skin inflammation and flare-ups. Rich in vitamin C, this citrus fruit will help your body purge excess water weight and balance the sodium and potassium levels in your cells. Add a slice of lemon to a mug of warm water in the morning to encourage digestion or squeeze onto your salad when eating meals.

  **Make your midday snack a healthy one.** This means no more popcorn or granola between lunch and dinner, instead snack on sliced cucumbers, carrots and celery with healthy dips like home-made hummus and almond butter. Cucumbers are especially good for your skin: they contain hydrating, nourishing and astringent properties both internally and topically. The enzymes in them help digest damaged skin cells, removing dead skin cells safely and adding a fresh glow.
Parsley and cilantro. Parsley, known for supporting liver and kidney functions, acts as a metabolism booster while removing toxins. Add these delicious greens to your daily green juice or sprinkle the milder flat-leaf version on a salad to keep those toxins from showing up on your skin. Cilantro is rich in antioxidants that prevent damage from free radicals and it helps the body purge “heavy metals” consumed in non-organic foods. Grow your own easily at home and add to rice, salads, salsas and dips.

Stay off soy. Soy is full of phytoestrogens that can make your face breakout. These hormonal blemishes occur around the mouth and jaw line.

Additionally, soy is a GM food source.

Coffee. Most people consider caffeine to be a diuretic, which means too much of it will leave you feeling dehydrated (and probably with a headache and under eye circles, too). Our research however shows that this is not totally accurate. Studies have not proven an increase in urine output. It is obvious that if you are drinking 5 or 6 cups of coffee a day, you will indeed use the toilet more often. Our concern with coffee is more from the negative aspects of caffeine - such as insulin resistance, impacted sleep and much more. Try switching to green tea instead as it has the added benefit of antioxidants only has a fraction of the caffeine found in coffee, and it has wrinkle-fighting antioxidants.

- Use only natural, chemical-free skin products. Since you are reducing the toxins you are putting into your body, it makes sense to also reduce or remove the toxins you put onto your skin. Switch from chemical laden store-bought formulas to coconut oil or vitamin E oil. This of course depends on your skin type. My favorite scented drugstore body lotion to good old coconut oil. It’s anti-bacterial and antifungal, which is beneficial for maintaining clear skin. Luckily, I already used most natural skincare products on my face, so this one wasn’t too much of an adjustment. (Click here for a list of Team LC’s favorite eco-friendly beauty products.)
Drink half your body weight in water per day. Water increases your metabolism so much that if you're chronically dehydrated, it can mean up to an 8-pound weight gain or more per year. No wonder weight creeps on! Your challenge is to drink at least half your body weight in ounces of water per day. For example, someone who weighs 150 pounds should be drinking 75 ounces of water a day. This doesn’t mean all at once, it means throughout the whole day. This would equate to approximately 7 – 8 glasses of water for someone of average weight and height of 75kg / 1.65m.

Don’t skimp on your healthy fats. Avocados will be your best friends on this diet. Avocados, full of moisturizing monounsaturated fats, are a great source of antioxidant carotenoids like alpha-carotene, beta carotene, beta-cryptoxanthin, zeaxanthin and lutein that provide significant protection for your skin from the environmental damage that leads to fine lines and wrinkles. Kelly suggests putting them in your smoothies and adding them to your salads.
Sleep

**Sleep**

Sleep is a natural state of rest for the mind and body. A third of life is spent sleeping, yet it is often taken for granted or abused. Sleep is essential to physical, cognitive and emotional well-being. As sleep is perceived as lacking importance in our society, sleep difficulties are rapidly becoming more prevalent. Insomnia is defined as difficulty in initiating or maintaining sleep for an adequate amount of time. It is estimated that 3.3 million Canadians a year, or about 1 in every 7th persons, have trouble going to sleep or staying asleep.

**Stages of Sleep**

During the day the brain is firing at a rapid rate – known as beta waves - keeping one alert, allowing one to think and to be aware of their surroundings. Normal sleep is characterized by alternating between light, deeper slow-wave sleep (NREM) and REM sleep. Each sleep cycle is roughly 90 minutes, allowing an individual to move through 4 to 6 cycles in a given night. During the first cycle the least amount of time is spent in REM sleep and the most time in stages 3 and 4 of NREM sleep. Throughout the night, as the cycles continue, there is an increase in the amount of time in REM sleep and a decrease in the amount in NREM. During 7.5 hours of sleep you will spend about 25% in REM sleep.

**Rapid eye movement or REM sleep** is the period of sleep that the eyes flutter back and forth and vivid dreams are experienced. During this stage the brain is highly active and muscles are
temporarily paralyzed. Researchers believe this is to protect an individual from acting out their dreams. This stage is characterized by alpha and beta brain waves, bringing the brain close to a wakeful state. Respiration rate, heart rate and blood pressure all fluctuate during this time in response to dreams. Women may experience clitoral engorgement and men may experience penile erection as part of the autonomic nervous system activation. It is easier to arouse someone from REM sleep than from stage 3 or 4 of NREM sleep.

**NREM Stage 1** - Stage 1 of NREM begins when the brain waves slow and one begins to relax. This stage is known as a state of transition when an individual slips into the beginning of sleep. One may notice physical changes as they relax: brain activity decreases, heart rate and blood pressure drop, muscles become relaxed, breathing slows and body temperature drops. This stage is characterized by theta brain waves and lasts for 5 to 10 minutes.

**REM Stage 2** - In stage 2 of NREM, the brain waves slow even more. This is still a stage of moderately light sleep and it is fairly easy to arouse someone. However, during this stage the body has committed to sleep rather than just dozing. Healthy adults typically spend about 50% of their time in stage 2.

**NREM Stage 3 and 4** - Stages 3 and 4 are often grouped together, because, from a physiological point of view, they are relatively similar. During stages 3 and 4 the senses and mind are completely cut off from the external environment. The brain waves have switched to a delta brain wave activity. If a person were to be aroused from this stage, it would be quite difficult to wake them. If they do wake up, they would awaken feeling groggy and disoriented. Stage 4 is the stage of deepest sleep, followed by stage 3. It is during stage 4 that growth hormone is secreted and the body begins to repair itself. The immune system also works hard during this stage. This is why, when falling ill, a good night’s rest helps one to feel better. On the other hand, when lacking sleep, the body is not awarded the opportunity to repair and is unable to ensure optimal immune function. During sleep deprivation the body craves delta sleep and will do its best to get one to stages 3 and 4 in a hurry. This is noticed when someone falls asleep quickly and it is very difficult to wake them. Their body has pushed them to a deep sleep quickly to make up for a lack of repair processes.

**Importance**

During sleep the body’s energy shifts focus from external activities such as processing information, movement and digestion to internal activities such as self-healing, rejuvenation and repair. Some of the internal processes that occur during sleep include:

**Cellular Repair:** The body must constantly keep up with the wear and tear of daily living. When awake the body is in a breakdown process or catabolic process, in which large amounts of adrenaline (the fight or flight hormone), noradrenaline and cortisol (two stress hormones) are released which helps the body deal with daily strains.

- At night, these hormones drop and the body shifts to anabolic processes where it releases growth hormone which stimulates the cellular repair process. Growth hormone initiates protein synthesis, breaks down fats to supply energy for tissue repair, and stimulates cell division to replace old or malfunctioning cells.
- Growth hormone is released in stage 4 of sleep, the deepest stage of sleep. Balancing catabolic and anabolic processes aids cellular repair which is vital for health and well-being. This also explains why it is necessary and common for a person to require more sleep when dealing with acute or chronic illnesses.
- The maximum healing potential is between 11 p.m. and 1 a.m.
Immune System Replenishing: The immune system works hard to keep us free of illness by attacking anything that it does not recognize as self. The immune system also recognizes if one of the body’s own cells has mutated or become cancerous and attempts to kill it off to keep us healthy. If the immune system recognizes an invader, it releases interleukins (a specific protein) which signal other immune cells to come to the area to multiply and attack. Special proteins called immunoglobin or antibodies are called upon to identify and neutralize foreign bodies. During sleep the body releases large amounts of interleukin 1 and tumour necrosis factor. Interleukin 1 is a powerful immune system messenger that allows the body to mount a fever if necessary and also helps to decreases inflammation.

- Tumour necrosis factor is a potent killer of cancerous cells and rises tenfold in the blood during sleep. Natural killer cells are also affected by sleep. Although no change is noticed during a sleepless night, their number is 30% lower the following night. Natural killer (NK) cells are essential to the body’s defences. Decrease in NK cells indicates a weakened immune system making one more susceptible to illness. Sleep is of vital importance and assists the body’s ability to fight infections, cancer and inflammation. A chronic state of insomnia increases the risk of disease.

Increased longevity: Sleep duration is related to length of life, with a greater risk of death in those sleeping fewer than 6 hours a night. Sleep deprivation is also linked to vehicle crashes and deaths. Insomnia early in adult life is a risk factor for the development of clinical depression and mental health disorders.

Muscle relaxation: During the night muscles can take a break and relax. Respiratory muscles also relax, resulting in the breathing rate slowing down. During REM sleep, muscles become so relaxed that they actually become temporarily paralyzed, called muscle atonia. This is thought to protect a person from acting out their dreams. Muscle relaxation is a necessary component of sleep in order to allow the body time to recharge and replenish. When muscles are relaxed, there are less metabolites formed, allowing for additional cellular repair and replenishing.

Weight management: Adequate sleep is required for weight management. Sleep deprivation is linked to weight gain, typically because the amount and quality of sleep affect hormone levels, namely the levels of leptin and ghrelin. Many physiological processes depend on these hormone levels to function properly, including appetite. Leptin is a hormone that affects the feeling of fullness and satisfaction after a meal, and ghrelin is the hormone that stimulates appetite. When you suffer from sleep deprivation, your body’s levels of leptin fall and ghrelin levels increase. This means you end up feeling hungrier without feeling satisfied by what you eat, causing you to eat more and, consequently, gain weight.

Free radical scavenging: Sleep is the body’s natural antioxidant. Throughout the night large amounts of free radicals are scavenged from the brain and other vital organs, protecting them from oxidative damage. Most individuals can handle a few days of sleep deprivation, but prolonged depletion of sleep creates advanced aging to the brain, neuronal damage and elevated night time cortisol levels.

Cognitive enhancements: Without adequate rest, the brain’s ability to function quickly deteriorates impacting concentration, consolidation of memories, and the learning of new motor tasks.

- The brain works harder to counteract sleep deprivation effects, but operates less effectively. Sleep helps with memory in two ways; first, when someone is sleep deprived, there is an inability to concentrate and, therefore, an inability to learn efficiently; secondly, in the consolidation of memory. Memory consolidation implies storing short term memories to long
term memory. Memory consolidation occurs during sleep through the strengthening of neuronal connections that form memories. Another area of research is on sleep and procedural memory. Procedural memory is the remembering how to do something and REM sleep seems to play a pivotal role in this. Insomnia early in adult life is a risk factor for the development of clinical depression and mental health disorders.

- Chronic sleep deprivation is linked with cognitive impairments, the decrease of the brain’s ability to problem solve and the impairment of an individual’s ability to perform optimally. Sleep deprivation has been associated with increased accidents and injury. When decision-making abilities are compromised, the brain falls into rigid thought patterns that make it difficult to generate new problem-solving ideas. Insufficient rest can also cause people to have hallucinations.

**Regeneration of personal essence:** Adequate deep restful sleep is essential to a person’s overall sense of wellbeing. It allows a person to process and recover from each day and to feel rejuvenated and ready to handle the next. Sleep is tied to a person’s overall vitality and to their sense of inner strength and ability to heal. Lack of adequate restful sleep is associated with increased aging and with greater dissatisfaction in life. Sleep duration is related to length of life, with a greater risk of death in those sleeping fewer than 6 hours a night.

**How Much Sleep Is Optimal?**
When it comes to the amount of sleep needed for each person, there is tremendous variability among age groups but also among members of the same age population. The Canadian National Sleep foundation recommends 7 to 9 hours for adults. See the chart below for sleep recommendations for each age group.

- New-borns (0 – 2 months) need 12 - 18 hours
- Infants (3 to 11 months) need 14 - 15 hours
- Toddlers (1 – 3 years) need 12 - 14 hours
- Pre-schoolers (3 – 5 years) need 11 - 13 hours
- School-age children (5 – 10 years) need 10 -11 hours
- Teens (10 – 17 years) 8.5 - 9.25 hours
- Adults need 7 - 9 hours

**Influences**
There are numerous internal and external factors that can promote sound restful sleep or can wake an individual leaving them lethargic, irritable and moody due to sleep deprivation.

**The most common factors that disturb sleep include:**
- **Mental Unrest** is the most common cause of a disruption in sleep.
  - Most individuals with an active mind find it difficult to fall asleep or find themselves waking between 3 and 5 am.
  - Both short term and long term stress and anxiety can cause significant impairments in an individual’s ability to fall asleep. Stress and anxiety cause increased muscular tension and sympathetic nervous system activation. In addition to these negative emotional states impairing sleep, sleep deprivation increases an individual’s level of stress and anxiety. Individuals become anxious and stressed about not sleeping creating a vicious cycle.
  - Anticipatory anxiety is anxiety that interferes with sleep. This is anxiety experienced the night before a significant event or a stressful period in life causing an overactive mind which in turn affects sleep ability.
Depression and feeling down or confused are also linked with insomnia. Working on figuring out and addressing what is really bothering you is often the best solution.

**Food choices that you make greatly influence sleep.**
- Root vegetables are high in minerals and are more grounding and settling to the body helping promote restful sleep.
- Tryptophan, an essential amino acid found in turkey, milk, miso soup, eggs, nuts, figs, fish, bananas, dates and papaya, helps the body to produce serotonin, a neurotransmitter that helps promote relaxation and sleep.
- Complex carbohydrates and starches promote sleep as they release sugars into the blood causing a compensatory release of insulin followed by a drop in blood sugars causing the body to feel fatigued. Eating a high-carbohydrate meal (potatoes, pasta and whole grain breads) three or so hours before bed is often helpful for those that have trouble falling asleep.
- Lettuce can often promote healthy sleep as it contains an opium-related substance combined with traces of the anticramping agent, hyoscyamin. Include lettuce as part of your evening meal.
- Include foods high in Vitamin B3 (niacin) such as legumes, peanuts, nutritional yeast, fish or poultry. Niacin is involved in serotonin synthesis and promotes healthy sleep.
- A glass of warm milk with honey is one of the oldest and best remedies. Milk contains tryptophan which, when converted to serotonin, induces sleep and prevents waking. Please make sure that if you recommend this food therapy that the patient uses goat or sheep milk and not milk from COWS.

**On the contrary, certain foods can negatively impact sleep.**
- As most individuals know, caffeine is a nervous system stimulant. Some individuals are so sensitive that even a cup of coffee in the morning or chocolate bar can cause a sleepless night. Avoid foods high in caffeine such as coffee, tea, cola and chocolate.
- Sugar stimulates the nervous system and hence, sugary desserts and for some even the consumption of fruit after dinner is best avoided if you desire a good night’s sleep. Sugar causes a rapid increase in blood sugar which calls upon the pancreas to release insulin. Once insulin is released, sugar enters the cell and blood sugar rapidly drops. If sugar is ingested right before bed, a drop in blood sugar occurs in the night calling upon the adrenal glands to release hormones to restore blood sugar balance. This release of hormones wakes you up and affects the normal sleep patterns.
- Foods high in tyramine increase the release of norepinephrine, a brain stimulant. If you have difficulty sleeping, avoid bacon, cheese, chocolate, eggplant, ham, sauerkraut, sugar, sausage, spinach, tomatoes and wine close to bedtime.
- Alcohol, another nervous system stimulant, interferes with the natural sleep cycles and also increases anxiety levels interfering with sleep. Alcohol impairs the transport of tryptophan into the brain and hence, disrupts serotonin levels.
- Any food that you are intolerant to is best avoided. Food intolerances are often the cause of snoring and can contribute to gas, heartburn, indigestion, pain and discomfort.
- Diets high in meat or other proteins can inhibit sleep by blocking the synthesis of serotonin, making you feel more alert. Diets high in protein are also more acidic and take longer to digest.
- Avoid too many ingredients in a meal and too much food late at night.

