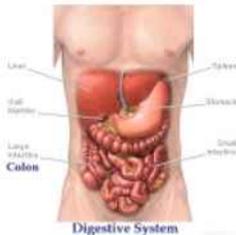


## CERTIFIED HEALTH & NUTRITION COUNSELOR ONLINE COURSE - SESSION 14:

### • Alternative Therapies

#### COLON THERAPIES: COLONICS, COLEMA, ENEMAS, COLON CLEANSSES



#### COLON CLEANSING

Retained debris in the colon leads to the absorption of toxins, resulting in systemic intoxication (poisoning). Symptoms of this condition can include mental confusion, depression, irritability, fatigue, gastrointestinal irregularities, and even allergic reactions such as hives, sneezing, and coughing. Many nutritionists and researchers believe that this toxicity can eventually lead to more serious disorders. Colon cleansing can rid the colon of debris, and help prevent and treat a variety of health problems.

#### FASTING

The best means of removing toxins and wastes from the body is a fast. This should be the first step in any colon-cleansing program. In addition to following a fast, use a wheat grass, fresh lemon juice, garlic, or coffee enema. If bowel problems or related symptoms are chronic, repeat this program once monthly.

#### NUTRIENTS

The following supplements aid in cleansing the colon:

- Fiber - Ground flaxseeds, oat bran, and psyllium seed husks are good sources. Essential for a clean colon. Not habit forming.
- Acidophilus - Take on an empty stomach. Restores the normal “friendly” bacteria in the colon. If you are allergic to dairy products, use a nondairy formula.
- Apple pectin – Source of quality fiber. Helps to detoxify heavy metals.
- Wheat grass Juice or Capsules – To assist in keeping the colon clear of toxic debris and aid in healing of an inflamed colon.
- Aloe Vera Juice – Heals colon inflammation. Use a pure form.
- Vitamin C – Protects the body from pollutants. Use a buffered or esterified form.
- Herbal Laxative/Cascara Sagrada/Other – Helps remove debris from the colon and detoxifies the liver.

#### COLONICS

Colon lavage was first recorded 1500 BC, in the ancient Egyptian document, Ebers Papyrus which dealt with the practice of medicine. These enemas were described as the infusion of aqueous substances into the large intestine through the anus. Hippocrates (4<sup>th</sup> and 5<sup>th</sup> century BC) recorded using enemas for fever therapy. Galen (2<sup>nd</sup> century AD), also recognized and was a proponent of the use of enemas. Pare in 1600 AD, offered the first distinction between colon irrigation and the popular enema therapy of that age.

Colon therapy since the turn of the century has experienced periods of popularity alternating with periods of reaction. The factors that contributed mainly to this ambivalence primarily were due to the practice of colon hydrotherapy by the untrained and unskilled, which was very detrimental to its professional growth. When the therapy gained the attention of such physicians as James A. Wiltsie, MD and Joseph E. G. Waddington, MD, great value was placed on the therapeutic benefits of this modality. The philosophy attributed to colon therapy by certain physicians of this era was depicted by Dr. Waddington: “Abnormal functioning of the intestinal canal is the precursor of much ill health, especially of chronic disease conditions. Restoration of physiologic intestinal elimination is often the first, but too often ignored, important preliminary to eventual restoration of the health in general.” Dr. Wiltsie contends that “our knowledge of the normal and abnormal physiology of the colon, and of its pathology and management, has not kept pace with that of many organs and systems of the body. As long as we continue to assume that the colon will take care of itself, just that long will we remain in complete ignorance of perhaps the most important source of ill health in the whole body”.

In summary, through misconceptions, misunderstandings and preconceived emotionalism, controversy has prevailed, but accomplished nothing. Historically, we recognize two unequivocal conclusions. First, there is something of value to this modality or it would have been conclusively withdrawn; second, that through lack of professional control and study, colon hydrotherapy never received the attention and recognition it justly deserves.

Today, with modern technological advancements in colon hydrotherapy instrumentation, particularly with regard to safety, along with educated and skilled therapists, colon hydrotherapy has become a valuable adjunctive modality to the physician in treating disease. At the time of this writing, colon hydrotherapy is still relatively unknown and misunderstood. Combined with sound nutrition, exercise and a positive mental and

spiritual outlook, colon hydrotherapy can play an important role in achieving and maintaining vibrant health.

### **Definition:**

Colon hydrotherapy is an extended and more complete form of an enema. The concept involves the mechanical process of infusing warm filtered water into the rectum with the objective of cleansing and balancing the colon. This procedure removes fecal material from colon walls and dilutes the bacterial toxin concentration in the large intestine. The therapeutic effects of colon hydrotherapy are improved muscle tone which facilitates peristaltic action and enhances the absorption of nutrients from the cecum and ascending colon while minimizing the absorption of toxic waste material. The cleansing effects of colon hydrotherapy reduce stagnation and subsequent bacterial proliferation in the colon and maintain harmony of the intestinal flora in promoting optimal colon health.

Colon hydrotherapy is not a cure-all, but an important adjunctive therapy in the overall health care of the patient. The trained and skilled colon therapist alternately fills and empties the patient's colon with temperature and pressure regulated water. While on the empty cycle (only) the colon therapist gently manipulates the abdomen enhancing the removal of waste material.

The standard enema and colon hydrotherapy treatment both utilize the infusion of aqueous substances into the rectum. A standard enema involves the injection of water (one way) into the colon, which is retained and evacuated by the patient. Colon hydrotherapy is an instrument controlled continual bathing of the colon for cleansing and therapeutic purposes. The patient is not involved in the emptying of material from the rectum. There is no offensive odor or health risk to those in contact with sick patients as with enemas and bedpans and the dignity of the patient is maintained. The enema's cleansing ability is limited to the area of the rectosigmoid and shorter periods of time because of the body's natural wish to expel material from the rectum. Colon hydrotherapy extends beyond the natural expulsion area to offer greater cleansing and therapeutic benefits.

Variations in enema therapy include: The cleansing enema softens the feces and promotes evaluation of the bowel. The retention enema softens the feces and lubricates the lower bowel and rectum. The carminative enema is used primarily to relieve flatus (gas). The nutrient enema provides liquid nutrition for repaid absorption by the colon and rectum.

Colon hydrotherapy in itself encompasses all of these forms of enema therapy and the benefits of a closed system can be attained. Various prescribed supplemental solutions, i.e., saline, kayxellate, etc., or others may be implemented through the colon hydrotherapy (Model 1085) instrumentation (as prescribed by a Physician).

Colon hydrotherapy not only removes impactions, parasites, intestinal flatus and cellular debris, but is thought to cleanse and rejuvenate the portion of the immune system that resides in the intestinal tract (recent European studies indicate a greater portion located in the intestines than previously recognized). In summary, colon hydrotherapy provides tubular and cellular drainage outwardly from the rectum and inwardly via the portal and mesenteric lymphatic system.

### **Why Colon Hydrotherapy?**

Diseases and functional disturbances of the digestive organs are the most frequently complained about problems today. The health of most organs as well as our overall well being depends upon how well our bowel (intestine) functions. A change in diet after many years of wrong eating habits does not assure optimal colon health.

### **Consider these current Medical Facts:**

1. Over 400 million dollars are spent annually on laxatives in the U.S.
2. Over 70 million Americans suffer from bowel problems.
3. 100,000 people undergo colostomies each year in the U.S.
4. Worms outrank cancer as man's deadliest enemy on a worldwide basis.
5. Colon cancer is the second leading cancer killer in the U.S.
6. Over 100,000 Americans die annually due to this disease.

These facts demonstrate that the medical profession recognizes the important part, which the colon plays in health and disease. In all sickness, the status of the bowel is inquired into as a matter of routine and a laxative or enema prescribed when indicated.

Research has shown that regular use of refined carbohydrates and lack of fiber in the diet increases the transit time of bowel wastes and stimulate putrefaction in the colon. Both of these factors have been linked to constipation and certain bowel disease such as: Diverticulitis, colitis, and colon cancer which have a high success rate for cure with surgical management when detected early. The American Cancer Society has provided evidence in recent years which suggests that bowel cancer is caused by environmental

agents such as: pesticides and herbicides sprayed on crops, hormones and antibiotics fed to animals and carcinogenic agents in the air we breathe. Periodic cleansing could minimize exposure of these potential carcinogens to the colon wall.

### **Pros:**

1. Laxatives act as chemical irritants and stimulate the muscular walls of the colon to abnormally contract to expel the irritating substances. It is very easy to become dependent upon these drugs and permanently destroy the normal ability of the colon to eliminate naturally on its own accord. The oral route of administration is the least optimal method of evacuation of the large intestine. Very important digestive processes occurring higher up in the alimentary tract (stomach and small intestine) are interfered with. Most laxatives and other cathartics precipitate dehydration in the patient. Colon hydrotherapy alternately fills and empties the colon and would improve the hydration status of the patient.
2. Electrolytes, or minerals, are elements that are responsible for cell function throughout the body. When the body is properly nourished with good quality organic foods containing sodium, potassium and magnesium, the electrolyte level of the colon is replenished as part of the diet. The Colon Hydrotherapy (Model 1085) Instrumentation allows for supplementation via the rectum (saline, kayxellate, etc.) at the direction of the physician.
3. The intestinal flora are billions of microscopic organisms including: bacteria, yeast, fungi and viruses which inhabit the bowel and play a very important role in health and disease. Bacteria synthesize valuable nutrients and proper balance of these microorganisms is essential to the healthy colon. The large intestine is producing bacteria on a daily basis and adherence to proper nutrition will enhance the colon's ability to maintain balance following colon hydrotherapy. The physician may elect to prescribe lacto-acidophilus/bacillus culture to facilitate this process or incorporate low fat dairy products (yogurt, etc.) into the patient's dietary program.
4. Following a colon hydrotherapy treatment, the instrument is thoroughly cleansed and disinfected. A potent germicidal solution is used to properly disinfect the instrument and its contents are not harmful to the colon environment. When the disinfection procedure is completed, the instrument is generously cleansed with water clearing the germicidal solution completely from the instrument. The colon hydrotherapy instrumentation contains a check valve, which prevents wastewater from returning to the water supply. In addition, the application of a disposable unit consisting of: waste hose, water line, speculum and obturator which is discarded following each treatment, ensures against any possible contamination to the patient.

### **Cons:**

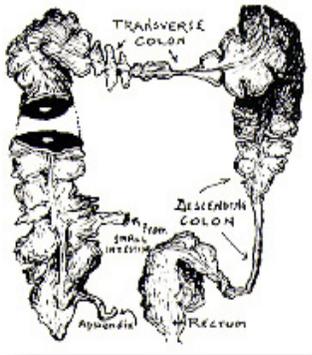
1. Possibility of weakening the colon from too many sessions.
2. Dependency.
3. Loss of minerals (leaching) from bones and teeth from too many sessions.
4. Uncomfortable both physical and emotional.

### **Indications for Colon Hydrotherapy**

The history and physical examination of the patient (by the physician) would dictate the need for colon hydrotherapy in the overall treatment plan. Colon hydrotherapy has been shown to be beneficial for the following conditions:

1. Acute Fecal Impaction
2. Constipation
3. Colitis
4. Diarrhea
5. Parasitic Infections
6. Atonic Colon
7. Mucous Colitis
8. Fever Therapy
9. Hyper/Hypothermia
10. Paraplegics & Quadriplegics (Bowel Training)
11. Prevention
12. Abdominal Distention/Flatulence
13. Hemorrhoids (mild to severe)
14. Intestinal Toxemia
15. Nutrient Supplementation via Rectum
16. Diverticulosis
17. Balance Physiologic Flora of Large Intestine
18. Preparation for diagnostic study of the large intestine:

- 19. Barium Enema
- 20. Sigmoidoscopy & Colonoscopy
- 21. Surgery



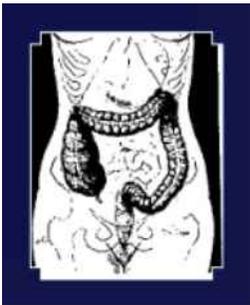
**AN UNHEALTHY COLON**

Through detoxification, proper diet and supplementation, vitality and health can be yours.



**ATONIC CONSTIPATION**

Abnormally distended descending colon and sigmoid colon. Atonicity or distention of the lower descending sigmoid commonly caused by excessive use of enemas and laxatives. Such conditions of this section of the colon will cause pressure on the left ovary, bladder, uterus, and kidney.



**BOWEL ADHESIONS**

Adhesions occur a great many times after surgery and will interfere mechanically with the peristaltic wave of the colon. They are common sights after surgeries: gall bladder, duodenum, appendectomy, hysterectomy, cesarean section, etc.



**PTOSIS**

Ptosis of the first, second, third, and fourth degree are common mechanical conditions. Third and fourth degree ptosis cause such symptoms as lower back pain, frequent elimination of urine and pressures on uterus, ovaries, prostate, etc.



**SPASTIC CONSTIPATION**

Pinching down of the descending colon. Spastic irritability: the descending colon is commonly the site of ulcerative colitis, mucous colitis, and irritable run colitis. This spastic colon also causes constipation, alternation constipation, or running off of mucous.

### Indications under Prescription and Direct Physician Supervision:

1. Diverticulitis
2. Ulcerative Colitis
3. Crohn's Disease
4. On Site Preparation Following Trauma
5. Early Pregnancy (up to 4 months)

### The Benefits of Body Cleansing:

1. Colon stimulation and rehabilitation
2. Cleanses the entire large intestine from the rectum to the cecum, providing relief and prevention of chronic constipation.
3. Facilitates the removal of stagnant fecal material and subsequent proliferation of bacteria and their toxins, along with gas, mucus, parasites and cellular debris, allowing the large intestine to perform its natural functions of absorption and assimilation optimally.
4. Is an effective therapy for acute fecal impactions.
5. An excellent screening device for early detection of colon cancer.
6. A valuable aid in promoting accuracy of their diagnostic colon procedures, i.e. barium enema, sigmoidoscopy and colonoscopy.
7. Would be an effective part of the preparation procedure prior to bowel surgery, promoting an optimal surgical field, and potentially decreasing the risk of post-operative complications due to the presence of bacteria at the suture line.
8. Would dramatically reduce problems associated with bowel function secondary to general anesthesia following surgery.
9. Would minimize defecation in the surgical suite while saving valuable surgical time.
10. Extremely useful to alcohol – drug detoxification as an aid in the internal cleansing process. Enhances the elimination of toxins from the large intestine and circulatory system.
11. A natural solution vs. chemical application.



### COLEMA

The Colema Board® is usually setup in the bathroom by placing the evacuation end (splashguard) over the toilet and the other end over a stool or chair. The bucket is placed on a counter near by, or on the tank of toilet. Another option is to place both ends of the board over five gallon buckets (metric conversion), so that the Colema® may be taken anywhere.

### Extra Items Needed:

1. Aside from the Board (and included tubing assembly and tips) and a 5 gallon bucket (or a similar container), you may want to obtain some extra items to make your Colema® experience more comfortable and relaxing.
2. Comfort Pad - placed on the Board and provides cushioning for your back while you take your Colema (which take about 45 minutes to 1 hour).
3. Lubricant - KY-Jelly® or a lubricant salve to apply to the rectal tip for easy insertion (do not use petroleum products as they will clog the holes of the tip).
4. Colander - to place in the toilet before taking the Colema® so that you can see what material comes out (a kitchen accessory).
5. Towel & Pillow - A towel may be placed on the board (where you will lie or over the comfort pad.) A pillow may be placed at the head end of the board to provide extra support and comfort.
6. Reading Materials - A book or magazine may be read while on the Board if you so choose. (Optional)
7. Candles & Music - To give a calm relaxing atmosphere to your Colema experience, you may add a few candles and soft, relaxing music in the background.

### Water Purification Suggestions:

We suggest using only purified water (as opposed to tap or municipal sources). Here are some suggestions for purifying your water for the Colema® procedure:

1. BOIL: Bring several gallons of water to a boil and let cool down before using.
2. FILTER: A home water filter or purifier may be used.
3. You may also purchase a 5-gallon container of purified water and heat half and mix with the other half. Cool to body temperature.
4. FILLING YOUR BUCKET: You can fill your bucket by using some of the following suggestions:
  - Shower Extension
  - Pitcher
  - Fill bucket in tub and lift to position. (Do not attempt if you are weak.)

## Solutions for the Water:

Here are some suggested ingredients you may use in your Colema water solution:

1. Coffee: 3 Tablespoons of ground coffee in 1 quart of water – Bring to a boil and simmer 15 minutes. Strain through strainer and cloth, put in bucket (5 gallon) and add water to make 5 gallons. Coffee - Stimulates the colon wall and helps to promote peristaltic action. However, a word of caution: If you have a toxic liver do NOT use coffee or if necessary, use a diluted solution.
2. Epsom Salts: 1 Tablespoon of Epsom Salts dissolved in 5 gallons of water.
3. Lemon Juice: ¼ cup strained Lemon Juice in 5 gallons of water.
4. Garlic: 4 cloves of garlic – put into blender with 1 cup of water. Strain and add ½ cup of Detoxificant #16 (put into bucket and fill with water).
5. Catnip: 2 cups of catnip in 2 cups of water – bring to a boil and boil 3 minutes. Strain and put in bucket and fill with water. This has a particularly calming effect on the system. (Recommended for children).

## Other Preparations:

1. Herbal tinctures (such as Black Walnut and Black Cohosh) may be used for parasite removal, Wheat Grass Juice helps to re-establish healthy intestinal flora, Hydrogen Peroxide (3%) (20 drops).
2. Note: Most water temperatures for colonics range from cold to very warm, but should be a comfortable temperature for the user.



## Cleaning Tips:

### Tips & Tubing:

Plastic tips are disposable (designed for one use only). Stainless Steel Tips are reusable and may be cleaned with a bleach and water solution, germicidal solution and/or boiled to sterilize. The tubing may be cleaned with a bleach and water solution, then rinsed with fresh water. It is important to hang to dry for several hours before storing.