**Dietary Regimen:** Ensuring that your last meal of the day is about 3 hours before bedtime is important because:
- It ensures that your blood sugar is not spiking in the middle of the night, thus waking you up.
• It allows the body time to complete digestion so that when you are sleeping your body can focus on healing and repairing. It minimizes any discomfort that may be associated with going to bed with a full stomach.
• During digestion your metabolic rate and body temperature increase. This increase in body temperature can throw off the internal stimulus for inducing sleep.

**Smoking:** Individuals who smoke require more time to fall asleep, have less oxygen absorption, more congestion and snoring and less deep sleep. Another good reason to give up smoking!

**Physical Activity:** People who regularly engage in exercise have fewer episodes of sleeplessness and typically fall asleep more easily and sleep more deeply and soundly.
• Exercise promotes improved sleep quality by allowing for smoother and more regular transitions between the cycles and phases of sleep.
• Increased physical activity is also associated with improved mood and well-being. Individuals who exercise appear to have better emotional balance, decreased anxiety and depression, thus promoting restful sleep.
• The change in body temperature promoted by exercise triggers areas in the brain that help to initiate sleep.
• When exercising, the body releases endorphins, a natural opioid in the brain, that increase feelings of wellbeing and decrease the sensation of pain. These endorphins are a nervous system stimulant and if one exercises too late in the evening, it impairs your ability to fall asleep.
• Initiation of an exercise regime can, however, can temporarily impair sleep.
  o Muscle stiffness and soreness experienced after initiation of a new exercise routine can cause the body to experience pain, therefore, interfering with sleep.
  o Too much physical activity or physical activity at the wrong time can also interfere with sleep. Do any aerobic or strenuous exercise in the morning or afternoon, not close to bedtime if experiencing sleep difficulties. Choosing to take a leisurely walk or to do some gentle yoga or stretching is a good way to unwind at the end of the day and will support your body winding down and preparing for sleep.

**Sleep Regimen:** When you choose to sleep affects health. Sleep comes most easily and is the most conducive to health when it is in line with the natural circadian rhythms. Circadian rhythms govern the body’s hormonal, physiological and behavioural processes. The most notable circadian rhythm is the sleep cycle.

Establishing a regular sleep schedule and sleeping when it is dark and waking when it is light ensures balances between the delicate systems of the body. Not being in sync with the circadian rhythm can lead to hormone imbalance, seasonal affective disorder and jet lag just to name a few.

Melatonin is the second most powerful message for the body’s circadian rhythm. Melatonin is a hormone secreted by the pineal gland which is located in the centre of the brain between the two hemispheres. Melatonin is the “hormone of darkness”, as its levels rise in response to darkness and fall in response to sunlight. Its secretion begins in the evening as the sun is setting and signals the body to feel tired and go to bed. Melatonin production decreases throughout the night and reaches a low in the morning when one is cued to wake up. Exposure to increase in light in the evening or while sleeping can disrupt melatonin levels and often contributes to sleep disorders.

Cortisol is known as the stress or the ‘awake hormone. It is responsible for waking a person up. On a normal basis its release follows the circadian rhythm with a peak in cortisol naturally occurring between 6 and 8 a.m. The initiation of sleep is associated with low levels of cortisol. Many sleep
problems, such as night time awakening and difficulty following asleep are linked with increased cortisol levels and are associated with chronic stress or adrenal fatigue.

Body temperature is also governed by the circadian rhythm. Body temperature and sleep run independently, yet they are usually synchronized. Body temperature fluctuates throughout the day, rising in the morning making one alert and falling during the night. It is easiest to sleep when body temperature is reaching its lowest temperatures. Around 6 to 8 pm body temperature reaches a peak and begins it decline, at the same time melatonin begins to rise making one feel sleepy. Temperature reaches its lowest point between 3 to 5 a.m.

**Sleep Environment:** In order to sleep soundly it is important to have a sleep environment that is quiet, dark, secure and comfortable.
- Loud noise causes excess nervous system stimulation and inhibits the ability to sleep or to wake an individual from a sound sleep.
- Light entering the bedroom, either from the outdoors or from an alarm clock, impacts the release of melatonin from the pineal gland affecting hormone balance, causing a direct impact on the ability to fall asleep. Choose to sleep in a completely dark and quiet room.
- Temperature also plays a role in your ability to sleep soundly. At night the body temperature drops, cueing us to feel tired and to go to bed.
- In order to have a comfortable and uninterrupted sleep it is important to have enough covering on the bed to not cause one to wake feeling chilled.
- Having a comfortable mattress and a bedroom that is comfortable and free of stressors (i.e. computer, work, etc.) will help ensure a good night’s rest.
- Reserve the bedroom for sleep and sexual activity. Watching television, reading or doing computer work can create a stimulating environment and impact the ability of the mind to equate going to bed with sleeping.

**EMF Impact:** Research shows that having electronic devices in the bedroom disrupts sleep. Electronic devices contribute to daytime fatigue and are associated with disrupted sleep and unrestful sleep.
- There is a correlation between time spent watching television and delayed sleep onset, shorter sleep time and increased daytime fatigue.

**Physical Ailments:** There are a number of physical ailments that contribute to insomnia or that aggravate it. Ailments that result in frequent waking to use the washroom, pain and discomfort, changes in sweating or temperature and other symptoms can cause disturbances in sleep throughout the night.

**Impact**
Inadequate sleep can be both a cause of other diseases and conditions or it can be a result of other underlying conditions. The following conditions are associated with sleeping problems and insomnia:

**Mental unrest:**
Stress and anxiety are the most common cause of a restless night.

**Pain:**
Individuals who suffer from chronic pain typically complain of sleep disturbances.

**Sleep Disturbances:**
- Fibromyalgia is associated with a great deal of sleep disturbances; as are musculoskeletal pain, especially low back pain, TMJ pain and arthritis.
• Sleep disturbances also seem to decrease a person’s pain threshold, further impairing one’s ability to sleep.
• Sleep difficulties impair the repair process that happens during the 4th stage of sleep and prevent muscular relaxation and healing. This inability to properly repair muscles can lead to increased musculoskeletal pain and further perpetuate this vicious cycle.

Menopausal insomnia:
A significant percentage of women will suffer sleep disturbances either due to hot flashes or anxiety during menopause.

Adrenal Dysfunction:
• The adrenal glands are responsible for release of cortisol and epinephrine (the fight or flight hormone). Individuals with adrenal dysregulation have irregular cortisol levels which contribute to sleep problems.
• Long term chronic stress, anxiety, worry and overwork can deplete the adrenal glands.
• Cortisol levels may remain high in the evening or they may rise in the middle of the night causing difficulty falling asleep or waking throughout the night.

Dysglycaemia.
• Improper sugar regulation disrupts quality of sleep.
• Sleep disturbances independently increase an individual’s risk of insulin resistance and other components of metabolic syndrome.
• The opposite may also be true, in that metabolic abnormalities may contribute to sleep disturbances.

Heartburn:
• When circadian rhythms are disrupted, stomach acid and digestive enzyme secretion become altered. This leads to oesophageal irritation and reflux.
• Conversely, gastroesophageal reflux disease or heartburn in itself can cause insomnia. If an individual cannot lie down horizontally due to the presence of stomach acid irritating the oesophagus, sleep will be greatly impaired.
Cardiovascular Disease (CVD):
- Individuals with poor sleep habits are unable to enter into stage 4 of sleep, which is pivotal for the function of our immune system and the natural anti-inflammatory properties supported by this sleep stage.
- In epidemiological studies, individuals who suffered from sleep deprivation had increased C-reactive proteins in the blood. C-reactive protein is a marker of inflammation and is associated with an increased risk of cardiovascular morbidity.
- Increased systolic blood pressure and heart rate were noted in individuals with poor sleep habits.

Sleep Apnoea:
Untreated, obstructive sleep apnoea has been associated with cardiovascular disease, insulin resistance, gastroesophageal reflux disease, motor vehicle accidents and decreased attention and working memory - conditions all caused by inadequate sleep.

Restless leg syndrome:
This sensation always occurs during times of rest or inactivity, directly impacting an individual’s ability to sleep.

Obesity:
- Sleep deprivation has been associated with alteration in energy balance within the body. Maintaining adequate energy balance is imperative to maintain a constant weight. Excess energy intake and decreased energy expenditure often results in weight gain. Sleep deprivation has been associated with alterations in appetite regulation.
- When individuals are sleep deprived there is a decrease of the hormone leptin. Leptin is responsible for our appetite regulation. It is stored in our adipose tissue and is up-regulated when we are full.
- Sleep deprivation decreases leptin production and as a result the body does not get a signal that it is full. In addition to changes in leptin levels, it was observed that ghrelin levels were also altered in sleep deprivation. Ghrelin signals the body when it is hungry. Normally its levels increase when the stomach is empty and decreases once you are full.
- However, in sleep deprivation, ghrelin levels remained elevated despite adequate food intake. Therefore, sleep deprivation seems to play an important role in appetite and food intake and can directly predispose someone to obesity.

Jet Lag:
For some individuals travelling to an area with a different time zone causes them to feel groggy, irritable, fatigued, disorientated and greatly affects their sleeping patterns. This feeling is called jet lag and is due to a disruption in circadian rhythms.

See Circadian Rhythm for More Information.

Assessment
From a naturopathic perspective assessing sleep is primarily determined through a detailed interview process and may involve keeping a sleep diary. Questions relating to sleep quality, quantity and energy will all contribute to an accurate diagnosis why someone is having sleeping difficulties. In order to find success in treatment it is imperative to find the root cause of the sleeping difficulties. Once a thorough assessment of sleep is conducted and identification of the root cause is established, a personalized naturopathic plan will be devised that can help an individual find deep restful sleep.
Treatments
There are a number of different ways to address insomnia. The success of any specific treatment option depends on the degree to which it addresses the underlying factors that are impacting sleep. For example, if your insomnia is due to pain, you will probably find minimal relief in taking a supplement that treats insomnia due to anxiety. It is recommended that you work with your DBM Physician to understand exactly what treatments are suited for you. The treatments that have been found to be effective include calming teas, meditation, journaling, deep breathing, various supplements, botanical medicine, acupuncture and many forms of body work.
Smoothies
Smoothies for healing

Smoothies have a high nutrient absorbability, although your body does expend a little more energy digesting smoothies (much less than a typical meal). If you’re otherwise healthy, though, this isn’t a bad thing — it’s a great thing, since most of us don’t typically get enough fibre. Smoothies are also excellent for weight loss and craving reduction, since they’re packed with fibre. Because the insoluble fibre in the produce isn’t being removed, a smoothie slows down digestion, keeping you full longer.

Since smoothies still contain all of the fibre of the fruits and vegetables, you can actually store smoothies longer without losing too much nutritional value. Be sure the smoothies don’t oxidize by keeping them in an airtight bottle. With proper bottling smoothies can last for up to three days, HOWEVER, we recommend you use this ONLY in an emergency. The fresher you drink your juices and smoothies the more nutrients you will feed your body.

**DBM PROTOCOL – ADJUNCT THERAPY - SMOOTHIES**

Smoothies are part of the Gut Repair Protocol as well as for on-going health.

**Smoothie Recipe #1: Healing Smoothie Recipe**
**Smoothie Recipe #2: Healing Smoothie Recipe – Enhanced**

You can add carrot, mango or melon into your smoothie too to change the flavours up a bit. Remember it should always taste nice. One can also do a green smoothie to help the haemoglobin and natural iron levels along. Add some apple, banana, broccoli, celery, mint, parsley and spinach for a green smoothie change up.

You can also vary the fruits going into the smoothie and really experiment with what is nice – having beetroot for example will make the smoothie red and a minimum of every second day with beetroot would be great for your liver.
• Banana is good for energy and beneficial to have before 11am.
• Paw-paw and pineapple is good for healing enzymes.
• Parsley lifts iron and haemoglobin levels.

For more information, see – Nutrition For Life – Food For Life - Smoothies
Sodium Borate (Boron/Borax)

Sodium Borate has a reputation extending back more than 200 years among medical doctors and homoeopaths for its anti-inflammatory effects on both internal and external parts of the body. Sodium Borate is prescribed to supplement boron diet deficiencies that result in debilitating conditions that are indicative of chronic disease. Boron deficiencies can be attributed to decreased hormone production, abnormal calcium uptake, magnesium destabilization and yeast and microbe overgrows. When these deficiencies are normalized, many symptoms of disease can be alleviated.

**Arthritis**
Dr Rex Newnham self-experimented with borax ingestion to supplement a boron deficiency. He discovered that the inflammation and joint stiffness he suffered was alleviated after taking 30 milligrams of borax twice per day for three weeks. In addition, the relief lasted for an entire year before he had to resume the regimen. Borax controls the amoeba that is attributed to rheumatoid arthritis. Boron-fortified mouthwashes treat pyorrhoea, arthritis of the teeth and gums. Spondylitis, arthritis of the spine, Still's disease, juvenile arthritis, gout, uric acid build-up and osteoporosis are all responsive to borax supplements.

**Skin Aging Deterrent**
Borax may be added to skin moisturizers to deter loss of moisture and elasticity that accompanies the natural aging process. Specifically, borax softens water and keeps oil from separating from the water used in moisturizing skin care creams. A simple cold cream recipe includes borax dissolved in water, olive oil and beeswax.

**Womb Inflammation**
Doctors of the 19th and 20th centuries recommended that women suffering from womb inflammation soak in lukewarm bathwater with borax twice a day. If women displayed profuse, egg-white-like discharge or leucorrhoea, they were told to douche with borax and lukewarm water solution three to four times per day. Other symptoms that can be alleviated by borax and water exposure include heavily clotted menstruation, painful sexual intercourse, blood-streaked vaginal discharge, painful menstruation, abdominal distention and false signs of pregnancy.

**Erectile Dysfunction**
It has been reported that a quarter of a teaspoon of borax added to one quart of drinking water sipped throughout the course of a day while taking magnesium supplements can reverse male impotency. This can be attributed to many effects of borax on the human body. Borax stabilizes calcium and magnesium in the blood. It stimulates hormone production. Toxic states of hyper fluoride accumulation, internal fungal growth and dangerous microbe production are normalized by borax consumption. Finally, borax has been attributed to female libido enhancement as well.

**DBM PROTOCOL FOR USE OF SODIUM BORATE**

**BORAX WATER RECIPE #1: GENERAL HEALTH**
Ideal for general health in this dilution.

**Ingredients**
- 1/8th of a teaspoon Sodium Borate (Borax) [0.5ml]
- 1 Litre of clean spring / borehole water

**Instructions**
- Dissolve Sodium Borate (Borax) in the water.
- Drink this water throughout the day.
- Repeat for 14 days. (Water can be flavoured with lemon or mint leaves)

**BORAX WATER RECIPE #2: PARASITE CLEANSE**
In this dilution - used as part of the parasite cleanse protocol.

**Ingredients**
- 1 pinch of Sodium Borate (Borax)
- 250ml clean spring / borehole water

**Directions**
- Dissolve Sodium Borate (Borax) in the water.
- Drink as part of the Parasite Cleanse Protocol.

**BORAX DOSAGES: ORAL**
What and How Much to Use
In some countries (e.g. Australia, NZ, USA, SA.), borax can still be found in the laundry and cleaning sections of supermarkets. *There is no "food-grade" borax available or necessary.*

The label usually states that it is 99% pure which is safe to use, and is the legal standard for agricultural grade borax. Up to 1% mining and refining residues are permitted. Boric acid, if available, may be used at about the dose of borax.