## Board:

Gently wipe the surface areas of the board with your choice of cleaning solution:

1. A bleach and water solution
2. Germicidal cleaner
3. A natural disinfectant cleaner
4. The comfort pad (included with the Deluxe Board only - available for purchase separately) may be cleaned with similar solutions as noted above.

## Cautions:

1. We do NOT recommend submersing the Boards in a tub filled with water.
2. We do NOT recommend abrasive cleaners.

## ENEMAS

Over time, toxic wastes can accumulate in the colon and liver, and then circulate throughout the body via the blood stream. A clean and healthy colon and liver, then, are essential for the health of all the organs and tissues of the body.

## Definition:

There are two types of enemas – the retention enema and the cleansing enema. The primary action of the retention enema, which is held in the body for about fifteen minutes, is to help rid the liver of impurities. The cleansing enema, which is retained for only a few minutes, is used to flush out the colon.

## Pros:

1. A coffee retention enema is quite helpful during a serious illness, after hospitalization, and after exposure to toxic chemicals. This enema can also be used during fasts to relieve the headaches sometimes caused by a fast-induced release of toxins.
2. Anything taken by mouth can be taken in an enema if there is severe vomiting. This will allow the individual to absorb the herb/mineral without the worry of nausea.

**Cons:**

1. When using any enema, keep in mind that they should never be used if there is rectal bleeding. In such a case, contact a physician immediately.
2. If you experience tension or spasms in the bowel while using an enema, try using warmer water – 99°F is a good temperature – to help relax the bowel. If the bowel is weak or flaccid, try using colder water – 75°F to 80°F – to help strengthen it.
3. Remember that excessive use of coffee enemas over six months or more may deplete the body's stores of iron, as well as other minerals and vitamins, causing anemia. Do not use coffee enemas for longer than four to six weeks at a time. If you develop anemia during treatment – or whenever you use this enema daily for a long period of time – be sure to take desiccated liver tablets as directed on the label.
4. Do not use hot water or very cold water.
5. Consult your physician before giving enemas to children, the elderly, the very ill, persons with hypertension, persons with bowel disease, or pregnant women.
6. If constipation persists after giving an enema, check with your physician.
7. Some people cannot tolerate coffee enemas as they spasm. Garlic enemas tend to be safer for first timers.

**IDEAL SOLUTION FOR AN ENEMA**

1. Take 3 buds of garlic; put in a blender with three cups of distilled water; blend until liquid. Use ½ cup of solution to 2 quarts of warmed water.
2. The addition of ½ teaspoon to one teaspoon of an organic soap, which is of a surfaction, can greatly help in softening. Sometimes the addition of an herb such as Lobelia or Chamomile is also very relaxing.
3. Do not worry if the water does not come out immediately or at all many times: the retaining of water is helping with dehydration, although you can use the last water entered into the body at a cooler temperature, which will cause rapid expulsion, if need be. Relieve yourself when there is discomfort.

**COFFEE RETENTION ENEMA**

When used as a retention enema – an enema that is held in the body for a specified period of time – coffee does not go through the digestive system, and does not affect the body as a coffee beverage does. Instead, the coffee solution stimulates both the liver and the gallbladder to release toxins, which are then flushed from the body.

**Procedure:**

1. To make the coffee enema solution, place 2 quarts of steam-distilled water in a pan, and add 6 heaping tablespoons of ground coffee (do not use instant or decaffeinated). Boil the mixture for fifteen minutes, cool to a comfortable temperature, and strain. Use only 1 pint of the strained coffee at a time, and refrigerate the remainder in a closed jar.
2. Place 1 pint of the enema solution in an enema bag. Do not use petroleum jelly to lubricate the tip of the enema bag. Instead, use vitamin E oil (buy it in oil form or pierce the end of a vitamin E capsule and squeeze the liquid onto the tip). The liquid will both ease insertion and have a healing effect on the anus and the lining of the colon, if these areas are inflamed. Aloe Vera may also be used for the purpose.
3. The best position to assume when receiving the enema is “head down and rear up”. After the liquid has been inserted, roll onto your right side and hold the solution in your body for fifteen minutes before allowing the fluid to be expelled. Do not roll from side to side.
4. Do not be concerned if the liquid is not expelled after fifteen minutes. Simply stand up and move around as usual until you feel the urge to expel the liquid.

**Recommendations:**

1. To maximize the benefits of this or any other retention enema, use a cleansing enema first.
2. Do not abuse coffee enemas by using them too often. Use them only once daily while following a program for a specific disorder, unless you are being treated for cancer. People with cancer may need up to three enemas a day. You may also use coffee enemas occasionally as needed.
3. If you have cancer, AIDS, or another serious illness, or if you have a malabsorption problem, add 1 cc of B-complex vitamins or 2 cc of injectable liver extract, plus a dropperful of liquid kelp or sea water concentrate to the enema solution. If you are unable to locate injectable forms of these supplements, open 2 capsules of a B complex supplement and add the contents to the enema solution, making sure it dissolves before use. Used daily, these supplements replace any lost B vitamins, help rebuild the liver, and provide an extra boost of energy.
4. To kill unwanted bacteria in the colon – or for any type of colon disorder, including diarrhea and constipation – add 5 drops of either Aerobic 07 from Aerobic Life Industries or Dioxychlor from American Biologics to the enema solution.

## **THE *L. BIFIDUS* RETENTION ENEMA**

This retention enema, which should be used only three to six times a year, is helpful in cases of candidiasis and other yeast infections, and in cases of severe gas and bloating. When gas is the problem, the *L. bifidus* enema may provide relief within minutes. This remedy may also be beneficial when high colonics have been used or when antibiotics have been taken over long periods of time – practices that can kill the body's "friendly" bacteria. The *L. bifidus* enema replaces this flora, helping the body fight yeast infections and improving digestion. In fact, this enema can be useful during any severe illness.

### **Procedure:**

1. To make the *L. bifidus* enema solution, place 6 ounces of Digesta-Lac from Natren in 1 quart of lukewarm steam-distilled water. (Be sure to avoid using very cold or very warm water.) Kyo-Dophilus from Wakunaga may also be used (empty the contents of 6 to 8 capsules into the water), although the Digesta-Lac works best. Mix until formula is dissolved. Use only 1 pint of the solution at a time, and refrigerate the remainder in a jar.
2. For best results, use a plain water enema before using the *L. bifidus* enema, as this makes it easier to retain the *L. bifidus* solution for the necessary period of time. After expelling the plain water enema, place 1 pint of the *L. bifidus* solution in an enema bag. Do not use petroleum jelly to lubricate the tip of the enema bag. Instead, use vitamin E oil (buy it in oil form or pierce the end of a vitamin E capsule and squeeze the liquid onto the tip). The liquid will both ease insertion and have a healing effect on the anus and the lining of the colon, if these areas are inflamed. Aloe Vera may also be used for this purpose.
3. The best position to assume when receiving the enema is "head down and rear up". After the liquid has been inserted, roll onto your right side and hold the solution in your body for fifteen minutes before allowing the fluid to be expelled. Do not roll from side to side.
4. Do not be concerned if the liquid is not expelled after fifteen minutes. Simply stand up and move around as usual until you feel the urge to expel the liquid.

## **THE LEMON JUICE CLEANSING ENEMA**

The lemon juice enema is an excellent means of cleansing the colon of fecal matter and other impurities and of detoxifying the system. This enema also balances the pH of the colon, and is useful whenever cleansing of the colon is desired, as well as for colon disorders, such as constipation.

### **Procedure:**

1. To make the solution for the lemon enema, add the juice of 3 lemons to 2 quarts of lukewarm steam-distilled water. (Be sure to avoid using either very cold or very warm water.) If desired, add 2 droppersful of liquid kelp to boost the mineral content of the solution.
2. Place all of the solution in an enema bag. Do not use petroleum jelly to lubricate the tip of the enema bag. Instead, use vitamin E oil (buy it in oil form or pierce the end of the vitamin E capsule and squeeze the liquid onto the tip). The liquid will both ease insertion and have a healing effect on the anus and the lining of the colon, if these areas are inflamed. Aloe Vera may also be used for this purpose.
3. The best position to assume when receiving the enema is "head down and rear up". After the liquid has been inserted, roll onto your back, and finally roll over and lie on your left side. As you are doing this, massage your colon to help loosen any fecal matter. Start on your right side and gradually move your fingers up toward the bottom of your rib cage, then across your abdomen and down the left side.
4. Note that 2 quarts is a lot of liquid. If you experience any pain during insertion, stop the flow of the enema bag and, remaining in the same position, take deep breaths until the pain subsides. Then resume the enema flow. If you expel the liquid before all of it has been inserted, simply begin the process over again. If pain persists, discontinue the enema procedure.
5. Hold the solution in your body for three or four minutes before allowing it to be expelled. After two or three such sessions, you will find it easier to insert and hold the liquid.

### **Recommendations:**

1. If you have trouble with constipation, use the lemon juice enema once a week and the coffee retention enema once a week. The bowels will shortly move on their own, the colon will be clean, and the stool will not be foul smelling.
2. If you suffer from colitis, use the lemon juice enema once a week. Any time pain from colitis is experienced; this enema will quickly relieve the discomfort.
3. If allergic to lemons, prepare the enema solution with 1 to 2 ounces of wheat grass or garlic juice in place of the lemon juice, or fill the enema bag with plain steam-distilled water.

## THE CATNIP TEA ENEMA

Catnip tea enemas are a good way to bring a high fever down quickly and keep it down. These also relieve constipation and congestion, which keep fever up. When body temperature goes above 102oF (102oF in children over two), take a cleansing catnip tea enema. Repeat the procedure every four to six hours, and continue taking the enemas twice daily as long as fever persists. Catnip tea enemas should not be used by children under two years of age.

### Procedure:

1. To make the solution for the catnip tea enema, place about 8 tablespoons of fresh or dried catnip leaves in a glass or enameled pot. (If you are using bagged catnip tea, use the amount recommended on the package to make 1 quart of tea.) In a separate pot, bring 1 quart of steam-distilled water to a boil. Remove the water from the heat and pour it over the herbs. Cover the pot and let the tea steep for five to ten minutes. Then strain out the catnip and allow the tea to cool to a comfortable, slightly warm temperature.
2. Place all of the solution in an enema bag. Do not use petroleum jelly to lubricate the tip of the enema bag. Instead, use vitamin E oil (buy it in oil form or pierce the end of the vitamin E capsule and squeeze the liquid onto the tip). The liquid will both ease insertion and have a healing effect on the anus and the lining of the colon, if these areas are inflamed. Aloe Vera may also be used for this purpose.
3. The best position to assume when receiving the enema is "head down and rear up". If you experience any pain during insertion, stop the flow of the enema bag and, remaining in the same position, take deep breaths until the pain subsides. Then resume the enema flow. If you expel the liquid before all of it has been inserted, simply begin the process over again. If pain persists, discontinue the enema procedure.
4. After the liquid has been inserted, roll onto your back, and finally roll over and lie on your left side. As you are doing this, massage your colon to help loosen any fecal matter. Start on your right side and gradually move your fingers up toward the bottom of your rib cage, then across your abdomen and down the left side. Hold the solution in your body for three or four minutes before expelling it.

## COLON CLEANSSES

### Ivy Bridge

"The key to good health is getting nutrients into the blood stream. This happens once the bowels have begun to be cleansed" – Ivy Bridge

### Ingredients:

1. ½ glass apple juice
2. 2 tablespoons Aloe Vera Juice
3. 2 tablespoons Liquid Chlorophyll
4. 1 heaping teaspoon Psyllium Hulls

### Procedure:

1. Combine in blender or stir with spoon. This mixture will thicken if allowed to sit, so drink it immediately. Follow with a full glass of pure, delicious-tasting water and two Cascara Sagrada capsules.
2. This drink should be taken first thing in the morning every day for 60 days. Thereafter, it can be taken every other day indefinitely.
3. NOTE: It is important to drink plenty of good, clear water, while on this regime.

## Six Month Colon Rejuvenation Program To Restore Natural Peristaltic Action by Dr. Jack Ritchason

This program is designed to restore the natural peristaltic action of the colon. It is done by alternating the two following programs for a period of six months. You change the program every thirty days. Hence, you would follow program one for thirty days and then do program two for thirty days and then go back to program one again. After six months you will have spent three months on program one and three months on program two.

### Program Number One

Take the following at night before retiring. Add the following to 4-6 oz. Of juice and drink:

1. 6 oz Aloe Vera Juice
2. 1 oz. Liquid Chlorophyll
3. 2-4 capsules of lower bowel (laxative) herb formula\*
4. 1 oz. Hydrated Bentonite Clay
5. 1 tablespoon of Psyllium Hulls

**During the day, take the following:**

1. 3 Acidophilus capsules three times each day between meals
2. ½ teaspoon of Plant Cell Salts twice each day in juice.

**Program Number Two**

Take the following anytime day or night:

1. 1 oz. Aloe Vera Juice
2. 1 oz. Liquid Chlorophyll

**At night before retiring, take the following:**

1. 1 teaspoon of Psyllium Hulls in 4-6 oz. Of juice
2. 2-4 capsules of a lower bowel (laxative) herb formula\*

\*Persons may not wish to take this much of a lower bowel formula as they progress with the program. In fact, they may not need any of the lower bowel formula by the end of their thirty days.

**Comments:**

1. With this program you are attempting to have loose bowel elimination for six months to rebuild and restore the natural muscular action of the colon. The colon is a muscle, but it cannot be exercised in the same manner that you would exercise an arm. You can take a weight and put it in your hand and lift it repeatedly to build up and tone your arm muscle, but you cannot take your colon out of the body to exercise it. Hence, you need to put fiber and other material into the colon that stimulates it to action so that it can be strengthened and toned. One other benefit of this program is that people can lose weight on it.
2. This program will slowly clean out the pockets and crevices in the colon and will restore the natural muscular action called peristalsis. We stress we want a loose bowel elimination, but we also want this bowel elimination to be controlled. If the bowel elimination becomes too loose (that is watery or excessively runny) you should back down on the lower bowel formula. If the elimination continues to be too loose, you should take a teaspoon of Psyllium in a glass of juice in the morning.
3. This does not replace other colon cleansing programs. This program is specifically designed to restore the natural peristaltic action (or to build it up in the person who has never had it). This program does not eliminate the need for other supplements a person might need to take. Some people have also used anti-parasitic herbs (like black walnut) or combinations. One does not need to have enemas or colonic irrigations with this program; however, a person could use a very high colonic irrigation with a garlic solution if they desired, as this would aid the process.

**Seven Day Bentonite Colon Cleanse**

Eat nothing for seven days other than specified during the cleanse. Drink plenty of water (at least 5 glasses in addition to the instructions). You may have herbal teas or herbal beverages.

**Items Needed:**

1. An empty quart jar with a screw top
2. An enema bag
3. 2 quarts water with ½ dropper garlic oil
4. Combination potassium 100
5. Acidophilus
6. Hydrated Bentonite (2 bottles)
7. Cascara Sagrada\*
8. Psyllium Hulls Combination
9. Liquid Chlorophyll
10. Fasting Plus
11. Vitamins & Minerals
12. Vitamins-Calcium w/Magnesium & Vitamin D
13. Bioflavinoids w/Vitamin C

**Directions:**

5 times per day (every 3 hours) do the following:

1. Pour 4 oz. Juice into quart jar
2. Add 8 oz. Water
3. Add 1 teaspoon Chlorophyll
4. Add 2 tablespoons Bentonite
5. Last of all, add 1 tablespoon Psyllium Hulls Combination

6. Shake Violently for 10 to 15 seconds, or run through a blender.
7. Drink Immediately. Follow with an additional glass of water.

**5 times per day (1-½ hours after drinking the above) take:**

1. 2 Vitamins and Minerals
2. 2 Vitamin Calcium w/Magnesium and Vitamin D
3. 2 Fasting Plus
4. 2 Bioflavonoids w/Vitamin C
5. 2 Cascara Sagrada\*
6. 2 Potassium 100
7. 2 Acidophilus capsules
8. ½ teaspoon Cell Salts

\*Adjust the amount of Cascara Sagrada as required to have several bowel movements per day. Some individuals may need to take from 2 to 12 Cascara Sagrada per day. On rare occasions, some may need to take several enemas per day.

**Enemas:**

There needs to be an enema done the day before you start this program, one done every night for the total of 7 days on the program, and one done the day after coming off the program for a minimum total of 9 for the total program. It is of the utmost importance to take a daily enema while on this cleanse. Coffee enemas or garlic enemas or an interchange of the two has been suggested. People who are extremely toxic and need this program the most sometimes will get sick a few days into the program. It is advised that they take high colon irrigation in the morning also. This will prevent them from becoming nauseated while on the program. This will enable them to complete the 7 days on the program.

**Coffee Enema:**

Use 8 rounded tablespoons of regular grind coffee to 2 quarts of water. Boil thoroughly or perk. (You can make up to 1 gallon at a time).

**Garlic Enema:**

Put ½ eyedropper full of garlic oil in 2-quart enema bag with water.

**After Seven Days:**

1. After completing this program individuals should take 3 Acidophilus capsules twice a day – 3 upon arising and 3 before retiring each day for 2 months minimum to restore back the natural flora in the colon. Also one capsule of licorice root can be added each time the vitamin and minerals are taken if the person has low blood sugar.
2. Most individuals or families will want to stay on the cleanse for the full seven days and repeat twice a year. This is especially true of all those who are interested in prevention and in maintaining their good health. As for people with chronic health problems, the cleanse should be repeated 4 times a year, with a building program followed in the meantime.
3. Some nutritionists suggest a year-round use of the Bentonite; however, it has been suggested that the Bentonite Cleanse should be alternated with an individually designed building program. This program would use LBS, Psyllium, Cascara Sagrada, possibly Special Formula #1, and any other specific herbs and supplements for individual problems.

**Nature's Sunshine Tiao He Cleanse**

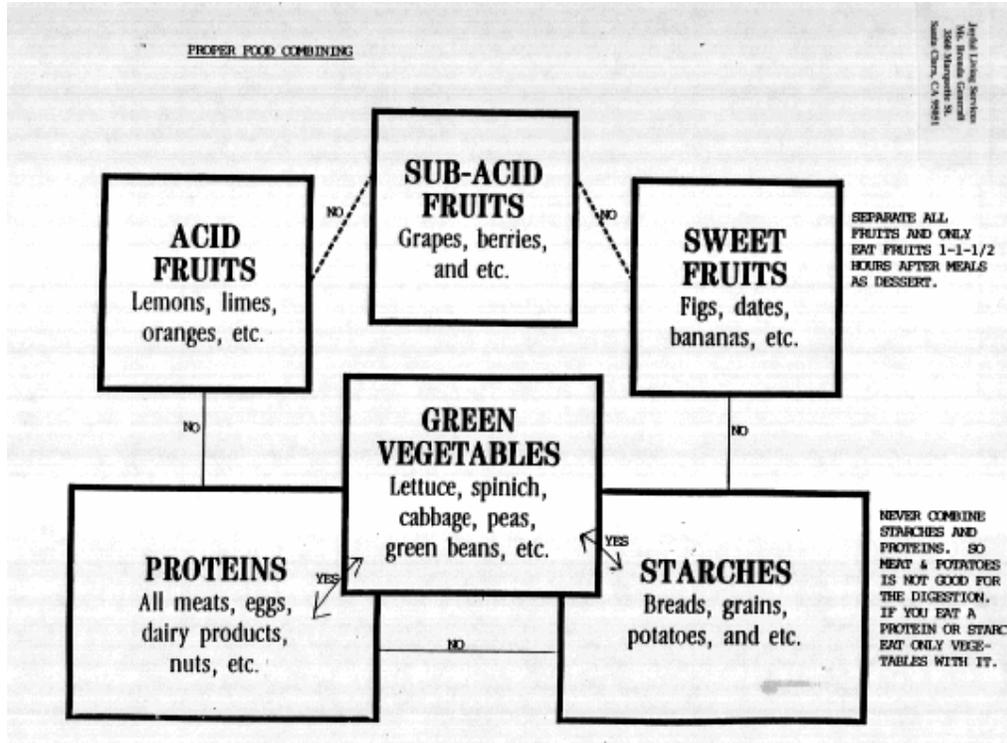
1. Balance and harmony – that's Tiao He. It's a path that leads to personal peace and happiness. Using the time-honored and popular Chinese system of herbal nutrition and adding respected Western herbal experience, Nature's Sunshine developed an important breakthrough: a cleansing system that blends both East and West for the best of both worlds – the Chinese Tiao He Cleanse.
2. Many years ago a Chinese herbalist from San Francisco designed a 10-day program to "balance" and "cleanse" the entire body.
3. The Tiao He Cleanse is perfect for those who are just getting acquainted with herbal supplements, or who have never experienced a cleansing program. The Chinese Tiao He Cleanse is prepackaged and simple to use. It's gentle, too.

**Product Information**

1. LIV-C: Bupleurum root, peony root, pinellia rhizome, cinnamon twig, dong quai root, fushen plant, zhishi fruit, scute root, atractylodes rhizome, Panax ginseng root, ginergh rhizome and licorice root.
2. Special Formula #1: Gentian root, Irish moss plant, cascara sagrada bark, golden seal root, slippery elm bark, fenugreek seeds, safflowers flower, myrrh gum, yellow dock root, parthenium root, black walnut hulls, barberry bark, dandelion root, uva ursi leaves, chickweed herb, catnip herb and cyani flowers.
3. LBS II: Cascara Sagrada bark, buckthorn bark, licorice root, capsicum fruit, ginger rhizome, barberry bark, Turkey rhubarb root, cough grass herb and red clover blossoms.
4. Psyllium Hulls
5. Burdock Root
6. Black Walnut Hulls

**FOOD COMBINING**

Do you have digestive trouble? In other words, do you belch after a heavy meal or feel full? Does it seem like food

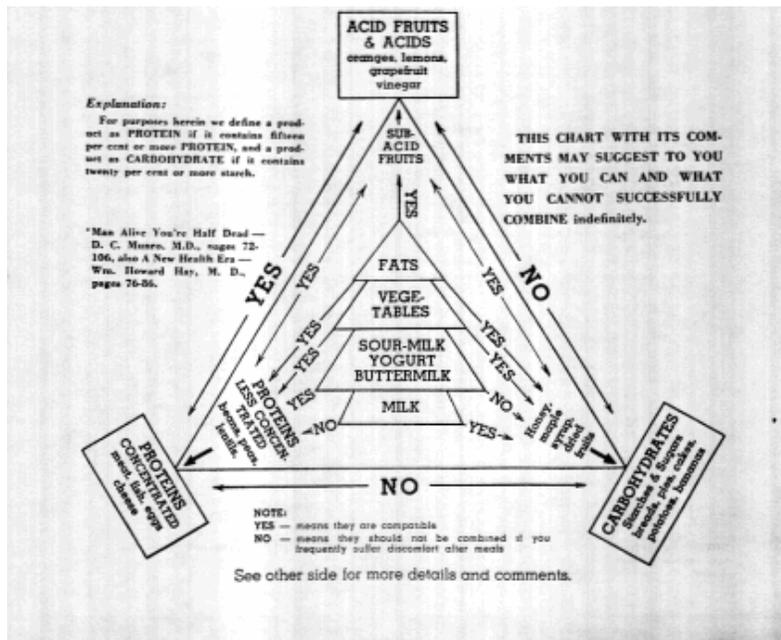


stays in your stomach for hours and hours? Do you still taste the food you ate 4 hours later? It typically takes 4 hours to break down fats and proteins (meat, eggs, dairy), 2 hours to break down starches (rice, potatoes, pasta), 1 hour to break down vegetables (salad, cooked or raw vegetables), and 1/2 hour to break down fruit.

**Think About This**

If you eat all the above types of foods together at one meal like most people do, how long do you think it will take you to break them down? If we add up the amount of time it takes to break

each one of these food types down it would take approximately 7-1/2 hours for these foods to be broken down and leave your stomach to be absorbed in the small intestines. That's a very long time.



Most people don't wait 7-1/2 hours between meals. Most people eat breakfast around 7 or 8 am, lunch around 12 or 1, and dinner around 5 or 6. That means that the last meal you ate is still in your stomach when you begin the next meal. And you're wondering why you're so tired and listless? Probably because your body is constantly trying to break down the food you're eating and all your energy is going to that task.

**How Can You Avoid This?**

Simply by following proper food combining rules and by supplementing your digestion with a product that will help you break down your foods easily. Food Combining is a process that we suggest for eating each meal in which you only combine foods that can be broken down together. This allows a much quicker transit

time. I've included a Food Combining Chart for you to follow. Let me know if you have any questions about it.

### **Why Use Digestive Aids?**

Even if you follow the food-combining chart that I've suggested above, you still might be low in your store of food enzymes and hydrochloric acid. These enzymes are created and stored by the liver and pancreas. If you constantly eat junk food and other foods that are devitalized of their nutrients your body will have to use its store of digestive aids. Once they're depleted you have to depend on the foods you're eating to stimulate the production of these enzymes and HCL.

Most people by the time they reach 35 have approximately 1/2 the enzymes and HCL production they used to have. This is because the body begins to slow down. The metabolism decreases and the body doesn't need as much fuel (food) to keep it going. At the same time the body slows down the production of these digestive aids. But, you keep eating at the same pace and the same types of foods not paying attention to the signals your body is giving you. These signals include belching, intestinal gas, bloating, nausea, over full stomach, pain in the stomach, and other symptoms related to the intestinal system such as diarrhea after a meal and formation of mucous after a meal relating to food allergies.

### **Take Responsibility for Your Health**

If you have these symptoms and are tired of them, then food combining will be useful to you. You will be amazed at how good you will feel in just a few days of following this program. It's not easy at first. The first week is difficult because we are so accustomed to sitting down and eating a salad, a protein, a starch, a fruit and maybe even a dessert at the same meal within the same hour. If you follow this program you will be limited to eating only a vegetable and a protein or only a starch and a protein at the meal and using the fruits and desserts as your desserts. If you need to lose weight this is the easiest way to do it. This is definitely NOT a diet BUT a lot of people have lost weight because they have begun to take responsibility for what goes into their mouth and how they feel afterwards. This is the beginning of "listening" to your body and learning what IT LIKES rather than what YOU LIKE. What your brain likes is not necessarily what's good for you. Everyone would love to eat whatever they want but there are consequences to doing this. Why don't you start today and feel better by following food combining rules and using digestive aids to help you along the way.

### **LOW FAT DIET/WEIGHT LOSS DIET: HIGH CHOLESTEROL & HIGH TRIGLYCERIDES**

This diet has been used by a number of Joyful Living Services' clients and the weight loss has been very positive. People who have had difficulty with high cholesterol and high triglycerides have also had positive results following these simple rules. It's more than just a diet - it's a lifestyle change. Remember that exercise is a MUST if you decide it's time to lose weight and lower your cholesterol. Without exercise it just won't work. It's not a fad diet either. Fad diets work great while you're on them but as soon as you go off the diet you gain the weight back plus more. The reason? Because the body went into what's called "starvation mode". A lot of people believe that if they starve themselves they will lose weight. Granted they probably will after a while depending on how long they starve. But the majority of the population will not lose weight and will either remain at the same body weight or even gain weight. The reason? In order to lose weight you must eat and you must eat foods that are low in fat so your body can burn the calories. If you're on a diet right now and are losing more than 4-5 pounds per month you're losing too fast. You may be losing muscle, which you don't want to do. If you are "stuck" at a body weight you are tired of, try incorporating the rules from this diet into your life. Remember - it's not a diet - it's a lifestyle change. That means you don't stop following it!

### **General Information**

The purpose of this diet is to lower your blood cholesterol, triglycerides, and for you to lose weight. There are three ways to reduce cholesterol:

1. Reduce dietary cholesterol
2. Reduce saturated fat intake
3. Increase polyunsaturated fat intake

### **Special instructions are as follows:**

Limit foods high in cholesterol: egg yolk, shrimp, prawns, dairy products containing butterfat, baked goods, desserts containing egg yolk and cream and organ meats (liver, heart, brain, kidney and sweetbreads). Cholesterol in the diet is limited to 300 mg per day. Limit foods high in saturated fats: animal fats and vegetable fats as palm oil, coconut oil, cocoa butter and vegetable shortening. Use polyunsaturated oils. Limit all meat to 9 oz. per day. Use fish and poultry as often as possible. Read labels carefully before using canned, packaged or frozen foods. Look for liquid vegetable oils as the first ingredient on the label.

### **Definition of terms:**

SATURATED FAT is usually a fat of animal origin. Some vegetable fats, however, are saturated. This may occur naturally (for example, palm oil and coconut oil), or as a result of food technology (for example, vegetable shortening, which is vegetable oil that has been "hydrogenated" causing the oil to solidify and become more saturated). CHOLESTEROL is a fatty substance manufactured by the body and normally present in the blood. It is present in foods of animal origin. POLYUNSATURATED FAT is a fat of plant origin. Most liquid vegetable fats are unsaturated. For example, safflower and corn oils are more unsaturated than olive and peanut oil.

Approximate composition of the diet is as follows: 1950 calories, 190 gms carbohydrate, 95 gms protein, 90 gms fat, and 300-mg cholesterol.

### **FOODS**

Beverages

Protein Group  
Meat and Meat  
Substitutes 6 oz.  
cooked weight

### **FOODS ALLOWED**

Coffee, tea, carbonated beverages, skim milk, nonfat buttermilk, evaporated skim milk, fruit juices, 2 cups low-fat milk daily.

Baked, broiled, boiled, roasted or sautéed in allowed oil: lean, well-trimmed pork, ham, beef, lamb, veal, poultry (white meat, cooked without skin), fish, shellfish (except shrimp, prawns, unless substituted for allowed egg yolks), oysters. Lean meat, fish or poultry canned in allowed oils.

Luncheon meats made from poultry, i.e., turkey salami, turkey bologna and turkey frankfurters.

Fish and poultry (white meat) are lower in saturated fats than red meats, and should be used more frequently.

Substitutions for 1 oz of meat:  
1 oz. cheese (pot, ricotta, mozzarella made with nonfat milk, special low fat cheeses (i.e., Farmers, Cheez-ola, Count-down, Sapsago; limit cheddar-type cheeses to 2 oz. per week).  
1/4-cup low fat or dry curd cottage cheese  
2 tablespoons old-fashioned peanut butter  
1/2 cup tofu  
1 oz. meat-flavored substitute made from soy protein

Low cholesterol egg substitutes, such as Eggbeaters or Second Nature.

Egg whites

Limit egg yolks to 3 per week, including those used in cooking or baking. You may substitute 4 oz. shrimp, prawns, crab or lobster or 2 oz. liver, sweetbreads, or heart for each allowed egg yolk.

### **FOODS TO AVOID**

Whole milk and whole milk drinks, evaporated and condensed milk, yogurt, chocolate milk.

Regular ground beef or hamburger, heavily marbled or fatty meats, spareribs, duck, goose, poultry skin or dark meat, fish roe, brain, kidneys.

Meats canned or frozen in sauces or gravies, such as chili, hash, ravioli, pork and beans.

Crab or lobster, liver, sweetbreads, or heart, except as substituted for allowed egg yolks.

Luncheon meats and frankfurters (except those listed in "Foods to Use"), sausage, fried meats, ham hocks, bacon, salt pork.

Cheese spreads, cream cheese, regular cottage cheese, other cheeses not listed.

Peanut butter other than "old-fashioned", cashew butter.

Egg yolks in excess of 3 per week.

**FOODS**

Vegetables

**FOODS ALLOWED**

All without saturated fat added.

**FOODS TO AVOID**

Buttered, creamed or fried vegetables unless prepared with allowed fat.

Fruits

All, limit avocado to 1/8 per day. Avocado, more than specified amount.

Breads

Whole wheat, rye, raisin or white bread, matzoth, saltines, graham crackers, English muffins, tortillas, bagels, Boston brown bread. Baked goods with no whole milk, no egg yolk and with allowed fats.

Biscuits, commercial muffins, sweet rolls, cornbread, pancakes, waffles, french toast, hot rolls, cheese bread or crackers, party crackers.

Cereals

All except granolas.

Granolas.

Starches

Rice, macaroni, noodles, spaghetti, potatoes.

Any starch prepared with whole milk or cheese.

Fats

Safflower, corn oil, cottonseed oil, soybean oil, sunflower oil and sesame oil or margarine made from these oils, commercial mayonnaise.

Butter, lard, hydrogenated margarine and shortenings, coconut oil, palm oil, salt pork, suet, bacon drippings, gravies or cream sauce unless made with allowed fat and skim milk.

Soups

Bouillon, clear broth, vegetable soup, fat free cream soup made with skim milk, dehydrated soups.

Cream soups and soups made with animal fat.

Desserts &amp; Sweets

Jams, jellies, marmalades, honey, hard candies; sherbert, angel food cake, puddings made with skim milk, gelatin desserts, frostings made with allowed fat, meringues; cakes, cookies and pies made with allowed fats and milk; fruit whips. 1/2 cup ice milk once a week.

Desserts which contain whole milk, saturated or hydrogenated fat and egg yolks, commercial pies, cakes and cookies, cake mixes except angel food.

Miscellaneous

Pickles, salt, spices, herbs, nuts except those excluded, cocoa, carob powder, plain popcorn. Limit olives to 5 per day. Chips fried in polyunsaturated oil.

Coconut, Brazil, cashew and macadamia nuts, chocolate, corn chips, potato chips, buttered popcorn. Gravies made from pan drippings.

**Treating Triglycerides**

Fat travels in the blood in two forms. One is cholesterol. This is a structural fat; it glues cells together, insulates nerves, and provides raw material for making hormones. But fat also travels as energy packages. These are called triglycerides - transformed butter and dietary oils circulating in the blood. Triglycerides have a cholesterol coating.

A "normal" triglyceride level is considered to be 40-180 mg/dL. A high blood fat level, also known as hypertriglyceridemia, is usually caused by an increase in stress hormone (cytokine) levels. The stressor is uncontrolled infection. While the upper limit of normal is 250 mg/dL, cytokines can kick triglyceride levels up to 750 or 1000. In this scenario, fat is circulating in the blood but not being burned up as fuel as it should. Even higher triglyceride numbers (1200-2000) are seen in people taking protease inhibitors, especially Norvir/Ritonavir.

A triglyceride count in the 250-750 range used to cause a bit of a stir in medicine, because levels this high over a number of years increase the risk of heart disease. Because of the close relationship between triglycerides and cholesterol, the higher risk is from elevated blood/serum cholesterol levels. AIDS

patients usually have low cholesterol levels, so a sudden increase may be related to a triglyceride problem.

Triglyceride levels greater than 750 mg/dL take on a bigger significance due to their risk of causing inflammation of the pancreas (pancreatitis). In this condition, pancreatic enzymes begin to digest the pancreas itself; researchers are not sure what causes pancreatitis, but it may lead to kidney failure, ARDS (acute respiratory distress syndrome), coma, or multisystem organ failure. Many AIDS care physicians mention that they have patients with high triglycerides whom they are "watching". Are they watching daily, weekly, or monthly, and what good does watching do? At worst they may watch high triglycerides provoke pancreatitis. Stop watching (or being watched) and start treating.

Classic dietary treatment for high triglycerides is to reduce dietary fat to 20%-25% of total calories. A person living on 2500 calories may have to limit themselves to 53-67 fat grams per day. Olive oil is the best tolerated dietary fat for triglyceride watchers. Eating a high fiber diet, i.e., more beans, bran cereals, fruit, and vegetables, can be of some help. Two doses a day of psyllium can lower triglyceride levels. Simple white sugar in the diet, such as candy and sodas, might need a little trimming too, since sugar (and alcohol) calories can turn to fat when eaten in large quantities.

Aerobic exercise, something as simple as a 20-30 minute brisk walk (although 45 minutes would be better), can help lower triglyceride levels a few hundred points. The effect of weight training on triglycerides is less clear.