Firstly, dissolve a lightly rounded teaspoonful (5-6 grams) of borax in 1 litre of good quality water free of chlorine and fluoride. This is your concentrated solution. Keep the bottle out of reach of small children.

**Standard dose = 1 teaspoon (5 ml) of concentrate. This has 25 to 30 mg of borax and provides about 3 mg of boron. Take 1 dose per day mixed with drink or food. If that feels right, then take a second dose with another meal. If there is no specific health problem or as a maintenance dose you may continue indefinitely with 1 or 2 doses daily.**

If you do have a problem, such as arthritis, osteoporosis and related conditions, menopause, stiffness due to advancing years, and also to improve low sex hormone production, increase intake to 3 or more spaced-out standard doses for several months or longer until you feel that your problem has sufficiently improved. Then drop back to 1 or 2 doses per day.

If you want to try the higher doses recommended by Earth Clinic for treating Candida and removing fluoride from the body - using your bottle of concentrated solution - then use:
- Lower dose for low to normal weight - 100 ml (= 1/8 teaspoon of borax powder); drink spaced out during the day.
- Higher dose for heavier individuals - 200 ml (= 1/4 teaspoon of borax powder); drink spaced out during the day.

Always start with a standard dose and increase gradually to the intended maximum. Take the maximum amounts for 4 or 5 days a week as long as required.

Borax is rather alkaline and in higher concentrations has a soapy taste. You may disguise this with lemon juice, vinegar or ascorbic acid. Keep the bottle with the concentrated solution out of reach of small children.

Borax and boric acid have been classified as reproductive poisons in Europe, and since December 2010 are no longer available to the public within the EU.

Presently, borax is still available in Switzerland (15), but shipment to Germany is not permitted. In Germany a small amount (20 - 50 grams) may be ordered through a pharmacy as ant poison (it will be registered).

Boron tablets can be bought from health shops or the Internet, commonly with 3 mg of boron. These contain tightly bound boron not present in ionic form as with borax or boric acid. While suitable as a general boron supplement, I do not expect them to work against Candida and mycoplasmas, or as a quick arthritis, osteoporosis or menopause cure. Most scientific studies and individual experiences were with borax or boric acid. To improve effectiveness, I recommend 3 or more spaced-out boron tablets daily for an extended period combined with sufficient magnesium and a suitable antimicrobial program (16).

**Possible Side-Effects**
While side-effects from pharmaceutical drugs tend to be negative and often dangerous, with natural medicine, such as borax therapy, these are usually healing reactions with beneficial long-term effects. Most common is the Herxheimer reaction from eliminating Candida.

In some of the above forum posts, rapid improvement was experienced within days. This is always a functional response. High cellular calcium levels cause muscle contraction with cramps or spasms as a common cause of pain. Boron, especially together with magnesium, can rapidly relax these muscles and take away the pain.

However, with long-standing severe calcifications a large amount of calcium cannot be redistributed in a short time. This leads to increased calcium levels in the affected area, especially the hips and shoulders, and can cause problems for a considerable time, such as a tendency to severe cramping and pain, or problems with the blood circulation, or nerve transmission. Nerve-related effects in hands and feet may be numbness, or reduced sensitivity or feeling in the skin. Higher amounts of calcium and fluoride passing through the kidneys may cause temporary kidney pain. Such healing reactions cannot be avoided when aiming for a higher level of health.

Whenever you experience an unpleasant effect reduce or temporarily stop borax intake until the problem subsides. Then gradually start increasing again. Helpful additional measures are a) a greatly increased fluid intake, b) using more organic acids such as lemon juice, ascorbic acid or vinegar, and c) improving lymph flow as with rebounding, walking or inverted positions.

For more information, see The Borax Conspiracy – Advanced Nutrition – PDF download
Spleen Cleanse

Chai Tea with Almond Milk; Green Tea

The Spleen – A Review
The spleen filters blood and removes abnormal blood cells, as well as making disease-fighting components of the immune system. Since the spleen is involved in so many bodily functions, it is vulnerable to a range of disorders including splenomegaly, hypersplenism and splenic rupture.

The spleen is located on the left side of the abdomen and weighs around 200 g in the average healthy adult. The spleen can be considered as two organs in one. It filters the blood and removes abnormal cells (such as old and defective red blood cells), and it makes disease-fighting components of the immune system (including antibodies and lymphocytes). Since the spleen is involved in so many bodily functions, it is vulnerable to a wide range of disorders. People who have had their spleen removed or have a spleen disorder are at increased risk of infection, most commonly pneumococcal infection.

The Liver and spleen work in conjunction with each other and form the body’s filtration system. This system’s main function is to keep poisons from entering the body, which includes environmental chemicals and food source chemicals.

In order to have a healthy filtration system, we have to keep it free of products that clog it. When the filtration system is clogged, you may feel very tired. You may have rashes that come out through the skin because the body will use the skin as a filtration system when the liver and spleen are stuck.

A clogged liver and/or spleen can create a feeling of exhaustion as well as a feeling of flu-like symptoms. Another symptom of an unhealthy filtration system can be recognized as inability to think and focus. Pains and infections can also be a part of liver/spleen issues including headaches and sinus infections.

Things to avoid to provide additional support to the Spleen.
- Avoid water that is treated with any chemical (this includes almost all public water systems). Make certain that your well is healthy. Water is our most important resource and we should drink four to six cups daily.
- All fizzy drinks / sodas should also be avoided.
- Artificial sweeteners
- Other artificial ingredients should also be avoided like colours and preservatives in food. They serve no purpose except to aggravate our filtration system.
- Environmental chemicals should be limited. These include poisons, chemical fertilizers, polishers, chemical cleaners, and harsh perfumes. Basically, anything that has a chemical smell can do damage to an already over-burdened liver and spleen.
- Dairy
- Wheat
- Processed foods
- Processed fruit juices
- Refined flours, pastries, pasta, breads,
- Coffee
- Alcohol
- Deep fried foods
- Peanuts and peanut butter
- Bananas
- Avocado

If the liver/spleen is very toxic, as you begin the cleansing program, you may feel ill for a day or two. If this should happen, make sure that you keep well hydrated, by drinking hot ginger tea to support the body’s ability to clear toxins.

Physical symptoms of Spleen imbalances
This includes conditions such as “cloudy” thought, the inability to focus properly, exhaustion – along with the flu-like symptoms, skin rashes, allergies, headaches, mucous membrane issues. Other signs that your spleen needs some attention are winds, bloating, constantly loose and runny stools (i.e. no stool has formed).

Emotions
Our spleen stores our resentment and bitterness. The spleen is directly connected to our lymphatic system which in turn connects us to our mucus membranes. Hence, resentments eventually manifest in the sinus/bronchial areas of the body. So in order to heal a chronic spleen condition, you must also heal your old resentments and bitterness.

Foods to support the spleen
Ginger is vital for spleen support (the compound gingerol helps to relax blood vessels and stimulate blood flow). Given that the spleen is so important to our blood, providing the body with sufficient gingerol, will effectively lower blood pressure and reduce blood clotting. Keep fresh ginger on hand at all times and use it freely in juices, salads, stir-fry, soups and dressings.

Other foods that support the spleen are:
- Organic lightly cooked vegetables, celery, watercress, turnip, pumpkin, alfalfa sprouts, button mushrooms, radishes, capers.
- Brown rice, barley, amaranth, rye, spelt and rolled oats
- Legumes, kidney beans, adzuki beans and lentils
- Small amounts of whole fruits, lemons
- Non GMO seeds – Sesame, pumpkin and sunflower
- Seaweed, kelp
- Teas: green tea, jasmine, raspberry leaf, home-made chai (using almond milk)
- Fruits (make sure they are organic): raspberry, peach, strawberry, cherry
- Nuts: (make sure they are well soaked and properly dehydrated thereafter) walnuts, chestnuts, pine nuts, pistachios.
- Spices: black pepper, cinnamon, clove, dill. Fennel, garlic, ginger, peppermint, rosemary, sage, turmeric, thyme, horseradish (fresh), cayenne, nutmeg.

The most important step you can take to encourage a healthy spleen is adopting a healthful diet. By avoiding foods that cause the spleen to work, you free the spleen to work on self-repair and cleansing. Whole grains, whole fruits, and vegetables require very little from the lymphatic system. By sticking to a diet of these healthful, unprocessed ingredients, you allow your spleen the time and energy it requires to purge itself.

In general, avoid foods that are highly processed and difficult to break down, including processed sugars, meat in general but especially red meat and white flour products like white bread and white pasta.
Fast foods and high-sugar foods of any kind are extremely taxing to the spleen and should not be eaten during a process of spleen cleansing. Be sure patients drink plenty of water during any cleansing process.

The enzymes and acids in raw fruit are powerful lymph cleansers, particularly when eaten on an empty stomach. Add more raw fruits, vegetables, salads and fresh juices to your diet and your lymph will have the tools it needs to do some serious deep cleansing.

Flavonoids, malic acid, citric acid, quinic acid and enzymes in cranberries and cranberry juice help emulsify stubborn fat in the lymphatic system. Be sure to drink only pure, unsweetened cranberry juice free of sweeteners — pasteurized bottled cranberry juice doesn’t have the same benefits.

Dilute the juice at a ratio of about 4:1, water to cranberry juice. If you prefer a less tart juice, dilute 1 part unsweetened cranberry juice with 2 parts pure apple juice and 2 parts water. Make sure you use only pure apple juice devoid of sweeteners or preservatives.

Eat plenty of green vegetables to provide chlorophyll (the green color in plants) and loads of vitamins and minerals to assist in lymph cleansing.

Foods high in essential fatty acids are critical to ensure a properly functioning lymph system. Some of these foods include flaxseeds and cold-pressed flax oil; fresh, raw nuts and seeds like walnuts, almonds, hazelnuts, sunflower seeds and pumpkin seeds; avocados; and cold-pressed oils, such as walnut and pumpkin seed. Be sure to purchase fresh, raw nuts and seeds from the refrigerated section of your local health-food or grocery store. The essential fatty acids found in nuts and seeds go rancid easily.

**DBM PROTOCOL – ADJUNCT THERAPY - ADDITIONAL SUPPORT FOR SPLEEN DURING CLEANSE – TEAS/TISANES**

Home-made Chai Tea provides the spleen with spices that will support its health. Drink hot or cold as desired.

**Spleen Tea #1 - Chai**
Sulphoraphane (SFN)
Cruciferous Vegetables

SFN – Healthful / Anti-cancer phytochemical in cruciferous vegetables
Cruciferous vegetables are rich sources of glucosinolates, which the body metabolizes into isothiocyanates such as SFN - Numerous studies have shown that Sulphoraphane provides a number of health benefits, including anti-cancer properties.

Anti-cancer properties – a study, led by Dr. Emily Ho, associate professor at the Linus Pauling Institute at Oregon State University, discovered that SFN selectively targets benign hyperplasia cells and cancerous prostate cells, while leaving the normal prostate cells unaffected.

SFN inhibited the enzyme histone deacetylase(HDAC) that plays a critical role in expression of tumour suppressor genes – and so is being pursued from both a pharmaceutical and dietary approach.

Don't overcook your veggies (steaming or raw is best)

Destroys vital enzyme for SFN formation - a Univ. of Illinois study found that overcooking broccoli destroys the enzyme myrosinase, which is needed for SFN to form. Broccoli powder supplements do not contain myrosinase.

Boiling leaches glucosinolates into cooking water - boiling cruciferous vegetables for 9 - 15 minutes decreases total glucosinolate content by 18 - 59 %.
"British Journal of Nutrition.", Sep 2003

3-day old broccoli sprouts are the richest food source of glucoraphanin, the precursor to SFN - offering 10 to 100 times more of it, by weight, than mature broccoli plants or cauliflower "Proceedings of the National Academy of Sciences.", Sep 1997.
Per 100g serving, broccoli sprouts provide ~250 mg. glucoraphanin. 1-oz. serving provides 73 mg.
Lightly cooked, they taste similar to steamed spinach. Brussels sprouts and Cabbage are good SFN sources – of the cabbages, savoy and red cabbage are particularly high in SFN precursor, glucoraphanin, retaining most phytochemicals when eaten raw E.g. in a coleslaw.

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<th>3-day old Broccoli Sprouts</th>
<th>Brussels Sprouts</th>
<th>Chopped Savoy Cabbage</th>
<th>Chopped Red Cabbage</th>
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<td>Total glucoraphanins</td>
<td>28g. = 73 mg</td>
<td>½ Cup = 104 mg</td>
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Suppositories

Source: The School for Aromatic Studies

What are suppositories?
Suppositories are commonly made from a combination of cocoa butter and another semifluid oil such as coconut or vegetable oil such as sesame oil. Suppositories are typically indicated for vaginal infections and inflammation, cervical dysplasia, rectal fissures, and hemorrhoids. I have used aromatic suppositories for the treatment of hemorrhoids and a rectal fissure with great success. The term suppository is derived from the Latin suppositorum, which means, “something placed beneath”. Pessary is an interchangeable term, referring specifically to a vaginal suppository.

One can make herbal or aromatic suppositories to address the conditions listed above. According to Schnaubelt (2011), French-style aromatherapy has found (rectal) suppositories to be hugely effective in the treatment of serious acute and chronic bronchitis. Essential oils delivered via (rectal) suppositories go directly to the lung tissues, specifically the lower bronchial capillaries. They are fed directly into the heart-lung circulatory system without first being subjected to biotransformation by the liver detoxification enzyme system. Consequently, they reach the lower bronchial capillaries in their original lipophilic and volatile state, still capable of eliminating pathogenic microorganisms and dissolving and expectorating mucus.

When are they indicated?
As stated above, suppositories are indicated for vaginal infections and inflammation, cervical dysplasia, rectal fissures, and hemorrhoids and for acute or chronic bronchitis. For vaginal infections and inflammation and cervical dysplasia use vaginal suppositories. For rectal fissures, hemorrhoids, and bronchitis or respiratory infections use rectal suppositories.

We strongly recommend not self-treating unless you’ve seen your DBM Physician or other primary care doctor and know exactly what you are treating. There are many disease states that mimic more benign vaginal infections and it is incredibly dangerous to have something go undiagnosed. To be honest, this recommendation goes for anything in medicine...as does the recommendation that self-treating can sometimes only take you so far before consulting either your DBM Physician or other medical advice.

Some of the essential oils recommended for hemorrhoids would be:
Tea tree, cypress, lavender and peppermint.
Use only 2-3 drops of two blends or a maximum of 5 drops per single EO of choice

When using a new oil, test one drop on a small patch of skin first (e.g., on the underside of the forearm). Skin sensitivity is highly individual. If the skin feels hot or turns red, apply a vegetable oil (e.g., olive or almond) to the area, which will dilute the essential oil. Washing with water is less effective.

How to make a suppository:
The ingredients you will need include:
- 20 gms of Organic cocoa butter (about 1/4 cup)
- 10mls Organic sesame oil OR coconut oil (about 1 tablespoon)

Alternatively, you can just use coconut oil on its own. Recommendation is that you use coconut oil if there is any inflammation or infection in the rectum.
Melt sufficient coconut oil to fill the mould you will make from aluminium foil.
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One can make herbal or aromatic suppositories to address the conditions listed above. In addition, one can use suppositories as a means of soothing the rectum after a colon cleanse.

According to Schnaubelt (2011), French-style aromatherapy has found (rectal) suppositories to be hugely effective in the treatment of serious acute and chronic bronchitis. Essential oils delivered via (rectal) suppositories go directly to the lung tissues, specifically the lower bronchial capillaries. They are fed directly into the heart-lung circulatory system without first being subjected to biotransformation by the liver detoxification enzyme system. Consequently, they reach the lower bronchial capillaries in their original lipophilic and volatile state, still capable of eliminating pathogenic microorganisms and dissolving and expectorating mucus.