There are supplements and medicines that have a strong impact on high triglycerides. Lowering the high cytokine level is a good step. Cytokines rise because of the build-up of too many stray electrons - also known as oxidative stress. This can be affected by comprehensive antioxidant supplementation, including beta-carotene, Vitamins C and E, N-acetyl cysteine, and selenium. Interestingly, antioxidant supplements (especially selenium and sodium selenite) have a role in reducing recurrent pancreatitis and in stopping acute attacks.

Nature's Sunshine carries "Guggul Advantage" which supports the circulatory system and has been used to lower triglyceride levels. Soluble fiber dissolves completely in fluids and has the ability to lower cholesterol and triglyceride levels, lower blood pressure, help to normalize blood sugars, and help with the excretion of fats include psyllium hulls which are 80% soluble (oat bran is 15-30% soluble), LOULO which is the most soluble fiber mixture available from Nature's Sunshine, and Fat Grabbers which contain psyllium hulls, guar gum, chickweed, and lecithin which help with the elimination and emulsification of fat.

Supplemental fish oils, providing 5-9 grams per day of omega-3 fatty acids, are helpful according to some studies and poster sessions. Nature's Sunshine carries flaxseed oil, which is high in the essential fatty acids. People with AIDS often have low platelet levels (a condition called thrombocytopenia), placing them at risk for poor blood clotting. Fish oils can also change blood-clotting rates, increasing the risk of undesirable, spontaneous bleeding. Therefore, people with AIDS must use fish oils with caution.

Another treatment, according to a few small studies and a lot of anecdotal reports, is L-carnitine. Its function is to help fats pass through certain parts of cells (the mitochondria) so that the fats can be used for fuel. Effective doses range from 2-6 grams per day: the higher dose was used in a two-week study that wanted to show rapid results. Two or three grams a day is a more normal dose. There are reports of diarrhea at 4 grams per day. Of note: in the study using 6 grams per day, several subjects who had high levels of the cytokine TNF-alpha saw them drop to normal.

Carnitine is an amino acid, found plentifully in beef, but not so much in chicken and fish. It is also produced in the body, from lysine, methionine, and vitamin C. But methionine is used up in cysteine production, and cysteine levels are often low when fighting HIV infection. AZT is also known to inhibit carnitine synthesis. There is a prescription form of L-Carnitine, Carnitor, indicated for use in "failure to thrive".

Clinics using high doses of the B-vitamin niacin to lower triglyceride levels are also known. This was traditional cholesterol treatment for years. As niacin may affect the circulatory system, dosages can be ramped up from 500 mg per day to help the body adjust. But liver enzyme levels should be watched on high-dose niacin.

Gemfibrozil/Lopid is commonly used to treat high triglyceride levels in heart patients, and is equally effective under these circumstances. The "statin" drugs (such as Mevacor), which block cholesterol production in the liver, are not appropriate here. They may be contraindicated with some protease inhibitors.

You've made it through PCP, multiple rises and falls in CD4 counts, and are now doing great on a triple drug mix. Don't let a treatable condition land you in intensive care with pancreatitis. Treat hypertriglyceridemia.

## **SUGAR & SUGAR SUBSTITUTES**

### **HOW SUGAR WORKS**

Although natural sweeteners are more appealing and healthier than chemically refined sugars and syrups, the fact remains that all sweeteners are not nutritious and their use should be moderate. Sugar influences dietary imbalances by crowding out more nutritious foods and by using up valuable nutrients through sugar metabolism. Using sweeteners in conjunction with nutritionally sound foods can help reduce the rise in blood sugar levels and provide nutrients needed to metabolize sugar.

Unlike whole foods that are digested slowly and changed into forms of sugar that the body can use, concentrated sweeteners are absorbed quickly into the bloodstream causing a rapid rise in the body's blood sugar level. The pancreas usually responds by overproducing insulin. This causes the blood sugar to rapidly fall, creating a variety of symptoms including fatigue, irritability, lack of concentration and ... the desire for more sugar.

### **Natural Sweeteners**

By using natural sweeteners in a moderate way, we can have our cake and eat it too. When sweeteners are needed, choose among the least processed and most natural alternatives to white sugar.

### **Fruit Juice Sweeteners**

These offer good flavor, slower more uniform digestion and added nutrients. There are more and more delicious products such as breakfast cereals and cookies that use fruit juice (usually white grape) exclusively as a sweetener.

### **Malted Rice or Barley Syrups**

These are produced by using malt enzymes to convert the starch in barley and rice into a sweet syrup. Malt syrups are better tolerated by those who have blood sugar disorders because their principal sugar, maltose, does not stimulate insulin production. Malt syrups are about 25% less sweet than sugar, and can successfully replace sugar in many recipes. Reduce the liquid by half the amount of malted grain syrup used in the recipe.

### **Honey**

Raw and unfiltered, is a whole-unprocessed food. You only need to use half as much honey because it's twice as sweet as sugar. Of all the sweeteners, honey needs the least amount of refining and therefore is most deserving of the often-misused label "natural".

### **Molasses**

This is a thick dark liquid produced during the refining of white sugar. Blackstrap molasses is the remaining liquid after the sucrose crystals have been removed. It contains a significant amount of minerals, including iron. Barbados molasses is sweeter and milder than blackstrap but contains only a fraction of the minerals. It is made from the whole sugar cane. Look for molasses that does not use sulfur as a preservative.

### **Pure Maple Syrup**

This is a delicious whole food made by boiling maple sap. A traditional favorite drizzled on pancakes or waffles; maple syrup adds a superb flavor to baked goods.

### **Sucanat**

This is made from organically grown sugar cane juice. Nothing is added, only the water is removed. Sucanat contains the natural complex sugars, molasses, and up to 3% vitamins and minerals. It is comparable to white sugar in sweetness and use.

## **REFINED SWEETENERS**

### **White Sugar**

This is a processed crystalline by-product of the sugar cane. The cane is chemically stripped of its minerals and bleached. White sugar is quickly absorbed. Brown sugar is white sugar flavored with molasses.

### **Turbinado Sugar**

This is sometimes mislabeled "raw sugar". It is slightly less processed than white sugar. It is steam-cleaned rather than bleached. True raw sugar is not sold in the United States because it is unsanitary.

### **Fructose**

This is not actually made from fruit but from sugar by breaking down the sucrose molecule into fructose and glucose. Its claim to fame is that it reaches the bloodstream more slowly than other kinds of

sweeteners and does not affect insulin secretions and blood sugar levels dramatically. Fructose is about 60% sweeter than sugar, but this is greatly reduced when cooked. Because it is only 55% fructose, high fructose corn syrup (commonly found in sodas) needs insulin to be metabolized.

## ARTIFICIAL SWEETENERS

Artificial sweeteners perpetuate cravings for sweets by keeping one's sweet tolerance level high. The current popular artificial sweetener, aspartame (NutraSweet) is 200 times sweeter than sugar. Some people are sensitive to aspartame and have reacted with headaches, depression, irritability or dizziness. Product advertising commonly claims that aspartame is a "natural" product. Its two ingredients, phenylalanine and aspartic acid are amino acids, but they are not found combined in nature as in the laboratory. The long-term effects of aspartame is not known.

## SUGAR ALCOHOLS

### Sorbitol, Mannitol, Xylitol

These are sugar alcohols. They act similarly to all sugars when broken down during digestion. Sorbitol and mannitol are derived from corn glucose and while half the calories of sugar, they are only half as sweet. Sorbitol is commonly found in diabetic food because it has a slow absorption rate and needs little if any insulin. Although xylitol has the same calories as sugar, it neutralizes acids in the mouth and may help reduce cavities.

### Sugar Content of Various Foods

<u>Food</u>	<u>Spoons of sugar per serving</u>
Pork and beans, 1 cup	5
Fruit yogurt, 8 oz.	8
Cola, 16 oz.	12
Chocolate cake, iced, 4 oz.	10
Ice cream, 1 cup	6
Glazed doughnut	6
Chocolate milk, 8 oz.	6
Peanut butter and jelly sandwich	7
Pecan pie, 5 oz.	12
Gelatin, 1 cup	8
Kool-Aid, sweetened, 8 oz.	6
Chewing gum, 7 sticks	4
Sweetened cereal, 2 oz.	7
Chocolate bar, 2 oz.	7
Thick shake, 11 oz.	9
Orange soda, 12 oz.	12
Jelly beans, a handful	8
Liqueurs/cordials, 2 oz.	4

## FAT IN THE DIET

On a percentage-of-calories basis, most vegetables contain less than 10 percent fat, and most grains contains from 16 to 20 percent fat. By comparison, whole milk and cheese contains 74 percent fat. A rib roast is 75 percent fat, and eggs are 64 percent fat. Low-fat milk or a skinned, baked chicken breast still has 38 percent fat. Not only do animal foods have more fat, but most of these fats are saturated fats, which research has shown to raise blood cholesterol levels. In addition, a lower fat, whole foods diet means fewer calories, since an ounce of fat contains twice as many calories as an ounce of complex carbohydrates. Studies have shown that a diet containing fewer calories can increase health and extend life. Labels can be very deceiving and misleading. The fat content of some of the foods below may be surprising.

### Fat Content of Various Foods

<u>Food</u>	<u>Fat Content</u>
Cheeseburger	45%
Chocolate Bar	55%
Cheddar Cheese	74%
Potato Chips	60%
Beef Steak, Untrimmed	74%
Chicken (light) without Skin	24%
2% Milk	35%
Skim Milk	5%
Beef Frank	82%
Mayonnaise	99%

## **Controversial Foods**

While often touted by special interest groups, the safety of the following foods has been called into question.

### **Milk**

Milk has traditionally been viewed as just about the most perfect food – especially for children. However, more recently experts have begun to question the safety of milk – especially for children. Dr. Benjamin Spock, the world-famous child care expert, shocked the nation by appearing at a press conference in 1992 warning parents about the dangers of milk.

According to the Physicians Committee for Responsible Medicine (PCRM), milk may cause diabetes, ovarian cancer, cataracts, iron deficiency, and allergies in both children and adults. Additional medical research associates milk consumption with greater frequency of cancer of the lymph system.

The statements of the PCRM may have some merit but much more research will be required for a final verdict. Until then, keep these safe eating guidelines in mind:

1. Breast milk is best for babies. Efficient breast pumps can be rented from hospitals to extract breast milk and make life easier for working mothers.
2. Mothers who are breast-feeding infants whose siblings or parents had childhood diabetes should avoid drinking large amounts of cow's milk as some proteins from the cow's milk that can trigger this condition can be absorbed into their breast milk.
3. Adults and children over the age of two should drink only skim or 1 percent low-fat milk.
4. Those who suffer from recurrent bouts of diarrhea, bronchitis, eczema, asthma, or runny nose, should be tested for a milk allergy.
5. People who get gas, diarrhea, or cramps after drinking milk, should drink it in smaller quantities with meals, switch to lactose-reduced milk, or try lactose pills (containing a key enzyme for digesting milk).

In addition, whole milk and whole dairy products like ice cream and cheese contain concentrated fat-soluble pesticides that have been shown to cause cancer in laboratory animals. They can also contain sulfa drugs and antibiotics as a result of mixing milk from healthy cows with the milk from ill or medicated cows. For protection against toxins in dairy products, rely on nonfat dairy products.

Another option is milk substitutes such as soy, almond, rice, or even goat's milk. Health food stores and many supermarkets sell these products, which are frequently made with organic (pesticide-free) ingredients.

### **Butter and Margarine**

Many medical experts today are concerned about the safety of margarine because of its high content of hydrogenated oils. Hydrogenation is a process that turns liquid oils into semi-solid globules. This process artificially alters the chemical structure of the fatty acids in the product. Hydrogenated oils are also called trans-fatty acids. They are most often found in shortenings, cakes, crackers, cookies, french fries, and chips. They tend to act like saturated animal fats in the human body by raising cholesterol. Of margarine, the diet or whipped types have the fewest trans-fatty acids.

Butter, on the other hand, contains both saturated fat and, like other fatty dairy products, a whole host of carcinogenic pesticides and chemicals. Because neither butter nor margarine present a clear-cut option, it is best to use them in moderation, and find substitutes whenever possible.

### **The Whole Oil Story**

There are three types of fats, or lipids, which are differentiated by their chemical makeup: saturated, monounsaturated, and polyunsaturated. The human body needs a certain amount of each of these lipids for its proper function. Common fats and oils have components of all of these lipids. For example, canola oil is made up of 62 percent monounsaturated fat, 32 percent polyunsaturated fat, and 6 percent saturated fat.

### **Saturated Fats**

These are primarily found in animal foods and tropical oils such as coconut and palm oil. Due to their chemical structure, saturated fats tend to remain solid at room temperature. Though there is tremendous evidence that appears to support the relationship between high fat intake from animal sources and heart disease, some amount of saturated fat in the diet is necessary. Saturated fat is needed for the liver's production of cholesterol, an important component in the structure of cell membranes. In addition, stearic acid, one of the most common saturated animal fats, has been shown in some studies to be beneficial in fighting cardiovascular disease.

## **Monounsaturated Fats**

Monounsaturated fats are considered healthier than polyunsaturated fats because of their ability to lower LDL (commonly called bad) cholesterol while maintaining or raising HDL (or good) cholesterol. Canola oil and olive oil are naturally high in monounsaturated fats.

Although the evidence is not ironclad, a study published in the Journal of the American Medical Association surveyed 4,900 Italian men and women, whose ages ranged from twenty to fifty-nine, and found that those people who had a diet high in olive oil and low in butter and margarine also had lower overall levels of cholesterol and blood pressure than people whose diets included more butter and margarine.

## **Polyunsaturated Fats**

Plentiful in safflower, sunflower, and corn oil, polyunsaturated fats contain both omega-6 and omega-3 essential fatty acids (EFA's). Omega-6 is beneficial when a person is injured, causing blood to clot and blood vessels to constrict. In contrast, omega-3 inhibits harmful clotting, relaxes vascular smooth muscle, and has an anti-arrhythmic effect, reducing the risk of heart disease.

Humans evolved on a diet that contained small but roughly equal amounts of omega-6 and omega-3 fatty acids. Then, about one hundred years ago, the food supply began to change. The vegetable oil industry began to hydrogenate oil, which reduced the oil's omega-3 content. At the same time, the domestic livestock industry began to use feed grains, which happen to be rich in omega-6 fatty acids and low in omega-3's. As a result, the American diet now has an EFA ration of 20-25:1 omega-6 to omega-3, rather than the 1:1 ration with which humans evolved. The modern diet is too high in omega-6's, which may contribute to heart disease.

There are many foods that can boost the intake of omega-3 essential fatty acids. Fish is a good source, as well as beans – especially Great Northern, kidney, navy, and soybeans. In oils, omega-3 is most abundant in flaxseed, but there is also canola oil with a 10 percent omega-3 content, and soy, pumpkin seed, evening primrose, borage seed, walnut, and black currant oils.

Some of the symptoms of an omega-3 fatty acid deficiency include increased allergies, dry hair and skin, brittle nails, acne, eczema, rashes, or tiny lumps on the backs of your arms. To find out if any of these symptoms might be related to the lack of omega-3 in the diet, take a teaspoon or two daily of pure flaxseed (linseed) oil, the vegetable oil richest in omega-3 fatty acids, and see if symptoms diminish.

High temperature cooking, such as frying, destroys the EFA content of certain oils. Oils such as flaxseed and walnut should only be used for baking, and in soups and salads. When frying foods, use the more heat stable oils – canola, avocado, peanut, and olive.

## **Hydrogenated Oil**

Many processed foods contain “partially hydrogenated oil” as an ingredient. Hydrogenated oils contain man-made molecules called trans-fatty acids, which may interfere with normal metabolic functions due to their unusual molecular shape. The natural form of fatty acids, called the cis form, has a molecular shape that is biochemically suited for human health. According to John R. Lee, M.D., of Sebastopol, California, “Trans-fatty acids enter our metabolic processes but are defective for our bodily uses. Our cell membranes, our hormone synthesis, our immune system, our ability to deal with inflammation and to heal, and many, many other vital systems all become defective when trans-fatty acids substitute for the health-giving cis fatty acids. Unknowingly, we are poisoning ourselves.”

Many processed food products contain these hydrogenated oils. However, in the United States, the exact amount of trans-fatty acids in a product is not required to be listed on the label of the product. As Dr. Lee points out, “Other countries, such as Canada, are more enlightened; food labeling there now requires that the included fats be measured and identified in terms of cis or trans forms.” For better nutrition, he advises, “Choose butter over margarine; olive oil and flaxseed oils over the many processed oils on the supermarket shelves; fresh vegetables over canned or otherwise processed ones; and learn to read labels.

## **Oxidized Oils**

When oils are overheated and used for too long, as is the case with the cooking oils at fast food restaurants, they become oxidized. Oxidized oils are loaded with oxygen-damaging free radicals, according to Bernhard Hennig, Ph.D., R.D., of the Department of Nutrition and Food Science, College of Human Environmental Sciences, University of Kentucky. To counteract the dangers of free radicals, Dr. Lee advises taking vitamin and mineral supplements. “Protect your metabolic processes and cell membranes with antioxidants such as vitamins C, A (or beta-carotene), and E, plus the mineral antioxidant, selenium,” he says.

## ACID vs. ALKALINE

We should eat only 20% acid foods. We should eat 80% alkaline foods.

The following table of foods is taken from Ragnar Berg of Germany. Foods preceded by the letters "AL" are alkaline forming. Foods preceded by the letters "AC" are acid forming.