When are they indicated?
As stated above, suppositories are indicated for vaginal infections and inflammation, cervical dysplasia, rectal fissures, and hemorrhoids and for acute or chronic bronchitis. For vaginal infections and inflammation and cervical dysplasia use vaginal suppositories. For rectal fissures, hemorrhoids, and bronchitis or respiratory infections use rectal suppositories.

How to make:
The ingredients you will need include:
- 20 gms of Organic cocoa butter (about 1/4 cup)
- 10mls Organic sesame oil OR coconut oil (about 1 tablespoon)
- 20gms organic coconut oil
- 10mls extra virgin olive oil

Alternatively, use plain coconut oil or a blend of coconut oil and olive oil
- 20gms organic coconut oil
- 10mls extra virgin olive oil
Prior to making the suppositories I cleaned/sterilized all pots, the measuring cup, bowl to weigh cocoa butter, and wooden spoon I would use to make suppository mold with. And of course, I washed my hands.

**Steps to make suppositories:**

**Step One**
First thing to do is make your suppository molds. You can do this by wrapping aluminum foil around the handle of a ‘thin’ wooden spoon handle. Wrap about 4 or 5 times around then cut and press to make sure it holds together. Remove foil from spoon handle and fold one end up a couple of times. Place mold in cup so it stands up. I ended up needing two molds.

Making a suppository mold with aluminum foil

Completing the mold: I cut the extra off.
Close off one end of mold by folding over twice

Step Two:

Prepare your essential oils synergy so it’s ready once you melt the cocoa butter with the sesame. The author made a synergy based upon her symptoms of bronchitis her own knowledge that included the following:

- 10 drops *Rosmarinus officinalis* ct. verbenon
- 15 drops *Origanum compactum*
- 10 drops *Thymus vulgaris* ct. geraniol
- 10 drops *Santalum album*
- 15 drops *Myrtus communis* (Green myrtle from OSA) very important to get right species.

This is the author’s choice of essential oils to include.
Make sure your synergy is mixed before you begin, as the cocoa butter and sesame melt quickly. Prepare Eos before adding cocoa butter/sesame to glass measuring cup.

**Step Three:**
Using a double boiler fill the bottom pan with water to about 1/4- 1/2 full, then put about a cup in the top pan as well. Place the 20 gms of cocoa butter and 10mls of sesame oil into a glass pyrex measuring cup and place cup into water of top boiler pan. Cocoa butter melts at body temperature and you want to avoid getting it too hot. So this is a great way to quickly melt it down without too much heat.
Measuring 2 ounces of cocoa butter

Pour cocoa butter into glass measuring cup
Add 10mls of Sesame oil in

Mixing cocoa butter and sesame oil together with chop stick
It takes a couple of minutes for the cocoa butter and sesame to merge. Remove the mixture off the heat and add the essential oil synergy/blend to it.

**Step Four:**
Remove measuring cup from double boiler and add in the essential oil synergy. Stirring together well.
Adding essential oil synergy to suppository mix

**Step Five:**
Pour suppository mixture into molds. Fill to just about 1 to 1 1/2 inch from top. You will want to fold it over a bit to close up.
Pouring suppository mixture into mold
Pouring mix into mold

**Step Six:**
Once the molds have been filled and the top end closed. Place them back into a cup or mug and place in freezer.
Place moulds in freezer to let suppositories harden.

**Step Seven:**
After the suppositories have hardened, remove them from the freezer and unwrap from the aluminum foil. Measure each suppository stick and then cut them to equal sizes, approximately 1 inch / 2.5cm long.
Store in the freezer and use one every 2-3 hours for bronchitis, or as needed for other conditions.

The cut suppositories. Stored in glass container in freezer until used.

References

DBM PROTOCOL – ADJUNCT TREATMENT – SUPPOSITORY

Colon Cleanse Alternative to Enemas
When taken under the guidelines presented an enema is safe and effective. However, in some situations a colon cleanse using an enema is not necessarily the best approach. +

For instance:
• When the colon is inflamed, a water enema may further inflame the colon.
• When children are constipated, they may be afraid of an enema nozzle being inserted in their body or the water from a past enema may have caused cramping and pain that they don’t want to go through again.
• The amount of time one has for the colon cleanse may be too short to take an enema.

All of these situations may be better suited to using a rectal suppository.

How to Make Essential Oil Suppositories
https://www.youtube.com/watch?v=O6xhJjUZXXM
| See: Suppositories  
| Essential oils and Colon Cleanse  
| [https://www.youtube.com/watch?v=QCaIRtGzAxk](https://www.youtube.com/watch?v=QCaIRtGzAxk) |
Thermography

With the new ultra-sensitive, high resolution digital infrared cameras available today a technology that has been developing over the past 20 years is creating renewed interest.

Canadian researchers recently found that infrared imaging of breast cancers could detect minute temperature variations related to blood flow and demonstrate abnormal patterns associated with the progression of tumours. These images or thermograms of the breast were positive for 83% of breast cancers compared to 61% for clinical breast examination alone and 84% for mammography.

Thermography as a physiologic test, demonstrates heat patterns that are strongly indicative of breast abnormality, the test can detect subtle changes in breast temperature that indicate a variety of breast diseases and abnormalities and once abnormal heat patterns are detected in the breast, follow-up procedures including mammography are necessary to rule out or properly diagnose cancer and a host of other breast diseases such as fibrocystic syndrome, Pagets disease, etc.
By performing thermography years before conventional mammography, a selected patient population at risk can be monitored more carefully, and then by accurately utilize ultrasound as soon as is possible to detect the actual lesion - (once it has grown large enough and dense enough to be seen on mammographic film), can increase the patients’ treatment options and ultimately improve the outcome.

Note: DBM does not recommend mammography

It is in this role that thermography provides its most practical benefit to the general public and to the medical profession. It is certainly an adjunct to the appropriate usage other diagnostic screening and not a competitor. Thermography, with its non-radiation, non-contact and low-cost basis has been clearly demonstrated to be a valuable and safe early risk marker of breast pathology, and an excellent case management tool for the ongoing monitoring and treatment of breast disease when used under carefully controlled clinical protocols.

Overview of Digital Infrared Thermal Imaging

Medical DITI is a non-invasive adjunctive diagnostic technique that allows the examiner to visualise and quantify changes in skin surface temperature. An infrared scanning device is used to convert infrared radiation emitted from the skin surface into electrical impulses that are visualised in colour on a monitor. This visual image graphically maps the body temperature and is referred to as a thermogram. The spectrum of colours indicate an increase or decrease in the amount of infrared radiation being emitted from the body surface. Since there is a high degree of thermal symmetry in the normal body, subtle abnormal temperature asymmetry's can be easily identified.

Medical DITI's major clinical value is in its high sensitivity to pathology in the vascular, muscular, neural and skeletal systems and as such can contribute to the pathogenesis and diagnosis made by the clinician.
Medical DITI has been used extensively in human medicine in the U.S.A., Europe and Asia for the past 20 years. Until now, cumbersome equipment has hampered its diagnostic and economic viability. Current state of the art PC based IR technology designed specifically for clinical application has changed all this.

**Clinical uses for DITI include:**
- To define the extent of a lesion of which a diagnosis has previously been made;
- To localise an abnormal area not previously identified, so further diagnostic tests can be performed;
- To detect early lesions before they are clinically evident;
- To monitor the healing process before the patient is returned to work or training.

Skin blood flow is under the control of the sympathetic nervous system. In normal people there is a symmetrical dermal pattern which is consistent and reproducible for any individual. This is recorded in precise detail with a temperature sensitivity of 0.01°C by DITI.

The neuro-thermography application of DITI measures the somatic component of the sympathetic nervous system by assessing dermal blood flow. The sympathetic nervous system is stimulated at the same anatomical location as its sensory counterpart and produces a 'somato sympathetic response'. The somato sympathetic response appears on DITI as a localised area of altered temperature with specific features for each anatomical lesion.

The mean temperature differential in peripheral nerve injury is 1.5°C. In sympathetic dysfunction's (RSD / SMP / CRPS) temperature differentials ranging from 1°C to 10°C depending on severity are not uncommon. Rheumatological processes generally appear as 'hot areas' with increased temperature patterns. The pathology is generally an inflammatory process, i.e. synovitis of joints and tendon sheaths, epicondylitis, capsular and muscle injuries, etc.

Both hot and cold responses may co-exist if the pain associated with an inflammatory focus excites an increase in sympathetic activity. Also, vascular conditions are readily demonstrated by DITI including Raynaud's, Vasculitis, Limb Ischemia, DVT, etc.

**DII AS A RISK MARKER FOR BREAST CANCER**

Studies show that an abnormal infrared image is the single most important marker of high risk for developing breast cancer, 10 times more significant than a family history of the disease. Consequently, in patients with a persistent abnormal thermogram, the examination results become a marker of higher future cancer risk. Depending upon certain factors, re-examinations are performed at appropriate intervals to monitor the breasts. This gives a woman time to take a pro-active approach by working with her doctor to improve her breast health. By maintaining close monitoring of her breast health with infrared imaging, self-breast exams, clinical examinations, mammography, and other tests, a woman has a much better chance of detecting cancer at its earliest stage and preventing invasive tumour growth.

Angiogenesis, or new blood vessel formation, is necessary to sustain the growth of a tumour. Digital Infrared Imaging may be the first signal that such a possibility is developing.

Just as unique as a fingerprint, each patient has a particular infrared map of their breasts. Any modification of this infrared map on serial imaging (images taken over months to years) may constitute an early sign of an abnormality. However, if a pathology is suspected, this information is used to recommend further examinations and tests.
Technology, Interpretation and Comparative Imaging

As is the case with mammography and all other imaging modalities, access to sophisticated technology and the expertise to interpret the findings are of prime importance. To help distinguish a normal process from an abnormal one requires proper training, clinical experience, strict adherence to protocols, and meticulous image acquisition. While not all tumours are visible on a mammogram, not all tumours are associated with a high level of blood vessel activity; thus, escaping infrared detection. Less aggressive lesions can be associated with less evident images. Therefore, in these select cases, DII may be an indicator suggesting a much better overall prognosis.

When digitally produced, and interpreted by qualified doctors, abnormalities or changes in infrared images provide invaluable information. This is particularly true in patients with dense breasts, non-specific physical or mammographic findings, or women with a previous history of breast surgery or radiation. The use of serial infrared imaging can draw additional attention to areas that require further evaluation or closer scrutiny during initial or subsequent exams. This further evaluation may include additional imaging such as mammography, ultrasound, or MRI. Used as a complimentary imaging technique, recent data suggests that DII may also help monitor the effects of some of the newer proposed anti-angiogenesis therapies (currently recognized as a promising treatment strategy) (6,8).

Since we have not been able to prevent breast cancer as of yet, there is a consensus among experts that more lives will be saved with earlier detection. Since both physical and mammographic examination cannot detect all cancers, particularly smaller tumours in younger patients and those with dense breast tissue, there is currently much interest in finding new ways to improve our abilities in early detection. While some new promising techniques have emerged such as MRI, Doppler ultrasound, and scintimammography, most are designed to be used in selected cases where physical and mammographic examinations have already picked up an abnormality. These tests also do not address the limitations of combined physical examination and mammography in frontline detection. Consequently, we are left with too many patients who have undergone these two screening tests and are still left with undetected breast cancer. Therefore, experts have concluded that no one procedure or method of imaging is solely adequate for breast cancer screening (1,2,6).

Early Detection Means Life

Breast cancer is the most common cancer in women, and the risk increases with age (1). Risk is also higher in women whose close relatives have had the disease. Women without children, and those who have had their first child after age 30, also seem to be at higher risk. However, every woman is at risk of developing breast cancer. Current research indicates that 1 in every 8 women in the US will get breast cancer in their lifetime (1).

DII’s ability to detect thermal signs that may suggest a pre-cancerous state of the breast, or signs of cancer at an extremely early stage, lies in its unique capability of monitoring the temperature variations produced by the earliest changes in tissue physiology (function) (3,6,7,8,9). However, DII does not have the ability to pinpoint the location of a tumour nor can it detect 100% of all cancers. Consequently, Digital Infrared Imaging’s role is in addition (an adjunct) to mammography and physical examination, not in lieu of. DII does not replace mammography and mammography does not replace DII, the tests complement each other. Since it has been determined that 1 in 8 women will get breast cancer, we must use every means possible to detect cancers when there is the greatest chance for survival. Proper use of breast self-exams, physician exams, DII, and mammography together provide the earliest detection system available to date (3,7,8,9). If treated in the earliest stages, cure rates greater than 95% are possible (3,6).
Thermography is a painless, non-invasive, state of the art clinical test without any exposure to radiation and is used as part of an early detection program which gives women of all ages the opportunity to increase their chances of detecting breast disease at an early stage. It is particularly useful for women under 50 where mammography is less effective.

Information for Thermography sourced from http://www.meditherm.com/contact.htm with their kind permission.
Spending time outside is an essential part of a health promoting lifestyle. It provides mental and physical well-being. In today’s world, the average individual spends very little time outside.

**Importance**

**Time spent outside is beneficial because it:**

- **Synchronizes Circadian Rhythm:** As natural beings, we have a connection to nature. Nature feeds the soul and helps to balance the body when exposed to sunlight and natural living things. The body’s internal clock, the circadian rhythm, is balanced when exposed to natural sunlight. Natural sunlight stimulates the optic nerve which sends a signal to the hypothalamus. From the hypothalamus biochemical, physiological and behavioural processes are governed and balanced. Imbalance of the circadian cycle contributes to hormonal imbalances, seasonal affective disorder, impaired sleep, fatigue and jet lag, just to name a few.

- **Grounding:** spending time with both feet on the earth, grounds the body and gets rid of the excess electrical activity, allowing it to ground itself both physically and mentally.

- **Energy:** Individuals who spent time outdoors reported feeling more alive and full of energy. Exposure to oxygenated air, trees and nature instantly increases energy levels and decreases feeling of exhaustion. Instead of reaching for a cup of coffee when energy is low, try spending a few minutes outside in nature to combat feelings of fatigue.

- **Sleep:** Years ago, individuals used to rise with the sun and go to bed at sunset. This was very beneficial to overall health as the body balances itself by light stimulation. Light cues are essential for proper circadian rhythms and sleep.

- **Mental/Emotional or Psychological Conditions:** Individuals who spend time outdoors report an increased sense of well-being, improved self-esteem and decreased feeling of depression.
Exposure to sunlight while outdoors increases Vitamin D synthesis. A deficiency of Vitamin D has been associated with increased feelings of depression. Sunlight is also beneficial for decreasing the severity and incidence of seasonal affective disorder. Spending 20 minutes a day may be the prescription needed to help combat feelings of low mood.

- **Vitamin Synthesis:** In order for the body to produce Vitamin D naturally, one needs so to be exposed to sunlight. Exposure to Ultra Violet B radiation allows the body to synthesize Vitamin D. To maximize Vitamin D synthesis, it is important to spend time outdoors with skin exposed to sunlight without sunscreen. That being said, it is also important to avoid a sunburn.
  - **Vitamin D** is essential for optimal immune function. Several cells of the immune system have Vitamin D receptors (VDR) which requires vitamin D to bind to it in order to be activated and function optimally. T-cells, macrophages and dendritic cells all have VDR on their cell surface pointing to the important role of vitamin D in immune function. Vitamin D has also been shown to increase innate immunity and prevent the development of auto-immune conditions.

- **Eye Sight:** One of the only times the eyes are given the chance to see distances is outdoors. Outdoor activity is protective against the development of myopia (the inability to see distances). Children who spend time outdoors are less likely to develop myopia later in life. Outdoor activity is also beneficial for balancing eye sight. The eyes balance themselves based on the colours green and blue, which corresponds with the colour of the sky and ground.

- **Increased Immune Function:** Spending time outdoors has a beneficial effect on immune function. Some of the reason why include:
  - **Phytoncides:** Plants emit phytoncides a natural airborne substance that prevents them from rotting and provides protection against insects and animals. Phytoncides are also beneficial for human immune function. Spending time in nature, exposed to phytoncides increases the number of natural killer cells, and anti-cancer proteins in white blood cells. Natural killer cells are powerful immune cells which protect the body from viruses and tumour formation. Phytoncides also decrease stress hormones in the blood which favourably affects immune function.

**Influences**

There are many factors that prevent someone from spending time outdoors.

**Here are some of the most common reasons.**

- **Age** Young children are encouraged to spend time outside and to find activities that encourage outdoor play. As one ages and enters the working world, the amount of time spent outside diminishes substantially. Spending all day in an office, followed by a commute home can decrease the amount of time left in a day for outdoor activities. In order to incorporate time outdoors into your daily schedule consider taking two 10 minute breaks throughout the working day to spend time outside.

- **Health Status**

- **Seasonal allergies** impact the ability to enjoy time outdoors.

- **Neighbourhood** with increased greenness are associated with more time spent outdoors. Greenness in a neighbourhood is also associated with a decrease in body mass index.

- **Excuses** There are a myriad of excuses that one can make up to not spend time outdoors.

**Here are some of the most common:**
Impact
Lack of time outdoors can contribute to various health conditions.

Below is a list of common conditions associated with lack of time outside.

- **Chronic Disease**: Studies have shown that adequate time outside can prevent the development of cancer, diabetes, heart disease and osteoporosis.
- **Obesity**: Spending time outdoors prevents the development of obesity, primarily as it is associated with increased physical activity.
- **Psychological Disorders**: Depression, anxiety and SAD have been associated with lack of time outdoors.
DBM PROTOCOL – ADJUNCT THERAPY - OUTDOOR TIME

- Spending 20 minutes a day outdoors is essential to health and well-being.
- One can incorporate their time outdoors with exercise if finding it difficult to get a full 20 minutes of fresh air.
- The patient can use this time to ground/earth themselves and/or meditate/pray.
- They can implement stress-relief practices such as tai chi / qigong / yoga and do this outdoors.
- They can utilise this time in order to promote Vitamin D synthesis.
- It is also possible to break up the 20 minutes into smaller amounts, as long as 20 minutes are accumulated throughout the day.
- Spending more time outdoors requires the patients to take time for themselves and honouring their health.
- Spending time outdoors should be viewed as equally as important as daily exercise or water intake.
- Patients should try to incorporate outdoor activities into their daily routines (i.e. walk to get groceries, eat lunch in the park, take children to the park instead of playing indoors etc.).
**Tisanes & Healing Teas**

*Herbal Infusions and Decoctions*

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**PREPARING MEDICINAL TEAS**

**Instructions for Patients:**

Tea is one of the most ancient forms of medicine and can be very comforting and pleasurable to drink. It is cheaper than capsules or tinctures (alcohol extracts) and the body is able to assimilate it easily.

Many medicinal herbs have a strong flavour, so consider adding these herbs, to mask the bitter flavours: cinnamon, cardamom and licorice or star anise. After brewing, an herbal tea and if you are making large quantities of it – the tea should be stored in the refrigerator. Left at room temperature for several hours, it will go “flat,” get tiny bubbles in it and begin to sour. Stored in the refrigerator, an herbal tea will be good for three to four days.

One can prepare a triple batch of tea and store it in the refrigerator. An interesting way to add additional benefit and flavour to teas - use mint leaves – pour clean spring water into an ice tray and place a mint sprig in each block – it is a healthy addition to any tea.

**Infusions**

An herbal infusion is made from lightweight plant material—namely leaves, flowers and fruits or as in the case of most of our teas – organic dried herbs. The infusion can be prepared in a French press, stainless steel pot, ceramic or glass teapot, or a stainless steel infuser. You may use a mason jars for your infusions but be careful that the boiled water does not crack the jar. Always place the jar it in the sink when you pour your water in case it breaks. An infusion is prepared by bringing the desired amount of water to a boil, pouring it over the herb, and letting it sit covered, for twenty
minutes. After straining the herb, the tea can be drunk immediately, or cooled to room temperature and refrigerated.

Decoctions
A decoction is basically a simmered tea and is the preferred form of preparation for bark, hard non-aromatic seeds. Decoctions are typically made in a stainless steel or stovetop-safe glass pot. The herb is placed in water and brought to a boil, then simmered with a lid on for 20 minutes to a half hour. Take off the heat, strain and enjoy. It is possible to simmer your decocted herbs again for a few more rounds; as long as they are still yielding a strong tasting tea, they are still good. Remember to store in the refrigerator to reduce microbial growth, if the plant matter is left in the container. This can be reheated in a pot if you want it warm – or drunk straight from the refrigerator as an “iced” tea.

DBM PROTOCOL – ADJUNCT THERAPY - TISANES / TEAS

Proportions For Herbal Infusions

**Folk method:**
Here is a general guideline in calculating herbal proportions:
1 teaspoon of dried, cut and sifted herb, or herbal blend or 2 tablespoons of fresh herb per 250ml of water.

**Weight method:**
5.5 grams of dried herb, or herbal combination, for every 1 cup of water.
(Note this is a more exact measure since it is using weight).

**DOSAGE**
The dosage is typically one cup of tea one to three times a day.

**Please Note:** Many herbs, including beverage teas, can have adverse reactions when combined with pharmaceuticals; so please ensure that patients have disclosed all their medications to you and that you have begun a reduction program with them.

For more information on Teas – see – Advanced Nutrition PDF download or visit Food for Life page

General Health Tea #1 – Ginger Turmeric
General Health Tea #2 – Thyme with Lemon
General Health Tea #3 – Russian Tea
General Health Tea #4 – Lavender and Lemon Balm
General Health Tea #5 – Spearmint
Toxic Metals

These are some methods for removing toxic metals from body tissues:
- Sauna - protects kidneys during detoxification by elimination through skin; increases circulation to bring metals to lymph and out through skin (See FIR Therapy / Saunas)
- Coffee enema (See Coffee Enemas)
- Vitamin C – preferably from a natural FOOD source.
- Higher than normal physiological dose Iodine - promotes excretion over base-line of cadmium, lead, aluminium and mercury (also halogens bromide and fluoride)
- Minerals - any chelation protocol requires supplemental minerals and physiological trace metals to replace those taken out along with the toxic metals
- Calcium and zinc - cadmium antagonists
- Sulphur – mercury and copper antagonists; found in meat, egg yolks, vegetables in the cabbage, radish, garlic and onion families
- Selenium and zinc - mercury antagonists
- Vegetable Fibre (slows intestinal transit time to allow more time to absorb metals) – a handful of studies support the role of fibre in enhancing the elimination of methylmercury from the body.
- DMSO Shows promise as an effective mercury chelator, but not in the brain;
- ALA is a potentially effective chelating agent, and does have the ability to access the central and peripheral nervous system E.g. the brain
  Rooney JP. The role of thiols, dithiols, nutritional factors and interacting ligands in the toxicology of mercury. Toxicology. 2007 Mar 1;
- EDTA chelation by I.V. - removes vital minerals, only reaches metals in blood and in tissues near large blood vessels unless using repeated treatments, which further deplete body’s essential minerals; there are several metals that chelation does not remove.
- Fulvic Acid
- Chlorella / Chlorophyll
Silver dental amalgams containing mercury should be removed by a holistic/biological dentist - with the concurrent use of a toxic metal detoxification protocol. *Avoid taking in any more toxic metals*;
Triphala

A Balancing Formula for Detoxification and Rejuvenation

Literally meaning “three fruits”, Triphala is a traditional Ayurvedic herbal formulation consisting of three fruits native to the Indian subcontinent: Amalaki (Emblica officinalis), Bibhitaki (Terminalia belerica) and Haritaki (Terminalia chebula).

Benefits of Triphala

- Assists natural internal cleansing
- Gently maintains regularity
- Nourishes and rejuvenates the tissues
- Supports healthy digestion and absorption
- Natural antioxidant

Triphala is most commonly known for its use as a gentle bowel tonic, being helpful in digestion, and supporting regular bowel movements. The combination of the three fruits has a synergistic effect to bolster many other systems as well. In addition to the GI tract, Ayurveda uses triphala to support healthy respiratory, cardiovascular, urinary, reproductive, and nervous systems. Triphala has also been shown to be a powerful antioxidant, protecting cells from the damaging effects of free radicals.
The three fruits involved in making triphala are also known for their individual effects:

- **Amalaki** (*Emblica officinalis*): Has a cooling effect that manages pitta, supporting the natural functions of the liver and the immune system.
- **Bibhitaki** (*Terminalia belerica*): Is particularly good for kapha, supporting the respiratory system as well as kapha accumulations in all systems.
- **Haritaki** (*Terminalia chebula*): Though having a heating nature, it is still good for all three doshas (vata, pitta, and kapha). Is known for its “scraping” effect, which removes toxins and helps maintain healthy levels of weight.

**Triphala and Weight Loss**

In conditions of excess weight, triphala can be used as part of a weight loss program that includes a healthy diet and exercise. Proper digestion and elimination are important factors in achieving long-term success in maintaining an optimal body weight. Triphala also promotes healthy eating habits and cravings by supplying the body with the full spectrum of natural tastes. By promoting healthy absorption and assimilation of nutrients, triphala keeps the body feeling properly nourished and balanced.

**Triphala and Ayurveda: Traditional Uses**

Triphala is recommended and used more often than any other Ayurvedic herbal formulation. It is popular for its unique ability to gently cleanse and detoxify the system while simultaneously replenishing and nourishing it. In Ayurvedic terms, triphala, used in moderation, is said to have a beneficial effect on all three doshas—vata, pitta, and kapha. It is most well-known for its gentle effects on the bowels, improving peristalsis and cleansing toxic build up of wastes; but Ayurveda also views triphala as a nourishing supplement known for its ability to rejuvenate healthy tissues, allowing one to age gracefully.

The *Caraka Samhita*, one of the main texts of Ayurveda, describes Haritaki as the remover of disease and promotes haritaki and amalaki for rasāyana, or rejuvenation of the body.

**Triphala is also traditionally used as a tonic in hair and eye washes.**

For those with sluggish digestion and build up of ama, triphala is said to kindle the digestive fire (deepana) and help improve digestion (*pachana*), allowing one to get the most nutrition from one’s dietary intake.

Culturally, Haritaki is given the highest respect for restoring health. The Medicine Buddha is often depicted with a haritaki fruit held in his hand. It is said to give the blessing of long life, and along with amalaki and bibhitaki, will nurture you like a mother.

**DBM PROTOCOL – ADJUNCT TREATMENT - TRIPHALA**

**Triphala Tea**

The traditional way of ingesting triphala is as a tea. This method allows one to taste the herb fully, and taste is considered by Ayurveda to be an important part of the healing process. Taste starts the digestive process, and sends signals to the body as to what to expect, already initiating your body’s own inner pharmacy.

- To take triphala as a tea, make a decoction by adding ½ teaspoon of triphala powder to a cup of hot water.
- Stir and allow the tea to cool, and drink.
- Triphala is usually taken on an empty stomach, most commonly in the evening before bed.
- Some prefer to take it first thing in the morning, especially if taking it at bedtime makes one urinate at night.
Triphala contains five of the six tastes recognized in Ayurveda (sweet, sour, bitter, pungent, and astringent), only missing the salty taste. Perhaps because the Western diet is so lacking in bitter and astringent, these are the two most prominent tastes for most people, which can make drinking the tea somewhat unpleasant initially.

Over time, as the system becomes more balanced, it is not uncommon for the taste one perceives to evolve into a sweet experience.

**Triphala Tablets**
A common amount to take would be two tablets (1000 mgs) before bed or upon rising in the morning. This can be a more convenient method, especially for those that travel a lot, have a shortage of time, or do not like the taste of triphala tea.

Many Ayurvedic practitioners prefer to give their patients tablets over capsules as there is still some mild tasting of the herb that occurs, sending signals to the digestive system, as explained above in the Triphala Tea section.

**Triphala liquid extract**
Triphala liquid extract provides an alternative method of taking triphala. It’s convenient, easy to assimilate, and has a long shelf life. This extract is made from the same certified organic fruits used in making the herbal tablets and is extracted using non-GMO, gluten-free grain alcohol. A typical dose is a dropper full (about 30 drops) taken in 1–2 ounces of water or juice, one to three times daily, or as directed by your healthcare practitioner.

**Modern Research**
Studies have shown that triphala supports not only the GI system, but also bolsters a healthy immune and cardiovascular system. It positively affects normal cell life cycles and promotes healthy lipid and cholesterol levels. Triphala has also been shown to have powerful antioxidant effects, protecting cells from the damage of free radicals. The result is thought to be largely related to the Vitamin C content of the amalaki, believed to be one of the highest concentrations of Vitamin C in any food. Other research shows that the Vitamin C may have been misidentified, and the antioxidant effect may be attributed to the tannins/polyphenols unique to the herbs used in making triphala. Regardless, it has been shown to produce an antioxidant effect, and in accord with Ayurvedic principles, this is related to the synergistic/holistic effects of the components of all three fruits.

For more information and links to articles on modern research, you can find multiple resources online. Two such sources include: Memorial Sloan Kettering Cancer Center Nutrition Review

**Side Effects**
Triphala is a natural detoxifying formula. As part of the cleansing process it is not uncommon for toxins to be released from the deeper tissues and enter the bloodstream on their way to being ushered out of the body. When many toxins are released at once it can prompt a “healing crisis”. For some people this can manifest as a headache, a rash, or nausea, in addition to gas, upset stomach, and diarrhea.
Since triphala supports healthy elimination, it is not uncommon to experience looser motions than usual. All of these reactions can be byproducts of cleansing. If your cleansing experience becomes too intense, you can stop taking triphala until the symptoms subside and restart using less, or simply reduce the amount you are ingesting. If the symptoms recur, it is best to stop use and consult a practitioner.

**Contraindications**
Contraindications can include diarrhea, dysentery, and pregnancy. There are no known drug interactions with the herbs that make up triphala. Some studies do report findings that would advise caution in people taking blood-thinning medicines, as triphala may affect platelet function. From an Ayurvedic perspective, if your stools are dry and hard, consider using haritaki in place of triphala.

**Buying Triphala**
Triphala is most commonly purchased as a bulk powder, tablet, or liquid extract. The advantage of buying it in bulk is that it is significantly cheaper on a per use basis and it allows one to take the herbs in the most traditional way—as a tea. Tablets are considered by many to be a quicker, more convenient method of taking the herbs along with providing the option of not having to taste the herbs. Many Ayurvedic practitioners feel that their clients are more likely to take the herbs if they are provided in tablet form.

When choosing a supplier of triphala there are a variety of questions to consider relating to quality of the herbs, the values of the company and the price you pay.

**Is the supplier able to trace the herbs back to the field they were grown in?**
Traceability of the herbs from field to shelf allows the supplier to know where and how the herbs were grown and when they were harvested.

**Are the fruits grown in optimal locations?**
Location does play a role in quality. Like the grapes in wine, herbs tend to vary in quality and taste depending on the conditions they are grown in. Banyan sources our triphala ingredients from areas where the fruit trees thrive naturally.

**Are the fruits sustainably harvested?**
The three fruits that combine to make triphala grow on large trees and are relatively abundant in many parts of India. Where and how the fruits are harvested makes a big difference in sustainability. They can be harvested on private farms where sustainability can be managed, or they may be wild-harvested from the forest legally, and sometimes they are taken illegally, threatening long-term sustainability. To ensure sustainability, Banyan sources amalaki, bibhitaki and haritaki that have been cultivated on privately owned farms.

**Are the farmers looked after for their labour?**
Harvesting and processing the fruits in triphala is labor intensive. It includes the picking of the fruits by highly skilled tree climbers, washing, drying and removing the pits. Banyan strongly believes in maintaining socially responsible relationships with our farmers. We are committed to following fair trade principals, which includes paying above market wages and making investments in educating the farmers and giving back to their communities.