<b>Column No. 1</b>		<b>Column No. 2</b>		<b>Column No. 3</b>	
<b><u>Non-starch foods</u></b>		<b><u>Proteins and Fruits</u></b>		<b><u>Starchy foods</u></b>	
AL	Alfalfa	AC	Beef	AL	Bananas
AL	Artichokes	AC	Buttermilk	AC	Barley
AL	Asparagus	AC	Chicken	AC	Beans (Lima)
AL	Beans (String)	AC	Clams	AC	Beans (White)
AL	Beans (Wax)	AC	Cottage Cheese	AC	Bread
AL	Beets (Whole)	AC	Crab	AC	Cereals
AL	Beet Leaves	AC	Duck	AC	Chestnuts
AL	Broccoli	AC	Eggs	AC	Corn
AL	Cabbage (White)	AC	Fish	AC	Corn Meal
AL	Cabbage (Red)	AC	Goose	AC	Crackers
AL	Carrots	AL	Honey (Pure)	AC	Corn Starch
AL	Carrot Tops	AC	Jello	AC	Grapenuts
AL	Cauliflower	AC	Lamb	AC	Gluten Flour
AL	Celery Knobs	AC	Lobster	AC	Lentils
AL	Chicory	AC	Mutton	AC	Macaroni
AL	Coconut	AC	Nuts	AC	Maize
AL	Corn	AC	Oyster	AC	Millet Rye
AL	Cucumbers	AC	Pork	AC	Oatmeal
AL	Dandelion	AC	Rabbit	AC	Peanuts
AL	Eggplant	AC	Raw Sugar	AC	Peanut Butter
AL	Endive	AC	Turkey	AC	Peas (Dried)
AL	Garlic	AC	Turtle	AC	Potatoes (Sweet)
AL	Horseradish	AC	Veal	AL	Potatoes (White)
AL	Kale			AL	Pumpkin
AL	Kohlrabi	AL	All Berries	AC	Rice (Brown)
AL	Leek	AL	Apples	AC	Rice (Polished)
AL	Lettuce	AL	Apricots	AC	Roman Meal
AL	Mushrooms	AL	Avocados	AC	Rye Flour
AL	Okra	AL	Cantaloupes	AC	Sauerkraut
AL	Olives (Ripe)			AL	Squash (Hub'd.)
AL	Onions	AL	Cranberries	AC	Tapioca
AL	Oysterplant	AL	Currants		
AL	Parsley	AL	Dates		
AL	Parsnips	AL	Figs		
AL	Peas (Fresh)	AL	Grapes		
AL	Peppers (Sweet)	AL	Grapefruit		
AL	Radishes	AL	Lemons		
AL	Rutabagas	AL	Limes		
AL	Savory	AL	Oranges		
AL	Sea Lettuce	AL	Peaches		
AL	Sorrel	AL	Pears		
AL	Soybean (Products)	AL	Persimmons		
AL	Spinach	AL	Pineapple		
AL	Sprouts	AL	Plums		
AL	Summer Squash	AL	Prunes		
AL	Swiss Chard	AL	Raisins		
AL	Turnips	AL	Rhubarb		
AL	Watercress	AL	Tomatoes		

For people with weak digestion it is best to make food combinations as simple as possible. Follow the suggestions on how to combine foods. Combine foods found in columns one and two; also columns one and three. Never combine columns two and three. All foods in column one will combine with all foods in column two.

## **Fruits**

Citrus fruits cause alkalinity. Citrus fruits, when broken down, release an alkaline ash, which develops an alkaline condition in the body. Sometimes these acid fruits stir up the acids so rapidly that their effect is considered to be a bad one. This may be quite the reverse of the real truth. Should the eating of fruit cause you distress, you may be sure you are misinterpreting your symptoms. In any case like that, I would say you are very ill and require the aid or advice of a specialist in natural healing.

But in general, remember that fruit should be eaten in a natural harmony. This means, oranges and grapefruits and tangerines and lemons as the acid fruits mentioned go very nicely with other acid fruits like cranberries, pineapple and strawberries. They do not combine well with the sweet fruits or the dried ones we mentioned, like prunes, figs, raisins, dates or grapes. Berries and melons should always be eaten alone. There is no disagreeable surprise for your stomach, for example, than watermelon eaten in conjunction with another food.

The sub-acid fruits mentioned, such as apples, persimmons, pears, plums, peaches, apricots combine fairly well with the acid fruits, but we do not recommend the combinations. The safest procedure is the simplest one. You can use cream, if you must, but never sugar. White sugar is actually a poison to your system, no matter how much energy you seem to get from it, and brown sugar is like gilding the lily. The fruit itself is plentiful with sugar – you do not need to put sugar on your sugar.

In general, too, remember that sweet milk goes best with the acid fruits, while sour milk, like clabber, yogurt or even cottage cheese, goes best with the sub-acid fruits. In other words, a glass of milk at orange juice time is a permissible combination. Again, keep your diet simple.

Fruits also can be classed in three columns:

### **Column No. 1**

#### **Acid Fruits**

Oranges  
Lemons  
Grapefruit  
Limes

### **Column No. 2**

#### **Sub-Acid Fruits**

Apples  
Pears  
Plums  
Peaches  
Grapes  
Apricots

### **Column No. 3**

#### **Sweet or Dried Fruits**

Dates  
Figs  
Raisins

Columns one and two will combine very nicely; also columns two and three. Columns one and three never mix. Do not combine acid fruits with sweet dried fruits. Berries and melons are best eaten alone.

## **Acid/Alkaline Balance General Test**

Use Nitrazine paper to determine the pH of the fluids of the body. A reading of 7.0 is neutral on a scale of 1.0 to 14.0. The normal pH of the body is slightly acid 6.3 to 6.8.

### **Procedure for Testing**

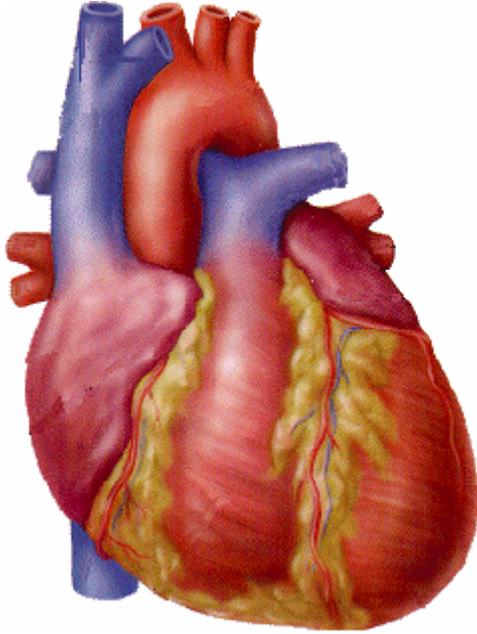
1. Take urine or saliva sample and test before meals or at least two hours after eating.
2. Check color of test strip with chart supplied with the Nitrazine paper and determine the pH.

### **Interpretation of Test**

1. If reading is above 6.8, the body is too alkaline and the person should be put on a diet of more acid-forming foods.
2. If reading is below 6.3, then the person is too acid and should be put on a diet including more alkaline foods.

## CHELATION: ORAL VS. INTRAVENOUS

One of the first uses of Chelation was in Russia in 1922, to remove the heavy metals from the blood stream of people who had blood poisoning from high amounts of various metals. Chelation was also used in Germany before World War II for the same reason and was brought into the United States in 1948. It was used to remove the heavy metals from the poisoned blood streams of men working on US ships who got too much lead from painting and chipping paint. As they were given Chelation to clear up the blood poisons, they began to realize that it was also removing the plaque from the arterial walls, improving overall circulation.



This was the beginning of Chelation therapy, as we know it today. There are approximately 10,000 Doctor's in the United States practicing Intravenous Chelation therapy, EDTA, meaning Ethylene Diamine Tetra Acetic. Dr. Albert J. Scarchill, an Osteopath from Farmington Hills, ID, has reported on a Chelation study of 19,000 people with vascular disease, 82.5% showed substantial improvement.

Chelation, (pronounced KEY-LAY-SHUN), comes from the Greek word "chele", which means "claw". The claw in Chelation Therapy is a synthetic amino acid, EDTA, which clamps onto certain minerals, calcium, tin, lead, mercury, and others that are impairing membrane function and contributing to free radical damage. Calcium in particular, is the substance that holds the plaque like glue to our arterial walls of our circulatory system. Plaque is made up of fat; collagen, cholesterol,

proteins and metals, all bonded together by calcium. When plaque build up to dangerous levels, it begins to cut off the circulation of the blood, forcing the heart to work harder. The fact is, many people do not know that they have clogged arteries or hardening of the arteries until it is too late.

Although EDTA intravenous chelation has been known to reverse hardening of the arteries, it is called non-consensus medicine; meaning that it is not FDA approved and is not covered by most insurance companies. Costs for this medical procedure can range from \$1,000-1,500 per treatment, which can be 1-2 times annually.

EDTA is not for everyone, because it is a one day out-patient procedure at a Doctors office, the release of these toxins in such a short time period can put a burden on the kidneys, which disposes of the heavy waste materials. A person must be in good overall health to handle the stress that the EDTA Chelation therapy procedure puts on the other systems of the body.

### WHAT IS CHELATION?

Chelating (pronounced key-laying) agents are substances which can chemically bond with, or chelate (from the Greek chele, claw), metals, minerals, or chemical toxins from the body. The chelating agent actually encircles a mineral or metal ion and carries it from the body via the urine and feces.

### HOW DOES IT WORK?

Chelation therapy involves injecting chelating agents into the blood-stream- for the purpose of eliminating from the body undesirable substances- such as heavy metals, chemical toxins, mineral deposits, and fatty plaques (as in the arteries; the agent binds to the calcium in the plaques). EDTA (ethylene diamine tetraacetic acid) is an effective and widely studied chelating agent. It cannot chelate mercury, however, DMSA and DMPS, the chemicals which work intravenously to chelate mercury, are not approved by the FDA.

EDTA is a synthetic amino acid; amino acids are the building blocks of protein. Chelation therapy with EDTA was first introduced into medicine in the United States in 1948 as a treatment for the lead poisoning- of workers in a battery factory. Shortly thereafter, the U.S. Navy advocated chelation for sailors who had absorbed lead while painting- government ships and facilities. The FDA approved IV EDTA chelation as a treatment for lead poisoning.

Physicians administering the chelation for lead toxicity observed that patients- who also had atherosclerosis (fatty-plaque buildup on arterial walls) or arteriosclerosis (hardening of the arteries) experienced reductions- in both conditions after chelation. Since 1952, IV EDTA chelation has been used to treat cardiovascular disease.

### ORAL CHELATION FOR HEAVY METAL TOXICITY AND CARDIOVASCULAR DISEASE

Human exposure to heavy metals has risen dramatically in the last 50 years, however, as a result of an exponential increase in the use of heavy metals in industrial processes and products. Today, chronic exposure comes from mercury-amalgam dental fillings, lead in paint and tap water, chemical residues

in processed foods, and "personal care" products (cosmetics, shampoo and other hair products, mouthwash, toothpaste, soap). In today's industrial society, there is no escaping exposure to toxic chemicals and metals.

In addition to the hazards at home and outdoors, many occupations involve daily heavy metal exposure. Over 50 professions entail exposure to mercury alone. These include physicians, pharmaceutical workers, any dental occupation, laboratory workers, hairdressers, painters, printers, welders, metalworkers, cosmetic workers, battery makers, engravers, photographers, visual artists, and potters.

### **THE HEAVY METAL HAZARD**

Some metals are naturally found in the body and are essential to human health. Iron, for example, prevents anemia, and zinc is a cofactor in over 100 enzyme reactions. They normally occur at low concentrations and are known as trace metals. In high doses, they may be toxic to the body or produce deficiencies in other trace metals; for example, high levels of zinc can result in a deficiency of copper, another metal required by the body.

Heavy or toxic metals are trace metals with a density at least five times that of water. As such, they are stable elements (meaning they cannot be metabolized by the body) and bio-accumulative (passed up the food chain to humans). These include mercury, nickel, lead, arsenic, cadmium, aluminum, platinum, and copper (the metallic form versus the ionic form required by the body). Heavy metals have no function in the body and can be highly toxic.

Once liberated into the environment through the air, drinking water, food, or countless human-made chemicals and products, heavy metals are taken into the body via inhalation, ingestion, and skin absorption.

If heavy metals enter and accumulate in body tissues faster than the body's detoxification pathways can dispose of them, a gradual buildup of these toxins will occur. High-concentration exposure is not necessary to produce a state of toxicity in the body, as heavy metals accumulate in body tissues and, over time, can reach toxic concentration levels.

Heavy metal exposure is not an entirely modern phenomenon: historians have cited the contamination of wine and grape drinks by lead-lined jugs and cooking pots as a contributing factor in the "decline and fall" of the Roman Empire; and the Mad Hatter character in Alice in Wonderland was likely modeled after nineteenth-century hat makers who used mercury to stiffen hat material and frequently became psychotic from mercury toxicity.

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In my clinical nutrition practice, when I discuss with clients my concerns regarding heavy metal toxicity, I often get the response, "That isn't a problem for me." Most are astonished to learn that we are all being exposed to and absorbing these harmful substances to some degree in our daily lives. The astonishment turns to alarm when they hear what heavy metals do in the body.

The Effects of Heavy Metal Toxicity Studies confirm that heavy metals can directly influence behavior by impairing mental and neurological function, influencing neurotransmitter production and utilization, and altering numerous metabolic body processes. Systems in which toxic metal elements can induce impairment and dysfunction include the blood and cardiovascular, detoxification pathways (colon, liver, kidneys, skin), endocrine (hormonal), energy production pathways, enzymatic, gastrointestinal, immune, nervous (central and peripheral), reproductive, and urinary.

Breathing heavy metal particles, even at levels well below those considered nontoxic, can have serious health effects. Virtually all aspects of animal and human immune system function are compromised by the inhalation of heavy metal particulates. In addition, toxic metals can increase allergic reactions, cause genetic mutation, compete with "good" trace metals for biochemical bond sites, and act as antibiotics, killing both harmful and beneficial bacteria.

Much of the damage produced by toxic metals stems from the proliferation of oxidative free radicals they cause. A free radical is an energetically unbalanced molecule, composed of an unpaired electron, that "steals" an electron from another molecule to restore its balance. Free radicals result naturally when cell molecules react with oxygen (oxidation) but, with a heavy toxic load or existing antioxidant deficiencies, uncontrolled free-radical production occurs. Unchecked, free radicals can cause tissue damage throughout the body; free-radical damage underlies all degenerative diseases. Antioxidants such as vitamins A, C, and E curtail free-radical activity.

Heavy metals can also increase the acidity of the blood. The body draws calcium from the bones to help restore the proper blood pH. Further, toxic metals set up conditions that lead to inflammation in arteries and tissues, causing more calcium to be drawn to the area as a buffer. The calcium coats the inflamed areas in the blood vessels like a bandage, patching up one problem but creating another, namely the hardening of the artery walls and progressive blockage of the arteries. Without replenishment of calcium, the constant removal of this important mineral from the bones will result in osteoporosis (loss of bone density leading to brittle bones).

Current studies indicate that even minute levels of toxic elements have negative health consequences, however, these vary from person to person. Nutritional status, metabolic rate, the integrity of detoxification pathways (ability to detoxify toxic substances), and the mode and degree of heavy metal exposure all affect how an individual responds. Children and the elderly, whose immune systems are either underdeveloped or age-compromised, are more vulnerable to toxicity.

### **Common Heavy Metals**

Sources and Specific Effects Aluminum, arsenic, cadmium, lead, mercury, and nickel are the most prevalent heavy metals. The specific sources of exposure, body tissues in which the metal tends to be deposited, and health effects of each metal are identified below.

1. **Aluminum** - Sources of exposure: Aluminum cookware, aluminum foil, antacids, antiperspirants, baking powder (aluminum containing), buffered aspirin, canned acidic foods, food additives, lipstick, medications and drugs (anti-diarrheal agents, hemorrhoid medications, vaginal douches), processed cheese, "softened" water, and tap water. Target tissues: Bones, brain, kidneys and stomach. Signs and Symptoms: Colic, dementia, esophagitis, gastroenteritis, kidney damage, liver dysfunction, loss of appetite, loss of balance, muscle pain, psychosis, shortness of breath, and weakness. DR McLaughlin, MD, F.R.C.P. (C), professor of physiology and medicine and director of the Centre for Research in Neurodegenerative Diseases at the University of Toronto, states, "Concentrations of aluminum that are toxic to many biochemical processes are found in at least ten human neurological conditions." Recent studies suggest that aluminum contributes to neurological disorders such as Alzheimer's disease, Parkinson's disease, senile and presenile dementia, clumsiness of movements, staggering when walking, and inability to pronounce words properly. Behavioral difficulties among schoolchildren have also been correlated with elevated levels of aluminum and other neurotoxic heavy metals.
2. **Arsenic** - Sources of exposure: Air pollution, antibiotics given to commercial livestock, certain marine plants, chemical processing, coal-fired power plants, defoliants, drinking water, drying agents for cotton, fish, herbicides, insecticides, meats (from commercially raised poultry and cattle), metal ore smelting, pesticides, seafood (fish, mussels, oysters), specialty glass, and wood preservatives. Target tissues: Most organs of the body, especially the gastrointestinal system, lungs, and skin. Signs and Symptoms: Abdominal pain, burning of the mouth and throat, cancer (especially lung and skin), coma, diarrhea, nausea, neuritis, peripheral vascular problems, skin lesions, and vascular collapse. The greatest dangers from chronic arsenic exposure are lung and skin cancers and gradual poisoning, most frequently from living near metal smelting plants or arsenic factories.
3. **Cadmium** - Sources of exposure: Air pollution, art supplies, bone meal, cigarette smoke, food (coffee, fruits, grains, and vegetables grown in cadmium-laden soil, meats [kidneys, liver, poultry, or refined foods), freshwater fish, fungicides, highway dusts, incinerators, mining, nickel-cadmium batteries, oxide dusts, paints, phosphate fertilizers, power plants, seafood (crab, flounder, mussels, oysters, scallops), sewage sludge, "softened" water, smelting plants, tobacco and tobacco smoke, and welding fumes. Target tissues: Appetite and pain centers (in brain), brain, heart and blood vessels, kidneys, and lungs. Signs and Symptoms: Anemia, dry and scaly skin, emphysema, fatigue, hair loss, heart disease, depressed immune system response, hypertension, joint pain, kidney stones or damage, liver dysfunction or damage, loss of appetite, loss of sense of smell, lung cancer, pain in the back and legs, and yellow teeth. Current studies are attempting to determine if cadmium-induced bone and kidney damage can be prevented (or made less likely) by adequate calcium, protein (amino acids), vitamin D, and zinc in the diet.