**Are the fruits organic?**
As Banyan sources from private farms, it is able to ensure that organic farming methods are followed, and you can therefore rest assured that your herbs have not been treated with pesticides.
or other harmful chemicals. The fruit contained in our triphala is grown exclusively on certified organic farms. The fresh, ripe fruit is harvested at the optimal time using environmentally sustainable methods that are sensitive to the long-term health of the trees and their surrounding ecosystems.

Source: http://www.banyanbotanicals.com/info/ayurvedic-living/living-ayurveda/herbs/triphala
**UNA3 - IMMUNOClean**

**The Cornerstone of All DBM Programs**

**UNA3 is the patents name – the market name for UNA3 is IMMUNOClean**

**A BRIEF EXPLANATION HOW UNA3™ DROPS WORK.**

Mitochondria generate electricity and energy in the human cell. When the generator is turned off, the name of the disease is cancer. These cells then cannot produce energy through oxidation. An emergency chain reaction subsequently is to generate energy through fermentation.

Sugars and foods are burnt for energy. We oxidise to live. Burning is the same as oxidising. Breathing is oxidising. Our bodies are conductive which means a current can run from one place to another. Salt conducts electricity. There are self-correction programs in the body to balance the self-correct function with positive feedback systems that create the flow.

Imagine that the body is a pool of water and if the pH is too low, you have to put in chlorine (which is alkaline) to raise the pH to prevent the pool from turning green. If the pH is perfect, the water is fine and beautifully clear and blue. If not, the balance and colour changes.

Oxidising and an explosion both work through an oxidative process. Chlorophyll (the green in plants that you eat) is also an oxidant. Lye is also an oxidant (although highly alkaline). The difference between them is the force (strength) of the explosion. According to studies done, the oxidation potential of UNA3™ Drops is 0.92 volts. Cells are normally oxidising at 1.3 volts (constantly oxidising oxygen) allowing combustion. Science says we generate 100mV energy from ATP, but not from only one cell. It is a 100mV from 100 trillion cells that work together to provide electric energy to the whole in order for you to lift your hand/arm, for example.

That is how we transfer energy from one person to another, by “laying the hands on”. Ozone oxidises at 2.1 volt where H2O2 (hydrogen peroxide) is at 1.7 volts also a strong oxidiser. It turns white against a wound, because its oxidation is stronger than the cells. Oxidisers attract electrons. Anti-oxidants give off electrons (electrons are the bodies’ currency for trade).

Doctors say oxidants (free radicals) age you and cause harm... a theory that has never been scientifically taken past a theory... the opposite is actually true.

Free radicals help people live longer... why is this not logical. It is all a matter of balance. Free radicals are something like electricity. One should not have too much or too little. Understanding that all things (even “natural and good” things) in excess can be toxic. To illustrate this by an example of people who are obese, they should not take any artificial anti-oxidants because they are not oxidising efficiently, thus energy is not conducted effectively and they retain weight. An anorexic person should take anti-oxidants because they are oxidising more than they are putting in, thus losing weight.

Furthermore, salt is conductive and increases electricity. Sugar is an electrical resistor. It is carbon (carbohydrates – hydrates=water, carbon=coal) An example is to put a block of coal into a stove – it burns and you get fire – then there is carbon oxidation. What happens is that people eat carbohydrates and sit and watch television, the carbon is a resister and one feels tired. There are no cables in the body for electricity. There are vortexes, where chemistry is not the force, it is the result. The oxygen requirement will drive the body for security reasons to ensure oxygen is supplied to the brain thus often the heart rate goes up and the blood pressure goes up to maintain oxygen to the brain.
Sugar reduces conductivity. When we eat sugar we have to do physical work to burn it. If you don’t burn it, it becomes a resistance in the system. The pH lowers, bacteria and other organisms automatically become opportunistic because of the environment/terrain change. Anti-oxidants then further retard oxidation. The sugar levels go up and the body pushes insulin up to balance blood sugar levels. So if the cells cannot oxidise, it becomes toxic inside them. Anti-oxidants prevent the body from burning these toxins. The body then locks the debris into fat cells as the body cannot cope with toxins in the blood stream.

Our bodies are up to 80% water. There are 5-6 litres of blood in an 80 “litre” person. Deduct 6 litres and you are left with approximately 74 litres. Interstitial tissue then receives this toxicity so that the pH stays 7.35-7.41 in blood. The tissue thus not at a healthy pH becomes vulnerable to pathogenic overtake. When fat is reduced through weight loss, the toxins are released in to the blood with a consequence naturally of experiencing anxiety from years of bad food and drink and lifestyle which come out at once. Artificial anti-oxidants then further prevent combustion.

Sugar increases energy but only if you are exercising. You can only lose weight if you are oxidising. The cells transmit energy and information simultaneously. Each cell is a battery transmitting millivolts all over the body combined to provide electric energy to the whole. Drinking UNA3™ Drops removes electrons from pathogens at the acidic pH level where pathogens thrive and with the mineral herbal combination it increases cellular conductivity again restoring health through a gentle oxidation process. It removes dirt through oxidation and exchanging electrons off pathogenic organisms. In our balance restoring protocol, and mineral rehydration intake, internal, vital conductivity is increased and electricity can flow easier again, improving the electron transport chain within each cell as part of the citric acid cycle natural to healthy cell function. Blood looked at through a dark field microscope when sticking together shows improved fluidity in less than 30 minutes from drinking UNA3™ Drops because of increased transcellular electricity through the cell membranes.

Unlike antibiotic, which enters the bacterial cell and poisons it, killing it from within, UNA3™ Drops breaks the cell wall through oxidation that causes bacterial cell wall to break apart, a process the immune system uses inherently. It oxidises viruses through the virus capsid. Viruses multiply faster than one’s defence cells, which is why the oxidation support of a protocol is effective to assist the body in getting on top of the pathogenic challenge. With the patented formula of health supporting herbal components, the body is naturally returned to homeostasis by the activation and facilitation for toxin reduction through oxidation and improved waste elimination.

If you drink UNA3™ Drops at low doses and you feel nauseous, you should check for intestinal worms such as the Ascaris lumbricoides, which would not be killed by low dose oxidation, but the worms certainly don’t like it. Feeling bilious following a standard dose of UNA3™ Drops can result in the worms pooping in the gut and that faecal matter causes upsets in the system. Having these worms in the gut results in them degrading polyunsaturated lipids that cause serum MDA – (serum malondialdehyde) well noted in studies cited and published in the world Journal of Gastroenterology. They would also cause anxiousness (in for example children with hyperactivity – check for worms).
A SUMMARY OF THE PROPERTIES & MEDICINAL USES OF THE FAITH DROPS HERBAL COMPOUND.

**Bidens pilosa (Beggar's Ticks)**
A good source of iodine; is anti-rheumatic, antifungal, anti-inflammatory (good for treating wounds, thrush, candida), is an anti-oxidant, used in treating immune disorders, has anti-tumor properties (reduces tumor volume), reduces serum LDH & GSH concentration in ascitic fluids.

**Catharanthus roseus (Madagascar periwinkle)**
Anti-diabetic, used in treating malaria, used against Hodgkin's disease.

**Centella Asiatica (Gotu Kola)**
Mildly antibacterial, anti-viral, anti-inflammatory, anti-ulcerogenic, cerebral tonic, circulatory stimulant, diuretic, promotes wound healing, maturation of scarring is stimulated by production of type 1 collagen. Used for treating abscesses, headache, asthma, bronchitis, eczema, gonorrhoea, hypertension, jaundice, rheumatism, spasms, TB, ulcers, diuretic.

**Camptotheca acuminata**
Anti-cancer properties.

**Cnicus Benedictus (Blessed thistle)**
Improves secretion of gastric juices & saliva, increases appetite, facilitates digestion, stimulates flow of bile, anti-inflammatory.

**Leonotis Leonurus (Lion's Tail)**
Induces deep sleep, calming, relaxing, increases hematic flux, improves micro circulation.

**Sutherlandia Frutescens**
Used for colds and flu, TB, asthma, bronchitis, rheumatism, arthritis, osteoarthritis, liver, bladder for irritability and anxiety.

**Leonurus Cardiaca (Motherwort)**
Prominent action on heart as a cardiac tonic, anti-spasmodic, anti-rheumatic, asthma and bronchitis.

**Elytropappus Rhinocerotis**
Used for colic, diarrhoea, digestive disorders.

**Dicoma Capensis**
Used for fever, influenza, high blood pressure, diarrhoea, cancer.

**Tulbagha Violacea (Wild garlic)**
Coughs and colds, antibacterial, antifungal, intestinal worms, aphrodisiac.

**Hypoxis (Africa Potato)**
Used for urinary infection, heart weakness, internal tumors, nervous disorders, has anti-oxidants, anti-inflammatory and anti-diabetic properties.
Doctors Beyond Medicine designed a Combined Health Plan consisting of 5 individual health plans. ImmunoClean is the 4th part of the plan and serves to optimise the human immune system and more efficiently remove toxins and harmful pathogens from the body.

1. Environment Management Plan
2. Breathing and Visualisation Plan
3. Organ Cleansing and Hydration Plan
4. ImmunoClean Application Plan
5. Nutritional Options Plan

IMMUNOCLEAN AND THE FLOWER OF LIFE

IMMUNOClean is an approved patented solution with compounds harvested from 12 herbs. The Flower of Life product logo symbolises the creation of life. The product is endorsed by Doctors Beyond Medicine who introduced the infant product 20 years ago, in the treatment of various life threatening diseases worldwide. IMMUNOClean is the core protocol used by DBM across its locations in Africa, Asia, UAE and Globally.
**IMMUNOCLEAN DOSAGE TABLE**

ImmunoClean is a liquid and can be taken in many ways. The application charts must be referenced for correct mixing instructions and applications. The most common application is to drink it orally. Before any application, the user must mix the drops from bottle 1 with drops from bottle 2. The dosages table presents 3 general health applications based upon a person’s weight. An extra emergency/aggressive dosage is also calculated in case of severe acute illness or infection.

<table>
<thead>
<tr>
<th>Dose</th>
<th>Use</th>
<th>Herbal Mix Bottle 1</th>
<th>Activator Bottle 2</th>
<th>Frequency</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>General health dosage for a person with weight <strong>above 50kg</strong></td>
<td>3 drops</td>
<td>3 drops</td>
<td>3 to 4 x times daily for 21 days. Thereafter 1 x time per day</td>
<td>• Use for general wellbeing as per picture instructions</td>
</tr>
<tr>
<td>2</td>
<td>General health dosage for a person with weight <strong>between 30kg - 50kg</strong></td>
<td>2 drops</td>
<td>2 drops</td>
<td>Up to 4 x times daily for 21 days. Thereafter 1 x time per day</td>
<td>• It is perfectly safe for children and babies to take ImmunoClean. • Children take fewer drops than adults</td>
</tr>
<tr>
<td>3</td>
<td>General health dosage for a person with weight <strong>less than 30kg</strong></td>
<td>Begin with 1 drop</td>
<td>Begin with 1 drop</td>
<td>Up to 4 x times daily for 21 days. Thereafter 1 x time per day</td>
<td>• For children Less than 30kg no more than 2 drops in total at a time – starting with one drop. • Do not exceed this dose and not more than 4 times daily</td>
</tr>
<tr>
<td>4</td>
<td><strong>Emergency Aggressive Dosage</strong></td>
<td>Begin with 3 drops</td>
<td>Begin with 3 drops</td>
<td>Drink it every hour for 7 hours. Increase the drops every hour by 1 extra drop in life threatening cases up to maximum 10 drops at a time</td>
<td>• For acute infections and illnesses only. • Consult your health care practitioner before you begin this protocol. • Do not continue for more than 4 days. • Do not take more than 45 drops per day. • Reduce when you become nauseous, or stools stay loose</td>
</tr>
</tbody>
</table>
1 - IMMUNOCLEAN ORAL APPLICATION

The oral application is used for general health and in combination with other applications. Add 3 drops of each bottle into a dry glass or a cup and mix it and let it stand for 3 minutes to activate. After 3 minutes a noticeable colour change will be visible. Then add clean water or tea (no milk or sugar) and drink the liquid within 15 minutes.

2 - IMMUNOCLEAN STEAM APPLICATION

The steam application is used for lung and sinus related ailments. Put 20 drops of each bottle into a dry bowl and mix it. Let it stand for 3 minutes to activate. After 3 minutes a noticeable colour change will be visible. Then add 1 litre or a kettle of hot water to the activated drops. Cover your head with a towel over the bowl and inhale through the mouth and nose for 7 minutes. Be cautious of hot water and steam as the heat can cause light headedness. Vicks or menthol crystals can be added optionally to open the sinuses.

3 - IMMUNOCLEAN SPRAY APPLICATION

The spray application is used for topical wound care, sores and bite marks. Add 10 drops of each bottle into a dry jug and mix it. Let it stand for 3 minutes to activate. After 3 minutes a noticeable colour change will be visible. Then add 100ml of luke warm water to the activated drops. Pour the solution into a spray bottle and spray all of the solution onto the affected area within 15 minutes. Repeat hourly in the case of severe sores or ulcers.
4 – IMMUNOCLEAN ENEMA APPLICATION

The enema or douche is an application for intestinal, colon, vaginal ailments or when oral protocol is not an option. Calculate 1 drop of ImmunoClean per 10kg of body weight. Then add equal number of drops into a dry glass and mix it. Let it stand for 3 minutes to activate. After 3 minutes a noticeable colour change will be visible. Then add 150ml of Luke warm water to the activated drops. Draw liquid into an enema applicator and inject rectally or vaginally.

IMMUNOCLEAN DAILY APPLICATION PLAN

ImmunoClean is a liquid and can be taken in many ways. The application charts must be referenced for correct mixing instructions and applicable use. The common application is to take it orally (drinking it). Before any application, the user must mix the drops from bottle 1 with drops from bottle 2. Refer to the dosage table for general health protocols.

All protocols come to greater effect when used in conjunction with a lifestyle that reduces the exposure of the person to the toxic or damaging effects of poor food choices or negative physical and emotional environments whilst increasing proper hydration and exercise regimes, for lasting wellness.
IMMUNOCLEAN DAILY APPLICATION PLAN

Drink ImmunoClean as per Oral dosage instructions

Drink ImmunoClean as per Oral dosage instructions

Drink ImmunoClean as per Oral dosage instructions

Drink ImmunoClean as per Oral dosage instructions

Drink ImmunoClean as per Oral dosage instructions
ImmunoClean PRODUCT INFORMATION

ImmunoClean is a blend of extracts from twelve indigenous herbs (16 compounds), which ensures that your immune system works at optimum levels. The secret to our formulation is the extracts, and sets it apart from any other similar or generic formulae and ensures proper removal of toxins and pathogens from the body. Referred to as the “The Immune Solution” the formula was developed over a period of more than 15 years and patented by medical doctor and scientist Dr. Mickael McDonald.

Side Effects

You may experience headaches. Nausea or loose stools are normal and are often an indication that you are detoxing. If you experience nausea from 1 dose, you may have intestinal worms, which should be treated appropriately with our natural parasite cleanse protocol. Note that the general use solution assists your body in recovering its balance and health at a moderate rate. It is advised that you take a maintenance dose once per day to ensure your continued health.

Caution

- Store in a cool dark place.
- Keep out of the reach of children.
- Do not take within 3 hours of taking Vitamin C or anti-oxidant supplements, thus not in conjunction with your ImmunoClean dose, as they will neutralize the oxidizing action of the drops.
- Do not drink the solution directly from the bottle or undiluted.
- Do not pre-mix your daily solution as the ImmunoClean drops must be drunk immediately on having been mixed and once the "standing" period of 3 minutes is over.