4. **Lead** - Sources of exposure: Air pollution, ammunition (shot and bullets), bathtubs (cast iron, porcelain, steel), batteries, canned foods, ceramics, chemical fertilizers, cosmetics, dolomite, dust, foods grown around industrial areas, gasoline, hair dyes and rinses, leaded glass, newsprint and colored advertisements, paints, pesticides, pewter, pottery, rubber toys, soft coal, soil, solder, tap water, tobacco smoke, and vinyl 'mini-blinds'. Target tissues: Bones, brain, heart, kidneys, liver, nervous system, and pancreas. Signs and Symptoms: Abdominal pain, anemia, anorexia, anxiety, auto exhaust, bone pain, brain damage, confusion, constipation, convulsions, dizziness, drowsiness, fatigue, headaches, hypertension, inability to concentrate, indigestion, irritability, loss of appetite, loss of muscle coordination, memory difficulties, miscarriage, muscle pain, pallor, tremors, vomiting, and weakness. The toxicity of lead is widely acknowledged. The greatest risk for harm, even with only minute or short-term exposure, is to infants, young children, and pregnant women. A federal study conducted by the Centers for Disease Control and Prevention (CDCP) in 1984 estimated that three to four million American children have an unacceptably high level of lead in their blood. Dr. Suzanne Binder, a CDCP official, stated, "Many people believed that when lead paint was banned from housing [in 1978], and lead was cut from gasoline [in the late 1970s], lead-poisoning problems disappeared, but they're wrong. We know that throughout the country children of all races, and ethnicity's and income levels are being affected by lead [already in the environment]." In their book, 'Toxic Metal Syndrome', Dr.'s R. Casdorph and M. Walker report that over 4 million tons of lead is mined each year and existing environmental lead levels are at least 500 times greater than pre-historic levels. In 1989, the U.S. Environmental Protection Agency (EPA) reported that more than one million elementary schools, high schools, and colleges are still using lead-lined water storage tanks or lead-containing components in their drinking fountains. The EPA estimates that drinking water accounts for approximately 20% of young children's lead exposure. Other common sources are lead paint residue in older buildings (as in inner cities) and living in proximity to industrial areas or other sources of toxic chemical exposure, such as commercial agricultural land. All children born in the U.S. today have measurable traces of pesticides, a source of heavy metals and chlorine-based chemicals, in their tissues. Lead is a known neurotoxin (kills brain cells), and excessive blood lead levels in children have been linked to learning disabilities, attention deficit disorder (ADD), hyperactivity syndromes, and reduced intelligence and school achievement scores.
5. **Mercury** - Sources of exposure: Air pollution, batteries, cosmetics, dental amalgams, diuretics (mercurial), electrical devices and relays, explosives, foods (grains), fungicides, fluorescent lights, freshwater fish (especially large bass, pike, and trout), insecticides, mining, paints, pesticides, petroleum products, saltwater fish (especially large halibut, shrimp, snapper, and swordfish), shellfish, and tap water. Target tissues: Appetite and pain centers in the brain, cell membranes, kidneys, and nervous system (central and peripheral). Signs and Symptoms: Abnormal nervous and physical development (fetal and childhood), anemia, anorexia, anxiety, blood changes, blindness, blue line on gums, colitis, depression, dermatitis, difficulty chewing and swallowing, dizziness, drowsiness, emotional instability, fatigue, fever, hallucinations, headache, hearing loss, hypertension, inflamed gums, insomnia, kidney damage or failure, loss of appetite and sense of smell, loss of muscle coordination, memory loss, metallic taste in mouth, nerve damage, numbness, psychosis, salivation, stomatitis, tremors, vision impairment, vomiting, weakness, and weight loss. The primary source of exposure to mercury is "silver" dental fillings (approximately 50% mercury when placed); over 225 million Americans have these fillings in their teeth. Mercury fillings release microscopic particles and vapors of mercury every time a person chews. Vapors are inhaled while particles are absorbed by tooth roots, mucous membranes of the mouth and gums, and the stomach lining. In people with mercury amalgam fillings, measurements of the mercury level in the mouth ranges between 20 and 400 mcg/m<sup>3</sup>. Keep in mind that this is continuous exposure. The National Institute of Occupation Safety and Health places the safe limit of environmental exposure to mercury at 20 mcg/m<sup>3</sup>, but that is assuming a weekly exposure of 40 hours (the workweek) and the mercury involved is outside the body. The Environmental Protection Agency's allowable limit for continuous mercury exposure is 1 mcg/m<sup>3</sup> but, again, that is based on mercury sources outside the body. Neither figure addresses 24-hour-a-day exposure from mercury in one's mouth. Hal Huggins, DDS, a specialist in the effect of mercury amalgams on health, reports that 90% of the 7,000 patients he tested showed immune system reactivity from exposure to low levels of mercury. In 1984, the American Dental Association (ADA), without providing scientific evidence, claimed that only 5% of the U.S. population is reactive to mercury exposure, and that this figure is insignificant. Meanwhile, the ADA mandates that dentists alert all dental personnel to the potential hazards of inhaling mercury vapors. The Environmental Protection Agency (EPA) goes further, instructing dentists to treat mercury amalgam as a toxic material while handling before insertion, and as toxic waste after removal. Mark S. Hulet, DDS, who conducts research on amalgam fillings, wrote a pamphlet for his patients, in which he cites five categories of pathological reaction to mercury fillings, as identified by dentists, doctors, and toxicologists. The categories are:

- Neurological: emotional manifestations (depression, suicidal impulses, irritability, inability to cope) and motor symptoms (muscle spasms, facial tics, seizures, multiple sclerosis)
- Cardiovascular problems: nonspecific chest pain, accelerated heart beat o Collagen diseases: arthritis, bursitis, scleroderma, systemic lupus erythematosus
- Immune system diseases: compromised immunity
- Allergies: Airborne allergies, food allergies, and "universal" reactors. One of the keys to mercury's effects on health may be its ability to block the functioning of manganese, a key mineral required for physiological reactions in all five categories, notes Dr. Hulet.

6. **Nickel** - Sources of exposure: Appliances, buttons, ceramics, cocoa, cold-wave hair permanent, cooking utensils, cosmetics, coins, dental materials, food (chocolate, hydrogenated oils, nuts, food grown near industrial areas), hair spray, industrial waste, jewelry, medical implants, metal refineries, metal tools, nickel-cadmium batteries, orthodontic appliances, shampoo, solid-waste incinerators, stainless steel kitchen utensils, tap water, tobacco and tobacco smoke, water faucets and pipes, and zippers. Target tissues: Areas of skin exposure, larynx (voice box), lungs, and nasal passages. Signs and Symptoms: Apathy, blue-colored lips, cancer (especially lung, nasal, and larynx), contact dermatitis, diarrhea, fever, headaches, dizziness, gingivitis, insomnia, nausea, rapid heart rate, skin rashes (redness, itching, blisters), shortness of breath, stomatitis, and vomiting. The greatest danger from chronic nickel exposure is lung, nasal, or larynx cancers, and gradual poisoning from accidental or chronic low-level exposure, the risk of which is greatest for those living near metal smelting plants, solid waste incinerators, or old nickel refineries.

### **How Can We Protect Ourselves from Heavy Metals?**

Logic dictates that, once the potential harm from heavy metals is understood, their production and use should be phased out and toxic storage heavily regulated. As is obvious from the list of exposure sources above, logic is not the guiding principle here, except in the case of lead, the use of which has been curtailed.

Even if all heavy metal production were to stop today, however, enough heavy metals have been released into our environment to cause chronic poisoning and numerous neurological diseases for generations to come. There are presently 600,000 toxic waste contamination sites in the United States alone, according to the U.S. Congressional Office of Technology Assessment. Of these, less than 900 have been proposed by the EPA for Superfund cleanup and approximately 19,000 others are under review. While some of these toxic messes were likely caused by accidents or ignorance, the majority came from illegal dumping by hazardous product or waste distributors, manufacturers, transportation companies, or waste management companies. Such practices have not ceased, as focus on profit continues to override concerns about health, the environment, and a more promising future for all of our children.

With the government doing little or moving very slowly to protect the public from the hazards of heavy metals, it is up to individuals to take measures to protect themselves. According to conventional medicine, there is nothing a person can do to address aluminum; arsenic, cadmium, lead, mercury, or nickel exposure, aside from avoiding known sources. Given the prevalence of these toxins in our lives, this is impossible.

Fortunately, there is a way to get these harmful substances out of the body. Intravenous and oral chelation, detoxification protocols, and specific nutritional therapies can remove heavy metals and chemical toxins and reduce the toxic load our bodies endure on a daily basis.

### **THE CHELATION SOLUTION**

Chelating (pronounced key-laying) agents are substances which can chemically bond with, or chelate (from the Greek chele, claw), metals, minerals, or chemical toxins from the body. The chelating agent actually encircles a mineral or metal ion and carries it from the body via the urine and feces. Many organic acids found in the body or in foods can act as chelating agents, including acetic acid, ascorbic acid (vitamin C), citric acid, and lactic acid. Natural chelation processes in the body are responsible for such things as the digestion, assimilation, and transport of food nutrients, the formation of enzymes and hormones, and detoxification of toxic chemicals and metals.

Intravenous chelation therapy involves injecting the chelating agent EDTA into the bloodstream for the purpose of eliminating from the body undesirable substances such as heavy metals, chemical toxins, mineral deposits, and fatty plaques (as in the arteries; the agent binds to the calcium in the plaques). EDTA (ethylene diamine tetraacetic acid) is an effective and widely studied chelating agent. It cannot chelate mercury, however, DMSA and DMPS, the chemicals which work intravenously to chelate mercury, are not approved by the FDA.

EDTA is a synthetic amino acid (amino acids are the building blocks of protein) and is approximately one third as toxic to the body as aspirin. Chelation therapy with EDTA was first introduced into medicine in the United States in 1948 as a treatment for the lead poisoning of workers in a battery factory. Shortly thereafter, the U.S. Navy advocated chelation for sailors who had absorbed lead while painting government ships and facilities. The FDA approved IV EDTA chelation as a treatment for lead poisoning.

Physicians administering the chelation for lead toxicity observed those patients who also had atherosclerosis (fatty-plaque buildup on arterial walls) or arteriosclerosis (hardening of the arteries) experienced reductions in both conditions after chelation. Since 1952, IV EDTA chelation has been used to treat cardiovascular disease.

Over 1,800 scientific journal articles have been published on the use of EDTA in intravenous (IV) chelation. In the past 30 years, hundreds of thousands of patients have received this therapy, as delivered by over 1,000 physicians in approximately 3,300,000 IV infusions. EDTA's success rate in increasing blood circulation is 82%, provided the patients received sufficient chelation.

### **How Chelation Aids Cardiovascular Health**

Chelation reduces calcium plaques on arterial walls. These atherosclerotic plaques are not limited to arteries nearest the heart. On the contrary, they are widespread and can affect blood flow (oxygen delivery) to every cell, tissue, gland, organ, and system being served by the over 75,000 miles of blood vessels in your body. Chelation reaches every blood vessel in the body, from the largest artery to the tiniest capillary and arteriole, most of which are far too small or too deep within the brain or other organ to be safely reached in surgery.

Other scientifically documented benefits of intravenous EDTA chelation therapy for the cardiovascular system include:

- Stabilization of arterial intracellular membranes o Maintenance of the electrical charge of platelets in the blood, reducing blood clumping (aggregation) and preventing blood clots.
- Marked improvement in nearly 100% of 2,870 studied patients with peripheral vascular disease
- Normalization of half of treated cardiac arrhythmias
- Reductions of cerebrovascular occlusion o Improved cognitive function in people with memory and concentration deficits and improved visual acuity (when problems are caused by arterial blockage)
- Improved myocarditis due to lead poisoning.
- Reduction of blood fat levels and improved capillary blood flow. O Increased peripheral blood flow to the extremities.
- Improved compliance of vascular tissues; decalcification of elastic tissues resulting in improved elasticity and resilience.
- Improved red blood cell membrane flexibility and permeability to potassium
- Decreased blood pressure levels, as a result of excretion of cadmium from renal tissues, diminished peripheral resistance, improved blood vessel resilience and pliability, decreased vascular spasm, and improved magnesium uptake.

In addition to the effectiveness of IV EDTA chelation therapy in treating cardiovascular disease and heavy metal toxicity, research has documented its benefits for aneurysm, Alzheimer's disease and senile dementia, arthritis, autoimmune conditions, cancer, cataracts, diabetes, emphysema, gallbladder stones, hypertension, kidney stones, Lou Gehrig's disease, osteoporosis, Parkinson's disease, scleroderma, stroke, varicose veins, venomous snake bite, and other conditions involving an interruption in blood flow and diminished oxygen delivery.

The ten top killers of Americans (in the order of frequency) include heart disease, cancer, stroke, accidents, pneumonia, diabetes, cirrhosis, arteriosclerosis, suicides, and infant death. All but accidents, pneumonia, suicides, and infant death have an underlying connection to reduced blood circulation. More than 90 percent of Americans live in jeopardy of having a serious illness relating to the circulatory system.

The human and financial cost of cardiovascular disease in the U.S. is astronomical. Every year, approximately 1.5 million Americans have a heart attack, 300,000 of who die before receiving medical attention. The treatment of cardiovascular disease rings up a total of \$100 billion dollars annually-\$200,000 spent every minute. Coronary artery bypass surgery (bypassing the blocked heart artery with grafted leg artery, average cost \$44,000) is the most frequently prescribed surgical procedure for heart disease, costing \$10 billion per year. Numerous leading medical doctors and authorities have stated that coronary bypass surgery is overprescribed and often unnecessary. Nearly 20,000 people die every year as a result of bypass surgery or angioplasty (ballooning of the occluded artery, average cost \$21,000).

Intravenous chelation is far safer, much less expensive, and less invasive. Proven effective in circulatory disorders, its benefits for cardiovascular patients is clear. IV chelation does pose some risks, however. 28

Although nontoxic, EDTA produces side effects in some people. These include burning, redness and swelling at the injection site, fever, hypotension (low blood pressure), joint pain, skin outbreaks or rashes, upset stomach, and, rarely, irritation of the kidneys and liver.

Some cardiologists who understand the benefits of intravenous EDTA chelation do not recommend its use with patients who are debilitated, emaciated, have weak or diseased kidneys, or advanced cardiovascular disease (end stage). They believe the sudden, massive infusion of EDTA puts too much stress on the kidneys, liver and detoxification pathways in these patients and could be harmful or even dangerous. Other doctors and medical researchers disagree, contending that "transient kidney malfunction" is a normal physiological adaptation occurring during the passage of toxic products (chelated metals and chemicals) through the kidneys, and that properly administered IV chelation will not cause kidney damage.

A common misconception about chelation is that it lowers the levels of calcium in the bones and teeth as the body draws calcium from them to replace the calcium drawn from the blood by the chelation process. On the contrary, the calcium to restore blood levels is drawn from places in the body where calcium has built up unnaturally, as in arterial plaques (which contribute to clogged arteries), calcified bursae (a source of bursitis), arthritic joints, and kidney stones.

Further, Garry Gordon, MD, D.O., co-founder of the American College of Advancement in Medicine (ACAM) and a pioneer in chelation therapy, states, "If calcium levels start to drop, the parathyroid glands kick in and start secreting parathormone which 'steals' back enough calcium from the EDTA (and other) chelates to keep the heart beating normally (serum calcium must stay at a constant level for normal heart function) and to activate cells called osteoblasts, which strengthen and rebuild bone. The more chelation we give people, the less osteoporosis they have and the less age-related calcium accumulation [arterial wall plaques] there is in the blood vessels."

There is no limit to the amount of IV EDTA chelation a person can be given and the peak beneficial effects last up to two months after treatment. IV chelation is safe for children as well as adults. People over 90 years old have enjoyed the benefits of chelation and more than 200,000 children in the U.S. have undergone IV chelation as treatment for lead poisoning.

Intravenous chelation has two drawbacks, however. Although much safer and less expensive than coronary bypass surgery or angioplasty, it is still relatively expensive (hundreds of dollars per visit) and not widely available, as there are comparatively few experienced medical doctors certified in IV chelation therapy. Fortunately, there is an even safer, inexpensive, and more easily obtained alternative: oral chelation.

### **Oral Chelation Ingredients for Arteriosclerosis and Arterial Plaque**

- Natural substances that can assist in breaking down the fatty deposits from the artery walls:
- Lipase- A plant enzyme that assists in the breakdown and digestion of fat. Lipotropic (has an affinity for lipids-fats). Lipotropics are fat metabolism assisting agents.
- Carrageenan- Lipotropic
- L-Lysine- Lipotropic
- Trimethylglycine- Lipotropic
- Choline- Lipotropic.
- Chondroitin sulfate- This nutrient is a constituent of the arterial wall and has anti-coagulant (prevents blood stickiness), anti-lipemic (anti-fat in the blood stream) and anti-thrombogenic (prevents clots) properties.
- L-Carnitine- Lowers blood fat levels and both triglycerides and total cholesterol levels.
- Garlic- Lowers LDL cholesterol, triglycerides, total cholesterol, and is used as a preventative for atherosclerosis (fatty deposits on the artery walls).
- Natural substances that can assist in the removal of mineral deposits from the artery walls:
- Magnesium- Displaces calcium within the cells of arterial walls. "Prescription for Nutritional Healing", James F. Balch, MD, Phyllis A. Balch, C.N.C., Avery Publishing Group, Garden City, New York, 1997. Pg. 541.
- Manganese- An important chelating agent. It is a major factor in blocking calcium from entering the cells of arterial lining. "Prescription for Nutritional Healing", James F. Balch, MD, Phyllis A. Balch, C.N.C., Avery Publishing Group, Garden City, New York, 1997. Pg. 541.
- Amino Acids- Because of their negative charge, amino acids have been found to be good chelators of positively charged minerals (especially calcium).

### **Natural substances that can assist in the removal of heavy metals:**

- Alginates and clays- Bind with unwanted toxic metals and remove them from the body through the intestinal tract.
- Coenzyme Q10- acts as a heavy metal chelator. "Prescription for Nutritional Healing", James F.

- Balch, MD, Phyllis A. Balch, C.N.C., Avery Publishing Group, Garden City, New York, 1997. Pg. 541.
- L-Lysine and L-Glutathione- Detoxify heavy metals. "Prescription for Nutritional Healing", James F. Balch, MD, Phyllis A. Balch, C.N.C., Avery Publishing Group, Garden City, New York, 1997. Pg. 541.
- Vitamin C and Vitamin E- powerful chelating agents. "Prescription for Nutritional Healing", James F. Balch, MD, Phyllis A. Balch, C.N.C., Avery Publishing Group, Garden City, New York, 1997. Pg. 541.

## **Oral Chelation**

Chelation delivered orally involves ingesting nutritional food supplements which contain chelating agents (EDTA & numerous natural chelators) including; vitamins, minerals, amino acids, antioxidants, phytonutrients, and herbs.

Oral EDTA chelation has all the benefits of IV chelation, but is much slower acting because only 4% to 18% of an oral EDTA dose is absorbed (compared with 100% of an IV dose). Taken on a daily basis, oral chelation will gradually accomplish what its IV counterpart does in a few administrations. According to Dr. Garry Gordon, oral chelation is useful in reducing heavy metal toxicity and calcification, lowering blood cholesterol, lessening lipid peroxidation (free-radical oxidation of metabolized fats), thinning the blood, and preventing the formation of blood clots (a cause of heart attack).

In some areas, oral chelation may actually outperform IV EDTA (only) chelation. In addition, Extreme Health's oral chelation formula has the ability to chemically bond with and cause the elimination of mercury from the body (as evidenced by mercury levels in urine samples before and after chelation). As mentioned earlier, EDTA does not chelate mercury. In Extreme Health's formula, it is the other chelating agents-cilantro, chlorella, and lipoic acid-that effectively act on mercury.

The heightened benefits of oral chelation may result from the synergistic effect of combining EDTA with numerous natural chelating agents, such as activated clays, certain bioflavonoids, chlorella, cilantro, coenzyme Q10, garlic, L-cysteine, L-glutathione, lipoic acid, methionine, selenium, sodium alginate, and zinc gluconate. Each chelating agent has a predilection for different chemicals and mineral or metal ions.

The addition of nutrients known to support liver function and detoxification also increases oral chelation formula's effectiveness. A companion formula of antioxidants and other nutrients enhances the chelation process by replacing beneficial minerals removed during chelation, promoting the healing of tissues, and preventing free-radical oxidative damage. As with chelating agents, different antioxidants work on different free radicals. For this reason, the formulas contain a wide range-there are 30 different antioxidants in the Age-Less formula.

Antioxidant activity may play a particularly important role in amplifying the benefits of chelation. Elmer Cranton, MD, author of *Bypassing Bypass*, believes that the prevention of free-radical damage (which EDTA does) is the main action behind chelation's positive effects.

The effectiveness of oral chelation is a topic of debate, even amongst proponents of IV chelation. Our clinical research, however, demonstrates oral chelation's benefits for atherosclerosis and heavy metal poisoning. Many health professionals believe that oral chelation is not a replacement for IV chelation. I agree with this view when the patient's condition is too severe to wait for the slower-acting oral chelation to produce effects. When such patients have completed the recommended number of IV chelation treatments, however, oral chelation is of great benefit in maintaining their cardiovascular health.

In addition to heart patients, I particularly recommend oral chelation for anyone with a family history of heart disease, long-standing poor dietary practices, or a history of exposure to heavy metals or toxic chemicals. More generally, oral chelation is useful to anyone who wants to prevent cardiovascular disease and clear their body of the metals and toxins that we all accumulate and which can cause a variety of health problems.

As such, oral chelation can serve as a convenient, non-invasive, long-term health maintenance and preventative program. The gradual dosage delivery significantly reduces the risk of side effects; oral chelation is safe for children and adults.

## **Diet and Nutrition**

In keeping with a whole-body approach to health and medicine, we recommend that our clients implement healthy dietary and lifestyle practices along with the oral chelation formula program. Abuse of alcohol, drugs (recreational or prescription), and tobacco products, chronic stress, and lack of exercise are obviously detrimental lifestyle factors.

A poor diet is equally detrimental. We recommend that everyone, but particularly people concerned about cardiovascular disease, avoid the following foods and beverages or ingest them only in small amounts: alcohol (any form), baking soda, butter, caffeinated drinks (coffee, tea, others), canned vegetables,

chemical ingredients (mold inhibitors, preservatives, artificial sweeteners, meat tenderizers), chlorinated (tap) water, commercially prepared foods, fats and oils (especially fats from commercially raised animals, saturated fats, hydrogenated and partially hydrogenated oils), fried foods, heated polyunsaturated fats (fast foods oils, theater popcorn oil), lard, margarine, MSG (monosodium glutamate), processed and refined foods, red meat (or any products from commercially raised animals), salt (sodium chloride), soft drinks, softened tap water, spicy foods, sugar, commercial salad oils (many contain trans-fatty acids, refined by bleaching, chemicals, heat, and solvents), tallow, tropical oils (palm, cottonseed), and white-flour foods.

Nutritional deficiencies can contribute to cardiovascular disease. Certain vitamins, minerals, and other nutrients have been identified as vital for maintaining cardiovascular health. Degrees of deficiency of one or a combination of the following nutrients will result in corresponding symptoms of physical disease or inadequacy in the cardiovascular system:

- Vitamins: C, E, A (beta-carotene), D, B (1, 2, 3 [niacin and niacinamide], 5, 6, 12), folic acid, and biotin.
- Minerals: Calcium, chromium, copper, magnesium, manganese, molybdenum, potassium, selenium, and zinc.
- Amino acids: L-carnitine, L-lysine, L-proline
- Coenzyme Q10.

Nutritional deficiencies can contribute to the accumulation of heavy metals in the body. When sufficient levels of certain vitamins, minerals, and other nutrients are maintained in the body, the continued absorption of specific heavy metals is greatly reduced.

### **Nutrients Known to be Protective Against Heavy Metal Toxicity:**

- Heavy Metal Protective Nutritional Supplement
- Aluminum: magnesium
- Arsenic: Amino acids (containing sulfur), calcium, iodine, selenium, vitamin C, and zinc.
- Cadmium: Amino acids (containing sulfur), calcium, vitamin C, and zinc.
- Lead: Amino acids (containing sulfur), calcium, iron, vitamin C, vitamin E, and zinc.
- Mercury: Amino acids (containing sulfur), pectin (alginate), selenium, vitamin C. 67

### **Conclusion**

Research has proven the benefits of chelation for cardiovascular disease, heavy metal toxicity, and other conditions. The number of physicians who are available to diagnose and treat advanced health problems and administer intravenous chelation continues to grow. This development, along with the recent advent of oral chelation, reflects the rapid changes occurring in U.S. health care. The transformation of medical practice is due to both public dissatisfaction with the "cut or medicate," linear-delivery system of medicine and the demonstrated effectiveness of alternative and complementary therapies. Preventive health protocols (diet, exercise, and lifestyle modifications), chelation therapy, and nutritional sufficiency is the medicine of the future.

## **KNEIPP BATHS/OCEAN THERAPY**

### **Definition**

Kneipp wellness is a holistic system for overall health developed by Sebastian Kneipp, a nineteenth-century Bavarian priest. His approach includes aspects of hydrotherapy, herbalism, and aerobic exercise.

### **Origins**

Sebastian Kneipp was born to a poor family in Stephansreid, Bavaria, on May 17, 1821. He initially took up his father's trade of weaving, but longed to become a priest. With help from a sympathetic clergyman, he was admitted to high school as a mature student, but after five years of intensive studies, Kneipp became seriously ill with pulmonary tuberculosis. At that time, the disease was usually fatal, but Kneipp came across an eighteenth-century book about hydrotherapy that inspired him during the winter of 1849 to immerse himself several times a week in the icy Danube River. These brief exposures to cold water seemed to bolster his immune system, because Kneipp's tuberculosis went into remission and he was able to continue his theological studies in Munich. There, he convinced some of his fellow students to join his experiments with hydrotherapy.

Kneipp was ordained as a priest in 1852. In that capacity, he began using hydrotherapy to help some of his poorer parishioners. He broadened his approach to include herbalism, exercise, and other elements, and toned down his initial enthusiasm for shocking the body with cold water. "I warn all against too-frequent application of cold water," he later wrote. "Three times I concluded to remodel my system and relax the treatment from severity to mildness and thence to greater mildness still." Kneipp's reputation grew after a number of dying patients recovered when he was called to administer last rites and managed instead to restore them to health. In 1855 he was assigned to Worishofen, a village in the foothills of the Bavarian Alps that soon developed an international reputation as a place of healing. Kneipp summarized his teachings in two popular books,

My Water Cure in 1886 and So Sollt Ihr Leben (Thus Thou Shalt Live) in 1889. Supporters of his techniques formed Kneipp Societies in Germany and the United States.

Father Kneipp was later named a monsignor by Pope Leo XIII. After his death in Worishofen on June 17, 1897, his wellness techniques became less popular, but interest in hydrotherapy increased again during the latter part of the twentieth century.

### **Benefits**

Proponents of Kneipp therapy believe that it bolsters the immune system and results in improved overall wellness. In Germany, it is especially popular for treating varicose veins.

### **Description**

Today, Kneipp physiotherapy is essentially a form of classical naturopathy. It is founded on five "pillars":

- Hydrotherapy. Hydrotherapy involves the use of hot and cold water to stimulate the nerves, blood vessels and internal organs. It uses baths, compresses, packs, and water jets.
- Phytotherapy. Plant therapy takes the form of medicinal herbs added to bath water and also administered as juices, lozenges, teas, or ointments, etc.
- Exercise therapy. This aspect of treatment involves long hikes, gymnastics, tennis, cycling, and other vigorous activities to amplify the effects of the water and herb therapies.
- Nutrition therapy, which employs a low-protein, high fiber diet. Special Kneipp diets are also available for weight loss or such ailments as gout, diabetes, or metabolic problems.
- Health maintenance therapy. Patients in the Kneipp program are trained to adhere to their natural biorhythms.

### **Precautions**

All forms of hydrotherapy may pose some risk of water-borne infections, and patients should make sure that baths and similar facilities are properly maintained and disinfected. In addition, persons with serious health problems should consult their physician before undertaking an exercise program.

### **Side effects**

Side effects may vary, depending on the numerous herbs used in Kneipp therapy. When in doubt, it is best to consult a knowledgeable herbalist.

### **Research & general acceptance**

Initially, Kneipp was rejected as a charlatan by the medical establishment. At one point, he was taken to court for quackery, although the judge acquitted him after learning from Kneipp about the shortage of physicians in alpine villages. Kneipp is now recognized by naturopaths as a founding father of their discipline. The benefits of water are well known to physiotherapists, but there is so far little conclusive evidence that Kneipp or other methods of hydrotherapy can increase the body's immunity. One German study published in 1977 found that immunological reactions to protein and bacterial antigens were significantly more intense in patients who had undergone Kneipp hydrotherapy, compared to a group of healthy volunteers. There is little doubt among medical doctors that patients should benefit from the vigorous exercise and high-fiber diet included in the Kneipp prescription for wellness.

### **Key Terms**

- Hydrotherapy - A family of therapies that treat illness by using water either externally or internally.
- Phytotherapy - A form of treatment that uses plants or plant extracts either externally or internally.

## **LIGHT TREATMENT**

### **Why Full Spectrum Light?**

No life can exist without the presence of natural sunshine. Each spring we feel the joy and energy that longer sunfilled days bring. All of nature wakes up to the added benefit of more and more natural light. When daylight enters our eyes, it reaches the pineal gland (also known as the seat of the soul or the third eye) and activates our Endocrine system, which is connected to our immune and nervous systems. The pineal gland reduces the production of the light sensitive hormone, melatonin from 100% in the night to 10% during the day. The balance of melatonin has been proven to be a crucial element in many health related studies and has been linked to estrogen production, and many cancer related diseases. Stimulating proper production of melatonin from the pineal gland is paramount to good health.

The question is how do you do this? The answer to that has been addressed by many photobiologists as of late. "They state that exposure to Full-Spectrum light has an important influence on the endocrine

system and can reduce the risks of many diseases, including cancer. These studies have shown that the retina can, when stimulated by the proper wave lengths of light, synthesize melatonin directly to the pineal gland. Malillumination can prohibit proper secretion of melatonin. So light of a proper type and intensity can be considered a nutrient.

At the beginning of the 20th century over 70% of north Americans worked outdoors thus benefiting from exposure to essential natural outdoor light. The result of this change has been severe in many cases due to spending more and more time under the type of lights which are missing that portion of the sun's spectrum which is important in triggering proper melatonin secretion. It is estimated that over 38 million north Americans feel the effects of malillumination causing poor work conditions which can result in less energy and productiveness.

There is convincing research that poor lighting environments can produce increased depression and even result in more severe cases called S.A.D. or "Seasonal Affective Disorder." This problem increases more and more as the winter months bring shorter and shorter days. "Sunlight Starvation" also affects millions more in the form of a milder version called the "Winter Blues".

Since 1978 researchers and scientists worldwide have documented the successful use of bright light therapy as a significant antidepressant. According to the Dec 8th, 1993 issue of The Journal of the American Medical Association, for many patients with S.A.D., light therapy should be regarded as first-line treatment. Light therapy is endorsed by the American Psychiatric Assoc. and the National Institute of Mental Health. Your insurance carrier may reimburse the cost of this purchase if prescribed by your therapist.

### **FULL SPECTRUM SOLUTIONS HELPS RELIEVE STRESS IN THE WORKPLACE**

(Jackson, Michigan) It is no secret that since the majority of Americans spend over half their lives at work, the thought of the office does not evoke the most positive images for most of us. What most people do not realize, however, is that it may be the office building itself that is causing the feelings of stress and fatigue experienced by most working people. The good news is that Full Spectrum Solutions, a leading manufacturer of full spectrum lighting products, has the ability to transform any office into a healthier and more productive environment.

For at least eight hours a day each week, most of us work under lights we would never consider putting in our homes. Headaches, eyestrain, and foggy thinking - symptoms most commonly attributed to stress or fatigue are actually the result of the antiquated fluorescent lighting still being used in 99% of offices nearly 75 years after its invention, despite overwhelming scientific evidence that it is harmful to people's health. A recent Steelcase Workplace Survey illustrated the need for change with over half of the workers surveyed stating that poor lighting in the workplace triggers tired or watery eyes, and another third of office workers stating they suffer headaches from poor lighting.

Years of research has led to the realization that people depend on full spectrum light- the full range of rays from ultraviolet to infrared, with rainbow colors violet, indigo, blue, green, yellow, orange and red in between - for optimal health. While full spectrum light is available in abundance in the form of sunlight, the fact that the majority of the world's population now works indoors has created a need for a new source of healthy lighting. From this Full Spectrum Solutions was born.

As more employers implement full spectrum lighting in the workplace, more and more companies will experience the economic success that Control Data in Sunnyvale, California experienced when they made the switch. Following their \$15,000 investment in full spectrum lighting for their data processing center, Control Data's error reduction rate increased so dramatically after the first year that their profits increased by a significant \$225,000. Other companies report improved employee morale, greater productivity, better quality control, error reduction rate, and reduced absenteeism.

### **LIGHT: AN ELEMENT IN THE ERGONOMICS OF LEARNING**

#### **Malillumination vs. Posillumination**

**"Malillumination" is to "light" as "malnutrition" is to "food".**

There is a wealth of research indicating that the ergonomics of an environment significantly improve or retard individual and group learning performance. These elements include light, sound enhancement, color, room design, temperature, and instructional design and energy distribution. What follows is a discussion on the element of "light" as a contributor to the enhancement of learning performance and achievement.

(I draw heavily from the brilliant and sensitive work of Dr. Jacob Liberman and encourage you to read his book Light: Medicine of the Future (Bear and Co. 1991), for an in-depth discussion and analysis of the research referenced in the following overview.)

“Malillumination” is the term coined by pioneer light researcher, Dr. John Ott, to describe sunlight deficiency and the negative, harmful effects of artificial pink or cool-white fluorescent lighting on behavior, learning, health, hardiness and longevity.

On the other hand, “Posillumination” is the term I have chosen to refer to those simulated sunlight environments, about which an overwhelming body of research shows the positive impact of simulated sunlight (full spectrum lighting and color) on human behavior, learning, health, hardiness and longer life.

Schools, classrooms and other work environments where people spend time learning and working under simulated sunlight (full spectrum lighting and color) experience less stress and anxiety, improved behavior and attitudes, improved health and attendance, and increased performance and academic achievement.

Research in the use of light in schools has shown that cool-white fluorescent bulbs, (which are used in virtually all classrooms) cause: bodily stress, anxiety, hyper-activity, attention problems and other distress leading to poor learning performance.

Titoff, 1999, concluded in his research “There was a statistically significant difference between the students who worked under old-style fluorescent lights and those who worked under full-spectrum, visually-efficient lighting.” This controlled study verified that depression was lowered among those students who experienced learning under full-spectrum lighting. Also, depression actually increased under standard fluorescent lights among the fourth graders. As an elementary school principal, William Titoff conducted research for his Ph.D. dissertation and discovered that when the project was completed, “the teachers with the full-spectrum lighting refused to let me take it out and put back the old-style fluorescent bulbs.”

Harmon, 1938, found that over 4000 children developed observable deficiencies associated with Malillumination. In the late 1940's conditions of the learning environment (lighting, seating and decor) were instituted in schools, resulting in the following student improvements: 65% reduction in visual difficulties, 47.8% decline in nutritional problems, 43.3% reduction in chronic infections, 25.6% reduction in postural problems and, finally, 55.6% decline in chronic fatigue.