Directions for Use

- ImmunoClean Oral Application – refer to the pictorial charts.
- ImmunoClean Spray Application – refer to the pictorial charts.
- ImmunoClean Steam Application – refer to the pictorial charts.
- ImmunoClean Enema Application – refer to the pictorial charts.
PROPRIETARY BLEND

- Extracts from Bidens Pilosa, Camptotheca Acuminata, Catharanthus Roseus, Centella Asiatica, Dicoma Capensis, Cnicus Benedictus, Elytropappus Rhinocerotis, Hypoxis Hemerocallidea, Leonurus Cardiaca, Leonotis Leonurus, Nigella Sativa, Sutherlandia Frutescens, Tulbaghia Violacea.
- Bottle 1: 30 ml ImmunoClean liquid
- Bottle 2: 30 ml ImmunoClean Activator liquid

IMMUNOCLEAN HISTORY

Faith™ Drops was formally renamed to IMMUNOClean in 2016 after 25 years as to enable the brand to be more marketable across ethnic/religious and commercial borders worldwide.

The ImmunoClean formula took more than 15 years to finalise. The developer’s medical knowledge as well as that of herbs and plants and alternative medicines and therapies were utilised extensively whilst putting the formulation to the test throughout Africa, the results of which were and still are astounding.

Combined with education on matters such as nutrition, cleaner lifestyle, addressing the cause, breathing, exercise and more, a lifestyle of health and wellness is encouraged and empowered through the IMMUNOClean program.

During the research period, our main focus was life-threatening diseases, and a wide range of chronic and acute illnesses and diseases were identified and treated using our unique ImmunoClean formulation. Some of the diseases we assisted in the treatment of were Diabetes type 1 and 2, Malaria, AIDS, Cancer, TB, Cholera and Hepatitis A, B and C, to name but a few. In most cases, patients recovered completely - the time factor varied according to the stage of the disease and the individual; but the time periods observed were significantly faster than those of patients that were not utilising our formulation.

It is not our intention to allow the reader to draw assumptions that IMMUNOClean heals or cures – we state only that herbal extracts such as Sutherlandia and compounds used in our formulation have well documented immune fortifying properties and it is these properties that provide the body with the necessary tools to aid recovery. We state also that the 16 compounds that form part of our patent have recognized properties for the treatment of cancer, HIV/AIDS, malaria, cholera, TB and various other diseases.

IMMUNOClean aids the immune system to overcome various ailments that are caused by germs, bacteria, viruses, fungi, parasites, poisons, and heavy metals, by targeting pathogens and elements (that have an acidic pH level) that are harmful to the body. The removal of pathogens and heavy metals is by oxidation, and to ensure no additional harm is brought to the organs, the 12 herbal extracts (16 compounds) selected to make up our formulation renders the residue harmless and aids in the complete removal and detoxing of any resulting toxins from the body.

For centuries, people have made use of various extracts of indigenous plants and herbs to produce a wide variety of alternative medicines.
Dr. McDonald, during his research, embarked upon a journey that would over many years culminate in this innovative immune fortifier. Using an alternative approach to healing making use of distilled herbal extracts and compounds in a base of a mineral ion to preserve the compounds. The ImmunoClean formulation was specially blended to ensure that the compounds would work in conjunction with each other and fortify the immune system and aid in the removal of toxins.

Time was invested and knowledge was gained in studying and researching not only Africa’s wealth of plants and herbs but a multitude of forms and protocols of Herbalism from Traditional Chinese to the Modern-Day herbalists in order to produce this unique formula.

This journey of study led to the combination of these important herbal extracts and compounds in the IMMUNOClean formula for an immune solution to work with the natural body systems.

REGISTRATION HISTORY

IMMUNOClean is listed in

3. Ivory Coast (2011) Registration and Ethics Committee 34-2011/MSHP/CNER-P.
4. Nigeria NAFDAC – pending
Vaginal Inserts

DBM PROTOCOL – ADJUNCT TREATMENT – COCONUT OIL TAMPON
Coconut Oil Tampon – For Vaginal Thrush
Coconut oil is a powerful, time-tested and pleasant antifungal remedy for a yeast infection

Instructions for Using Organic Coconut Oil Tampon
- Soak an organic cotton tampon in organic, virgin coconut oil for a few minutes
- Insert oil-soaked tampon into the vagina
- Leave in overnight (or a maximum 8 hours)
- Repeat for 4-5 nights

Coconut oil is solid in a cool climate, so if necessary, stand the bottle in hot water until oil becomes fluid (do not warm oil in a microwave oven).
Visualisation & Neurological Reprograming

Neurological Reprogramming
Every cell in your body is eavesdropping on your thoughts it is therefore vital you make those thoughts good ones.

“Our genes are as changeable as our brains. The latest research in genetics shows that different genes are activated at different times. They are always in flux and being influenced. There are experience-dependent genes that are activated when there is growth, healing, or learning; and there are behavioural-state-dependent genes that are influenced during stress, emotional arousal, or dreaming” Dr. Joe Dispenza.

Healing begins in your spirit - between your ears and in your heart. Deal with your emotions of fear, anger, panic, and depression and come out with optimism, hope and a fighting spirit.

Happiness brings endorphins that supercharge your immune system. Be with people who have faith, hope, a sense of humour and who encourage you.

There is wisdom in all life that knows how to fix disease, just give your body proper physical and metaphysical resources to do its job.

- Feed your mind with good thoughts, beauty, laughter, music, play
- Feed your heart with love, forgiveness, confidence in your abilities and a sense of purpose
• Feed your body with good nutrition

It’s all about soul medicine, about how we can’t truly heal unless we give our souls what they crave: love, community, meaning and purpose, healthy food, communing with nature, laughter, the unconditional love of animals, a sense of belonging and a serene living environment. You can only change from the inside out...

**Visualisation**

Visualisation is training yourself to think in a positive way. By visualising you are creating neural pathways, which will allow your intention to become more believable, within reach and obtainable.

Start by training your mind to bring the things you want into your reality. This could be a different body shape, overcoming a health condition, a feeling, or an object of value. If you have something you would like to come to fruition in your life, take time every morning and at night to visualise it.

Make the visualisation as vivid as you can, make the colours bright, the sounds clear and the taste pleasant. Notice if you hear anything and take in the detail of what you see. Make it stronger, brighter, and louder.

You can do this visualisation even if you find it a little difficult to actually believe it will happen.

**Directions**

• Close your eyes
• In your mind’s eye, visualise a carrot (for example)
• CAN YOU SEE IT?
• Apply the visualising principle of bringing a picture to your mind’s eye for the healing focus exercise

**Repetition**
Do this for as often as you can, your unconscious mind will work towards getting it for you. Repetitive visualisation and using your amazing imagination is the power behind everything you create in your life.

**Visualisation and Mindfulness are interconnected.** See more on Mindfulness

**Mindfulness**
• Mindfulness is paying attention, deliberately and non-judgmentally to each moment of your life. Knowing how to tap into this skill will change your life, because it’s the very cause of joy. You can experience significant benefits by incorporating these practices into your everyday life.

• Find a quiet space to be alone for 10 minutes and sit or stand comfortably. As you assume a comfortable posture, try and grow an inch taller by lengthening the crown of your head up towards the ceiling.

• Set a timer on your phone or watch for 10 minutes. Close your eyes and begin to take deep breaths in and out through your nose.

• Imagine the belly expanding first, then draw the breath up into the ribs, and then up into the chest.

• Begin to count the seconds of each inhalation and each exhalation. Inhale for a count of 5, exhale for a count of ten. If this length is too long to start, reduce the length but keep the ratio of inhale to exhale 1:2.

**Breathe like this for 20 breaths.**
• After your 20th exhale, take a few soft breaths in and out through your nose.
• Now, bring your awareness right to the centre of your heart.
• Imagine the breath moving in and out through the heart as it acts as your heart were your lungs and the breath was fluidly moving directly in and out of its centre.
• No need to count the breath, just keep it steady and fluid and concentrate on that point in the middle of the heart where it breathes in and out.
• After the timer sounds, place both hands on your heart and take a moment to feel its beating.
• You are alive. You are powerful. You are a centre of the universe that continually shines like the sun.

**Directions**
• Find a quiet space around you and sit down comfortably. Close your eyes and breathe deep into your belly.
• In your mind, take yourself to a peaceful setting, either one that you’ve experienced personally or one that you create in the moment. We recommend a natural setting such as a summer meadow, a clear riverbank, an open field of wildflowers, or a fertile mountain peak. Take yourself to this space.
• Engage all of your senses. What do you see in this setting? What are the sounds, the smells, and the tastes? Go through the senses and make a note of all the visceral experiences
you can call to your mind. Try not to make too much of an effort, just let these sensations come to you.

- Now, watch as someone enters into this space. At first, you cannot tell who it is, but a feeling of complete and pure love rushes over you. You feel you have known this person for a lifetime.
- Watch as this person starts to approach you. With each breath he/she gets closer, until you notice the familiar shape of their face. It is you, standing before you,
- Smiling. Take note of the kindness in your own eyes, the gentility of this self before you, and the feeling of complete compassion this visage has for you. You are witnessing yourself as your beloved.
- As you picture yourself standing before you, smiling, accepting, open to possibility, see yourself speaking these words to you: “I am open to and accept radiant health from the universe. I am open to and accept your highest potential.”
- Let these words be repeated to you 10 times. After the tenth time, take 3 deep breaths, holding at the top of the inhale for 5 seconds, solidifying in yourself the knowledge of your personal power and the reality of unimaginable possibilities to be attracted into your life.
"You're not sick, you're thirsty. Don't treat thirst with medication." Dr. F. Batmanghelidj

We have stressed the importance of water, acid/alkaline balance and hydration throughout this entire website. We stress it here again for obvious reasons.

Every one of the body’s tissues and organs, as well as every one of the body’s sustaining processes, such as thinking, nerve function, blood circulation, digestion, locomotion and elimination, requires water in order to function properly. The lack of water is a common contributing factor to disease.

Drinking it and using it as a therapeutic tool are essential to healing.

Water is vital in our body, and a lack of it certainly has its consequences. Your body is roughly 70 percent water. The build of your muscles are about 75 percent water, blood 82 percent, brain cells 85 percent, and even your bones are 25 percent water. Your body loses approximately two quarters (64 ounces) of water per day through urination, perspiration, and even exhalation. The average adult can last as much as seven weeks without food, but not much more than five days without water.

F. Batmanghelidj, MD, highlights some main benefits of keeping your body well hydrated in his book titled “Water for Health, for Healing, for Life”:
- Water being the main lubricant in joints, helps prevent arthritis and back pain.
- Water increases efficiency of the immune system.
- Water prevents the clogging of arteries in the heart and brain, thus reducing the risk of heart attack and stroke.
- Water is needed to efficiently manufacture neurotransmitters in the brain, including serotonin and melatonin (for hormones). It also improves attention span, and can prevent attention deficit disorder (ADD).
• Water prevents memory loss as we age, reducing the risk of degenerative diseases such as Alzheimer’s.
• Water reduces the effects of aging, making our skin smoother and giving a sparkling luster.

**Importance**
Every system in the body depends on water. When you’re born you are about 90% water, as an adult that percentage can drop to about 60%. The average water content of different parts of the body is as follows: lungs 90%, blood 82%, brain 76%, muscles 75% and bones 25%. There is a correlation between the onset of disease and the amount of water within the body.

**Influences**

**How Much Water Do You Require?**
Every day you lose water through your breath, perspiration, urine, bowel movements and from other physiological functions. For your body to function properly, you must replenish its water supply by consuming adequate water and foods which are high in water. Adequate hydration reduces the likelihood of overeating and improves the function and health of human beings. The amount of adequate water depends on many factors including body composition, age, activity level, health status and the season. In general, you want to drink enough fluid so that you rarely feel thirsty and so you produce colourless or slightly yellow urine a day.

**Here are the most common ways of calculating that amount:**

**½ Body Weight in Ounces** - For a regularly active adult the general guideline is to drink ½ your body weight in ounces a day. For example, if you weigh 150 pounds you would plan to drink about 75 ounces or roughly 8 glasses of water a day.

**Replacement approach** - In general the total water that you require is equal to the amount that you lose plus the amount that the body requires for ongoing metabolic functions. You expel between 2 to 4 cups of water each day simply by normal breathing. This amount increases in cold weather or with increased activity. You also lose about 1 cup of water each time you urinate. Other loses of water including sweating – including the skin and feet and bowel movements. Factors such as increased activity level, hot weather, diarrhoea or vomiting and food choices impact the requirement for water.

Your need for water will also fluctuate based on your specific symptoms and diseases.

**Children** - Fluid requirements in children are based on body weight according to the Holliday-Segar method. Fluid requirements are better estimated by weight than age, to take into account the possibility of an underweight or overweight child. It is important to note fluid requirements are higher with increased losses (i.e. fever, diarrhoea, vomiting, sweating, etc.). Fluid restrictions may be required in some medical cases and those children should be carefully monitored by their physician. It is important, however, to maximize fluid intake within this restriction.

**When is it best to drink water?**
- Starting your day with a large glass of water before any other food or drink is a wonderful habit. Throughout the night toxins accumulate in the body and drinking water assists in flushing them out of the body.
- Always drink water before, during and after any prolonged or excessive exercise or if you are outside in the heat – whether just relaxing and enjoying the sun or working.
- Throughout the day plan to drink about 1 glass of water an hour. **Stop ½ hour before meals and resume about 1 hour after meals.**
The notion of drinking water while eating is NOT advised for most people. Water dilutes the hydrochloric acid in the stomach thus decreasing the stomach’s ability to breakdown food. Some people choose to drink water before a meal or with a meal as it fills up the stomach and decreases appetite. Although this is a common practice for those looking at reducing their weight, it is not advised. Water is essential to health yet, it has no calories or nutrients. Using water in this way is a contributing factor to rebound weight gain and can disrupt health on many levels.

**Factors that Influence Requirements**

- Food Choices.
- Exercise.
- Environment
- Illnesses or health conditions
- Pregnancy or breast-feeding

For more information see: Water, Hydration, Acid/Alkaline Balance
Wheatgrass

An Overview
Wheatgrass juice is nature's finest medicine. It is our signature elixir here at Hippocrates. It is a powerful concentrated liquid nutrient. Two ounces of wheatgrass juice has the nutritional equivalent of five pounds of the best raw organic vegetables. For example, wheatgrass has twice the amount of Vitamin A as carrots and is higher in Vitamin C than oranges! It contains the full spectrum of B vitamins, as well as calcium, phosphorus, magnesium, sodium and potassium in a balanced ratio. Wheatgrass is a complete source of protein, supplying all of the essential amino acids, and more. It has about 20% of total calories coming from protein. This protein is in the form of poly peptides, simpler and shorter chains of amino acids that the body uses more efficiently in the blood stream and tissues.

In addition to flooding the body with therapeutic dosages of vitamins, minerals, antioxidants, enzymes, and phytonutrients, wheatgrass is also a powerful detoxifier, especially of the liver and blood. It helps neutralize toxins and environmental pollutants in the body. This is because Wheatgrass contains beneficial enzymes that help protect us from carcinogens, including Superoxide Dismutase (SOD), that lessens the effects of radiation and digest toxins in the body. It cleanses the body from head to toe of any heavy metals, pollutants and other toxins that may be stored in the body's tissues and organs.

Guests in the Life Transformation Program drink two ounces of wheatgrass juice twice a day. We also use wheatgrass in other therapeutic applications as well. The wheatgrass juice must be consumed fresh - within fifteen minutes of juicing for the best results. The juice should always be taken undiluted and on an empty stomach so the nutrients can be absorbed more efficiently. Powdered and freeze dried wheatgrass supplements are nowhere near as effective as fresh wheatgrass juice. We did a study in conjunction with MIT awhile back when we were still in Boston.
The study revealed that wheatgrass supplements and freeze dried powders are only two percent as effective as fresh juiced wheatgrass when it is consumed within fifteen minutes. These nutrients quickly begin to oxidize (break down) shortly after juicing.

When it is consumed fresh it is a living food and has bio-electricity. This high vibration energy is literally the life force within the living juice. This resource of life-force energy can potentially unleash powerful renewing vibrations and greater connectivity to one’s inner being. These powerful nutrients can also prevent DNA destruction and help protect us from the ongoing effects of pre-mature aging and cellular breakdown. Recent research shows that only living foods and juices can restore the electrical charge between the capillaries and the cell walls which boosts the immune system. When it is fresh, wheatgrass juice is the king of living juices.

Among other things wheatgrass juice is particularly high in chlorophyll. Wheatgrass cleanses and builds the blood due to its high content of chlorophyll. Chlorophyll is the first product of light and therefore contains more healing properties than any other element. All life on this planet comes from the sun. Only green plants can transform the sun’s energy into chlorophyll through the process of photosynthesis. Chlorophyll is known as the ‘life-blood’ of the plants. This important phytonutrient is what your cells need to heal and to thrive. Drinking wheatgrass juice is like drinking liquid sunshine.

Chlorophyll carries high levels of oxygen (among other things) which is especially powerful in assisting the body to restore abnormalities. The high content of oxygen in chlorophyll helps deliver more oxygen to the blood. We see red blood cell counts rise and blood oxygen levels rise very quickly with the regular drinking of wheatgrass juice and using wheatgrass juice implants. This marker is a key indicator of health recovery for abnormalities, ailments and disease. Oxygen is vital to many body processes, especially for the brain which uses 25% of the oxygen supply. This high oxygen helps support a healthy body

**Benefits of Wheatgrass**

**Increases red blood-cell count and lowers blood pressure.**

It cleanses the blood, organs and gastrointestinal tract of debris. Wheatgrass also stimulates metabolism and the body’s enzyme systems by enriching the blood. It also aids in reducing blood pressure by dilating the blood pathways throughout the body.

Stimulates the thyroid gland, correcting obesity, indigestion, and a host of other complaints.

Restores alkalinity to the blood.

The juice’s abundance of alkaline minerals helps reduce over-acidity in the blood. It can be used to relieve many internal pains, and has been used successfully to treat peptic ulcers, ulcerative colitis, constipation, diarrhoea, and other complaints of the gastrointestinal tract.

**Is a powerful detoxifier, and liver and blood protector.**

The enzymes and amino acids found in wheatgrass can protect us from carcinogens like no other food or medicine. It strengthens our cells, detoxifies the liver and bloodstream, and chemically neutralizes environmental pollutants.

Fights tumours and neutralizes toxins. Recent studies show that wheatgrass juice has a powerful ability to fight tumours without the usual toxicity of drugs that also inhibit cell-destroying agents. The many active compounds found in grass juice cleanse the blood and neutralize and digest toxins in our cells.

**Contains beneficial enzymes.**

Whether you have a cut finger you want to heal or you desire to lose five pounds...enzymes must do the actual work. The life and abilities of the enzymes found naturally in our bodies can be
extended if we help them from the outside by adding exogenous enzymes, like the ones found in wheatgrass juice. Don’t cook it. We can only get the benefits of the many enzymes found in grass by eating it uncooked. Cooking destroys 100 percent of the enzymes in food.

**Has remarkable similarity to our own blood.**
The second important nutritional aspect of chlorophyll is its remarkable similarity to haemoglobin, the compound that carries oxygen in the blood. Dr. Yoshihide Hagiwara, president of the Hagiwara Institute of Health in Japan, is a leading advocate for the use of grass as food and medicine. He reasons that since chlorophyll is soluble in fat particles, and fat particles are absorbed directly into the blood via the lymphatic system, that chlorophyll can also be absorbed in this way. In other words, when the "blood" of plants is absorbed in humans it is transformed into human blood, which transports nutrients to every cell of the body.

**Restores fertility and promotes youthfulness.**
Can double your red blood cell count just by soaking in it. Renowned nutritionist Dr. Bernard Jensen found that no other blood builders are superior to green juices and wheatgrass. In his book *Health Magic through Chlorophyll from Living Plant Life* he mentions several cases where he was able to double the red blood cell count in a matter of days merely by having patients soak in a chlorophyll-water bath. Blood building results occur even more rapidly when patients drink green juices and wheatgrass regularly.
DBM PROTOCOL – ADJUNCT TREATMENT - WHEATGRASS

Rectal Implant
When used as a rectal implant, reverses damage from inside the lower bowel. An implant is a small amount of juice held in the lower bowel for about 20 minutes. In the case of illness, wheatgrass implants stimulate a rapid cleansing of the lower bowel and draw out accumulations of debris.

- Wheatgrass is used for increasing production of haemoglobin; improving blood sugar disorders, such as diabetes; preventing tooth decay; improving wound healing; and preventing bacterial infections.
- It is also used for removing deposits of drugs, heavy metals, and cancer-causing agents from the body; and for removing toxins from the liver and blood.
- Wheatgrass is also used to treat various disorders of the urinary tract, including infection of the bladder, urethra, and prostate; benign prostatic hypertrophy (BPH); kidney stones; and in colonic-irrigation therapy.
- Other uses include treatment of respiratory tract complaints, including the common cold, cough, bronchitis, fever, and sore throat; tendency toward infection; gout; liver disorders; ulcerative colitis; joint pain; and chronic skin problems.
- Wheatgrass is used for cancer and arthritis in alternative treatment programs. Wheatgrass contains a lot of chlorophyll, the chemical in plants that makes them green and also allows them to make energy from sunlight through photosynthesis. Research indicates that chlorophyll might fight cancer and arthritis.

Wheatgrass juice is best drunk only when fresh and taken on an empty stomach immediately after extraction. Add to daily juice.
**A review**

Diabetes mellitus results in neuronal damage caused by increased intracellular glucose leading to oxidative stress. Recent evidence revealed the potential of ginger for reducing diabetes-induced oxidative stress markers. This study revealed a protective role of ginger on the diabetic brain via reducing oxidative stress, apoptosis, and inflammation. These results represent a new insight into the beneficial effects of ginger on the structural alterations of diabetic brain and suggest that ginger might be a potential therapeutic strategy for the treatment of diabetic-induced damage in brain.

Recent research looked at ginger consumption on glycemic status, lipid profile and some inflammatory markers in patients with type 2 diabetes mellitus. Ginger improved insulin sensitivity and some fractions of lipid profile and reduced inflammation in type 2 diabetic patients. Therefore, ginger can be considered as an effective treatment for prevention of diabetes complications.

Ginger has been used worldwide for many centuries in cooking and for treatment of several diseases. The main pharmacological properties of ginger include anti-inflammatory, antihyperglycaemic, antiarthritic, antiemetic and neuroprotective actions. Recent studies demonstrated that ginger significantly enhances cognitive function in various cognitive disorders as well as in healthy brain.
Dr. Ali Majid states that in his experience, turmeric and ginger are the safest and most potent anti-inflammatory spices. Both spices are also quite inexpensive if purchased properly. In his clinical work with patients with the common cold, for example, he finds turmeric — one-half teaspoon taken with vegetable or grapefruit juice three times a day — more effective than other spice remedies.

Turmeric, as well as ginger, are DAB’s highest priorities in the care of people with anti-inflammatory and autoimmune disorders and diabetes.

Fresh ginger is sold in grocery stores and is recognized as the beige-colored and knotted underground stem (rhizome) of the plant Zingiber officinale. It is a native plant in Asia where it has been used as a culinary spice for nearly 5,000 years. Like turmeric, ginger has a long history of medicinal uses in the ancient Asian medical traditions for treating a host of disorders, including gastrointestinal disorders (nausea, digestive-absorptive disorders, diarrhea, motion sickness, nausea of pregnancy, and others), arthritis, heart disease, headache, and chronic infections. All those disorders are now recognized as inflammatory in nature. In practice, ginger remedies are used as extracts, tinctures and oils. At present ginger is found in a variety of beverages and foods, including ginger water, ginger ale, ginger bread, ginger snaps, and ginger sticks. Gingerol is a well-characterized bioactive ingredient of ginger. HOWEVER, these forms of ginger will serve no purpose medicinally as the amount of sugar and other additives contained in these foods will cancel out the positive effects of the ginger.

Ginger (Zingiber officinale) is well-known for its effectiveness in treating nausea and vomiting, but it is also effective as a digestive aid and in the treatment of inflammatory conditions. To explore the characteristics, medicinal uses and prescribing considerations of this herb in more detail, check out the references indicated.

**Characteristics**
- **Common Names:** Ginger
- **Family:** Zingiberaceae
- **Habitat:** Zingiber officinale is native to Asia and is widespread in the tropics.
- **Parts Used:** Root/rhizome
- ** Constituents:** Oleoresins (pungent principle; gingerols and shogaol)
- **Medicinal Actions:** warming stimulant tonic, aromatic, anti-inflammatory, antiemetic, carminative, digestive stimulant, cholagogue, cardiotonic, antithrombotic (high doses), rubefacient, respiratory stimulant, diuretic, spasmylytic, antiseptic, emmenagogue, pungent, sialagogue, sedative, diaphoretic, analgesic, antimalarial, antimicrobial, cardiac tonic

**Historical Uses:**
Zingiber has historically been used for dyspepsia, vomiting, cholera, and malaria. It is thought to have been derived from the Garden of Eden.

**Medicinal Uses:**
- **Digestive Aid**
  - weak digestion, atonic dyspepsia, colic, gas, cramping, anorexia
- **Inflammatory Conditions**
  - arthritis, rheumatism, bronchitis
- **Nausea and Vomiting**
  - vertigo, motion sickness, morning sickness in pregnancy (see Cautions and Contraindications), post-operative nausea
Drug-Herb Interactions.

- **Anesthesia, General** - Beneficial or supportive interaction with professional management, prevention or reduction of drug adverse effect; Zingiber reduces post-operative nausea and vomiting (PONV) caused by anesthetics. Possible alternative to pharmaceuticals in moderate PONV. Insufficient activity for emetic rescue in acute cases. Consider pretreatment in elective surgery patients.

- **Antiplatelet Agents** - Potential or theoretical adverse interaction of uncertain severity; This is based on Zingiber's "NSAID-like" activity (clinical occurrence and significance not established, increase risk of bleed negligible). Professional monitoring advised but preferably avoid.

- **Cisplatin and Emetogenic Antineoplastic Chemotherapies** - Beneficial or supportive interaction with professional management, prevention or reduction of drug adverse effect; Zingiber reduces acute nausea and vomiting associated with these drugs. Consider pretreatment and post-treatment (up to 24 hours) for nausea.

- **Nonsteroidal Anti-inflammatory Drugs (NSAIDs) and Analgesic Antiarthritics** - Beneficial or supportive interaction not requiring professional management, prevention or reduction of drug adverse effects; Zingiber given as an adjuvant helps to increase symptom relief and reduces side effects of drug allowing for lower doses.

- **Phenprocoumon and Related Oral Vitamin K Antagonist Anticoagulants** - Potential or theoretical adverse interaction of uncertain severity; Zingiber has a theoretical additive effect on hemostasis (one case report, conflict with clinical data, suggests risk generally overstated). Monitor INR.

Ginger is used in many of DBM programs. Used in juices, smoothies, teas, soups and salads.

Health Benefits of eating ginger

Ginger has a long history of use for relieving digestive problems such as nausea, loss of appetite, motion sickness and pain.

The root or underground stem (rhizome) of the ginger plant can be consumed fresh, powdered, dried as a spice, in oil form or as juice. Ginger is part of the Zingiberaceae family, alongside cardamom and turmeric, and is commonly produced in India, Jamaica, Fiji, Indonesia and Australia.

Consuming fruits and vegetables of all kinds has long been associated with a reduced risk of many lifestyle-related health conditions.

Many studies have suggested that increasing consumption of plant foods like ginger decreases the risk of obesity, diabetes, heart disease and overall mortality while promoting a healthy complexion and hair, increased energy, and overall lower weight.

1) Digestive issues

The phenolic compounds in ginger are known to help relieve gastrointestinal irritation, stimulate saliva and bile production, and suppress gastric contractions and movement of food and fluids through the GI tract.

2) Nausea

Chewing raw ginger or drinking ginger tea is a common home remedy for nausea during cancer treatment.

Ginger tea can help relieve nausea and aid cold recovery.
Pregnant women experiencing morning sickness can safely use ginger to relieve nausea and vomiting, often in the form of ginger lozenges or candies. During cold weather, drinking ginger tea is a good way to keep warm. It is diaphoretic, which means that it promotes sweating, working to warm the body from within. As such, in the wake of a cold, ginger tea is particularly useful.

**To make ginger tea at home**, slice 20-40 g of fresh ginger and steep in a cup of hot water. Adding a slice of lemon or a drop of honey adds flavor and additional benefits, including vitamin C and antibacterial properties.

See other recipes in Nutrition For Life – Teas, that include ginger.

3) Pain reduction
A study involving 74 volunteers carried out at the University of Georgia found that daily ginger supplementation reduced exercise-induced muscle pain by 25%.

Ginger has also been found to reduce the symptoms of dysmenorrhea (severe pain during a menstrual cycle). In one study, 83% of women taking ginger capsules reported improvements in pain symptoms compared to 47% of those on placebo.

4) Inflammation
Ginger has been used for centuries to reduce inflammation and treat inflammatory conditions. A study published in *Cancer Prevention Research* journal found that a ginger root supplement administered to volunteer participants reduced inflammation markers in the colon within a month. Researchers on the study explained that by decreasing inflammation, the risk of colon cancer is also likely to decrease. Ginger has also shown promise in clinical trials for treating inflammation associated with osteoarthritis.

**Ginger - nutritional profile**
Using fresh ginger is an easy way to flavor foods and drinks without adding unnecessary sodium. Since it is often consumed in such small amounts, ginger does not add significant quantities of calories, carbohydrate, protein or fibre.

Ginger does contain numerous other anti-inflammatory and antioxidant compounds beneficial to health such as gingerols, beta-carotene, capsaicin, caffeic acid, curcumin and salicylate.

**Ginger provides a variety of vitamins and minerals:**
- Carbohydrate - 17.77 g
- Dietary Fiber - 2 g
- Protein - 1.82 g
- Dietary Fiber - 2 g
- Sugars - 1.7 g
- Sodium - 13 mg
- Vitamin B6 - 0.16 mg
- Calcium - 16 mg
- Iron - 0.6 mg
- Vitamin C - 5 mg
- Potassium - 415 mg
- Magnesium - 43 mg
- Phosphorus - 34 mg
- Zinc - 0.34 mg
- Folate - 11 mcg
- Riboflavin - 0.034 mg
- Niacin - 0.75 mg
- Iron - 0.6 mg

Figures above are per 100g of ginger.

**How to incorporate more ginger into your diet**
- Ginger pairs well with many different foods, oranges, melon, pumpkin and apples. When buying fresh ginger, look for a root with smooth, taut skin (no wrinkles) and a spicy aroma.
- Store fresh ginger in a tightly wrapped plastic bag in the refrigerator or freezer.
- Fresh ginger should be peeled and grated before use. In most recipes, one-eighth teaspoon of ground ginger can be substituted for one tablespoon of fresh grated ginger.
- Ground ginger can be found in the herbs and spices section of most grocery stores.

**Quick tips:**
- Add fresh ginger into your next smoothie or juice
- Add fresh or dried ginger to your next stir-fry or homemade salad dressing
- Steep peeled fresh ginger in boiling water to make your own ginger tea
- Use fresh or dried ginger to spice up any recipe.

**Potential health risks of consuming ginger**
- Natural ginger is safe for most people and causes little to no known side effects. It may exacerbate symptoms of acid reflux in some people. The effectiveness and side effects from ginger supplements will vary by brand and formulation.
- It is the total diet or overall eating pattern that is most important in disease prevention and achieving good health. It is better to eat a diet with a variety than to concentrate on individual foods as the key to good health

**Source:**