Ott, 1960, first discovered that mice lived an average of seven to eight months under pink and daylight-white fluorescent lights; whereas those mice living under natural, unfiltered daylight lived twice as long and were hardier.

In 1973, Ott studied four, first grade classes in Florida. Two classrooms were installed with full-spectrum, radiation-shielded fluorescent light fixtures, while the other two classrooms remained with the traditional cool-white fluorescent bulbs. In reporting the results of this study, Dr. Liberman stated that: “Concealed time-lapsed cameras took random sequences of students and teachers in the {four} classrooms. Although teachers were aware of the {research} program, neither they nor the students were aware of when they were being photographed.

With cool-white fluorescent lighting, some students demonstrated hyperactivity, fatigue, irritability, and attention deficits. In the classrooms with full-spectrum lighting, however, behavior and classroom performance, as well as overall academic achievement, improved markedly within one month after the new lights were installed. Furthermore, several learning-disabled children with extreme hyperactivity problems miraculously calmed down and seemed to overcome some of their learning and reading problems while in classrooms with full-spectrum lighting.

This study additionally demonstrated that children in rooms with full-spectrum lighting developed one-third of the number of cavities in their teeth as children in the classrooms with the standard cool-white fluorescent lights.” (Liberman, 1991) Hollwich, 1980, discovered that cool-white fluorescent lighting produced increased levels of stress producing hormones.

Wohlfarth and Sam, 1981, studied, according to Liberman, “the combined impact of selected colors and full-spectrum lighting on the behavior and physiology of both blind children with severe behavioral disorders and sighted children with severe handicaps.” Under full-spectrum lighting, blood pressure dropped significantly and aggressive behavior reduced significantly. However, when the lights were replaced with standard cool-white fluorescent bulbs, blood pressure increased and aggressive and disorderly conduct increased. And, the blind children were equally as affected as those with sight.

Liberman honestly laments that “For years we have been labeling and re-labeling children who appear to have difficulties we do not understand. We test and tutor them continually, only to find out that they are usually very bright but that for some reason outside of our understanding they do not achieve in the expected 34

manner within the traditional learning environment. Although the labels for these children have changed from dumb, stupid and lazy to dyslexic, minimally brain dysfunctioned, and learning disabled, the labels nonetheless scar them for life....”

How many must suffer before we realize that stupidity is a learned behavior; that the giftedness in each individual can be tapped and developed under optimal learning ergonomics, including the strategic use of “Posillumination” and the elimination of “Malillumination”?

Schools and classrooms, along with corporations and community organizations, across the country and abroad have gained award winning significant increases in student learning achievement as measured by a variety of standards. This has resulted because of an effective change in the ergonomics of learning, including changes in the elements of light, sound enhancement, room design, temperature, color, instructional design and energy distribution.

## **SKIN BRUSHING**

Dr. Jensen believed that skin brushing is one of the finest of all baths. No soap can wash the skin as clean as the new skin you have under the old. You make new skin every twenty-four hours on the body. The skin will be as clean as the blood is.

Skin brushing removes this top layer. This helps to eliminate uric acid crystals, catarrh and various other acids in the body. The skin should eliminate two pounds of waste acids daily. Keep the skin active. No one can be well wearing clothes unless they brush their skin. It is the greatest method to remove the scurf rim as found in the eye, which denotes an under active skin, a poorly elimination skin.

Use a dry vegetable bristle flesh massage brush with a long handle. It is not an expensive brush. Do not use nylon. Use this brush dry, first thing in the morning when you arise before putting clothes on and before any bathing. Use it in any direction all over the whole body except the face; use a special facial brush for this.

## **The Skin: An Essential Eliminative Organ**

The skin, the largest and most visible of all the body's organs, covers 3,000 square inches on the average adult and receives one-third of all the blood circulating through the body. To most people, the skin is undoubtedly important because of its relation to appearance. But the skin is much more than a beautiful outer covering. It is a protective organ, shielding the internal organs from a host of potentially harmful factors including bacteria, sun's rays and injury. (Though the skin is elastic and tough, it is very subject to being abused, damaged and diseased, especially since it is itself visible and unprotected.) It also helps to regulate body temperature and to prevent body dehydration and is an organ of perception. In addition, perhaps the least understood function of the skin is its role as an eliminative organ.

The body excretes unusable substances in many ways. The eliminative channels of the body include the bowel, kidneys, skin and lungs. Dr. Bernard Jensen, a world-renowned nutritionist, has stated that more toxins and poisons are moved daily through the skin than all the other eliminative organs combined. The skin is the largest and, some say, the most important path of elimination. If it should fail to function for even a few hours, a tremendous strain would be placed on the internal organs, causing a break down in their function with death resulting.

The skin can reduce the workload of the bowel and kidneys. The kidneys are especially aided by the skin, emphasized by the comparable chemical make-up of sweat and urine. For this reason, the skin is sometimes referred to as the third kidney. Since the skin has the greatest surface area of any body organ, it is ideally suited for fluid excretion. It is equipped with about two million tiny glands distributed all over the skin that bring water and wastes to the surface.

Wastes are excreted through the skin in the form of visible perspiration, insensible perspiration and invisible gases. Perspiration is from Latin words meaning, “breathe through”, and perspiration is sometimes referred to as skin breathing.

Working up a sweat through exercise or exertion is an obvious sign of perspiring. Such exercise can provide a break for the kidneys by quickly removing a large quantity of wastes through the skin. Whatever moves the skin-massage, exercise, skin brushing-stimulates the perspiration process. Also, saunas and exposure to sunshine can prompt visible perspiration.

Most of the body's perspiring, however, is known as “insensible”. The skin is constantly perspiring but it is generally dry to the touch and we are not aware that we are sweating. That's why this type of perspiration is called insensible. It has been estimated that a liter of fluids a day can be lost this way.

Without proper cleansing, toxins and poisons can accumulate on the skin's surface, obstructing to some degree further elimination through the pores. After the skin is cleansed, it should then be nourished. Ideally, a skin condition can be enhanced with a natural, herbal moisturizer. This skin will readily absorb nutrients applied externally, especially after being cleaned.

## **SLANT BOARDS**

**(For prolapsus and regenerating the vital nerve centers of the brain.)**



When there is lack of tone in the muscles we can expect prolapsus of the abdominal organs. The heart, lacking tone, cannot circulate blood properly throughout the body. Likewise, arteries and veins cannot contract to help the blood against gravity into the brain tissues.

There are some people who apparently have tried everything to get well, who still find all organs working under par. Many people do not realize that all the quickening force for every organ of the body comes from the brain. People whose occupations require them to sit or stand continually are unable to get the blood into the brain tissues because the tired organs cannot force the blood uphill. If we deny the brain tissues good

blood in the proper amount, in time, every organ in our body will suffer.

The heart gets its start from the brain and continues its everlasting pumping because of it. No organ can do without the brain. Dr. Jensen attributes the success of his healing work to the very fact that he definitely recognizes that the brain must be fed properly. Slanting board exercises are absolutely necessary to regaining perfect health.

The reports are phenomenal as to what can be done in cases of prolapsus and lack of tone in the abdominal walls. A Mr. C.M. Pierce, who became interested in this form of exercise, has done wonders in rejuvenating his body. Dr. Jensen quotes from Health News of September 26, 1941: "One night three years ago, I saw Dr. Jensen demonstrate the slanting board and instantly saw how to make my system much easier, and on the way home I told my neighbor, "I am going to make a board like that". Since then he has made many, selling them throughout the country. In fact, Mr. Pierce, who was born October 11, 1966, is still active in his business.

There are many cases where the board is contraindicated. It is best in most cases to get professional advice, for some people have had unhappy experiences due to the very fact they started too strenuous a program to begin with. If you haven't done much exercising of the abdominal muscles, it is well to take these exercises slowly and gradually increase them as you get stronger.

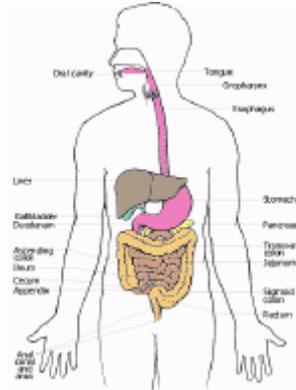
Do not use the board in cases of high blood pressure, hemorrhages, some tubercular conditions, cancer in the pelvic cavity, appendicitis, ulcers of the stomach or intestines, and pregnancy, unless under the care of a physician.

The slanting board exercises are practically the same as any other lying-down exercises. The most important exercise is to hold on to the sides of the board bringing the knees up to the chest. This forces all the abdominal organs up towards the shoulders. While in this position, twist the head from side to side and in all directions, thus utilizing the extra force to circulate blood to congested areas of the head, especially bringing the stomach and abdominal organs up towards the chest while holding the breath.

Slanting board exercises are especially good in cases of inflammation and congestion above shoulders, such as sinus trouble, bad eyes, falling hair, head eczema, ear conditions, and similar troubles. Slanting board exercise is needed and has helped more than any other treatment in cases of heart trouble, fatigue, dizziness, poor memory and paralysis. The average person should maintain the foot end of the board at chair height for all exercises, but if dizzy at first, the foot end of the board should not be raised quite so high to begin with. Exercise only five minutes a day. More time than that is too much. Gradually increase time spent on the board. The average patient should lie on the board ten minutes at 3:00 p.m. in the afternoon and again just before going to bed. After retiring, lift the buttocks up to allow the organs to return to a normal position.

## LIVER & GALLBLADDER FLUSHES

Nobody seems to know for sure how many functions it performs, or how it accomplishes over 500 tasks in such a small space. But the liver is one of your most important and largest vital organs.



Weighing 3-4 pounds and lying behind the lower ribs on the right side, the liver is capable of regenerating its own tissue faster than any other organ of the body. It can also function with only 20% of its original mass before you begin to notice any specific health problems.

The liver not only aids digestion (being able to make over a thousand different enzymes), but it also serves the body by filtering impurities from the blood, storing various nutrients and is the main participant in the defensive wars of the immune system. In it chemical compounds are burned, altered, broken down, synthesized, or excreted.

Associated with the liver is the gall bladder, a kind of storage bag that holds bile exuding from the liver. When oils and fats are eaten, bile is squeezed into the small intestine to "melt down" these huge molecules so they can be digested further.

Looking at the liver's surface, you would never guess the complexity of the inner tissue. Both arteries and veins feed it. This means that it can process blood both before and after the lungs oxygenate it. The hepatic artery carries the oxygenated blood into the liver, and the portal vein carries newly digested nutrients directly into it from the small intestine. Before the nutrients are allowed to circulate in the blood, the liver inspects them, and where needed, detoxified before they flow into the arteries for general distribution.

An example of the liver's protective ability is the processing of alcohol into harmless carbon dioxide and water. Another relates to lactic acid produced when glucose is burned by muscular contractions. Since too much of this acid can be fatal, the liver not only renders it harmless, but also turns it into glycogen for future energy needs. The liver lets nothing go to waste.

The functions of this triangular-shaped organ can be generally listed as follows:

- Metabolizes (reorganizes according to the body's need at the time) proteins, fats, and carbohydrates, which provide energy and nutrients.
- Stores vitamins, minerals, and sugars (energy reserves).
- Filters harmful chemicals and pathogens from the blood.
- Creates bile, which breaks down fats and excretes waste.
- Helps the body assimilate and store fat-soluble vitamins (A, D, & K).
- Stores extra blood for emergencies.
- Creates blood proteins as chelators and it aid blood-fluid balance.
- Helps maintain electrolyte and water balance in the body.
- Breaks down and eliminates hormones that are no longer needed.

### Signs of an Ailing Liver

As impurities are allowed into the bloodstream by an overworked liver, headaches are common. Constipation is also a symptom and as a result, allows poisons to be reabsorbed into the blood. Eventually, a "red nose" (ala alcoholics) may follow as a result of obstructed bile flow, and dark spots can appear on the face or back of the hands. Bad breath or a bitter taste might be evident and the tongue is sometimes coated. Gas often proceeds a meal, and more frequent urination gets a person up during the night. This may be because during the day the overworked liver under-stimulates the kidneys to function.

There may be sleeping difficulties, chills because the body's temperature cannot be properly controlled, heartburn, overweight or underweight, appendicitis, and anal itching. Parasites may grow uninhibited and abnormal bacteria will tend to be out of control in the bowel. The skin can turn yellow along with the whites of the eyes, and the mind is often plagued with depression.

These are matters to be promptly attended to, and the following suggestions have been found to be most helpful:

### Liver Therapy

- Regular Physical Exercise - Keeps the blood flowing and is a natural massage for the liver and gall bladder. Wastes produced by the body are released more easily through the lungs and skin rather than being trapped in the blood for the kidneys and liver to dispose of.

- Natural, High Quality Foods - These are obviously required, but eating simply and avoiding rich and complicated mixtures is best. Too much salt, fat, concentrated proteins (meat) and just plain overeating are stressful to the liver.
- Lemons, oranges, grapes, black olives, fresh berries, and tomatoes are therapeutic. Vegetables like artichokes, asparagus, beets, carrots, celery, leeks, dandelions, radishes, onions, garlic, and cabbage are also beneficial.
- Massage Therapy, Sweat Baths, Hot & Cold Showers, Breathing Exercises - These all benefit the liver. Hot and cold showers are stimulating. Breathing deep and low into the abdomen will reduce stress, toxins, and the tightness that retards circulation.
- Healing Clay - This is also used internally, and externally and a warm poultice. Redmond Clay greatly enhances mineral absorption and helps solve constipation problems at the same time if you drink plenty of water with it. Clay has never been properly appreciated even though its effectiveness is easily proven.

There are a number of excellent herbs to clean and heal the liver. Dandelion root is one of the best. Barberry and Oregon grape roots are similar and help to clean out congestion. Various mints have always been beneficial, including fennel, peppermint, and spearmint, thyme, and rosemary. Chamomile is excellent for several body systems at once.

We are giving you several options to help rejuvenate the liver. All need not be used, but are meant to help the reader in his investigation of various herbal and other preparations that are easily available.

A gradual liver flush is advisable. Like dieting to lose weight, the body needs to have enough time to take care of the toxins that the flush will release so that the eliminative organs are not overwhelmed, drowning the person in his own wastes!

Eating light foods, getting more rest, putting excessive stress out of your life by meditation, prayer, and being alone with Mother Nature (and that doesn't mean locking yourself in the bathroom!), drinking plenty of pure water and mild exercise are a wonderful beginning. Come to think of it, why should you ever stop doing these things? A cup of fresh lemon juice once or twice a day before meals will help cleanse the gall bladder, as will Cascara Sagrada and Barberry Root. LBS II is recommended even if the bowels are not sluggish.

### **For A Stressed Liver**

If the liver is merely under stress and hasn't degenerated into a cirrhosis or hepatitis condition, Oregon grape liquid, LIV-A with Milk Thistle, LIV-J, the Chinese formula, LIV-C, and Special Formula #1 are excellent. Food Enzyme Digestive Aid would help relieve stress on the liver while it restores itself with proper nutrition.

### **For A Weakened Liver**

- For a weakened liver, BP-C, AD-C, BP-X, Gentian liquid, Garlic, and Papaya Mint are good, along with the digestive aids mentioned above. Ginger is another marvelous liver herb, even as a poultice. Each of these herbs will have different effects on the system, and you are advised to seek wise counsel before trying them. The strongest formulas for rebuilding a weakened liver are the Chinese formulas BP-C and AD-C.
- Vitamin C, B, E, Mineral Maintenance, zinc, and formula P-14 would be part of a support program to increase the speed of healing. Some protein is necessary, but in moderate amounts. As the body improves, the "tongue" will clear up as well.

With continuous attacks upon the liver from chemicals, pathogens, parasites, and unpleasant emotional situations, learning about the liver and how to take care of it has to be one of the greatest topics in the field of health. Your liver is where you live!

### **Liver & Gallbladder Flushes & Detoxification**

The liver and gallbladder flush is an important detoxifying agent which can help restore the normal functional capacity of these organs. For more information regarding the function of the liver, [click here](#). Listed below are the steps that should be followed:

- Monday through Saturday noon, drink as much unfiltered, unsweetened apple juice or apple cider as your appetite will permit in addition to regular meals and any supplements that may have been suggested. The apple juice should preferably be purchased from a health food store to assure there are no additives.
- At noon on Saturday, eat a normal lunch.
- Three hours later take 2 Tablespoons Epsom Salts dissolved in about one ounce of hot water. The taste may be objectionable and may be followed by a little citrus juice (freshly squeezed if possible).
- Two hours later repeat step 3.
- Grapefruit juice, grapefruit or other citrus fruits or juices may be eaten for the evening meal.
- At bedtime have 1/2 cup of warm, virgin olive oil blended with 1/2 cup of lemon juice. (Virgin olive

oil can be purchased from any health food store. It is best to use fresh citrus juice, but canned or bottled are permissible.)

- Following Step 6, go immediately to bed and lie on the right side with the right knee pulled up close to the chest for 30 minutes before going to sleep.
- The next morning, one hour before breakfast, take 2 Tablespoons Epsom Salts dissolved in two ounces of hot water.
- Be sure to continue with a normal diet and any nutritional program that has been suggested to you.

### **Recommendations**

Some clients have occasionally reported slight to moderate nausea when taking the olive oil/citrus juice; this nausea will slowly disappear by the time you go to sleep. If the olive oil induces vomiting, you need not repeat the procedure at this time. This occurs only in rare instances. This flushing of the liver and gallbladder stimulates and cleans these organs as no other method. The most common side effect of this flush is diarrhea the day and/or the day after the Epsom salts are taken.

Clients who have chronically suffered from gallstones, biliousness, backaches, nausea, etc. generally find small gallstone-type objects in the stool the following day. These objects are light green to dark green in color. They are very irregular in shape, gelatinous in texture and vary in size from grape seeds to the size of a nickel. If there seems to be a large number of these objects in the stool, the liver flush should be repeated in two weeks. To be sure the gallbladder has been thoroughly flushed, it is recommended to have a follow-up Kinesiology visit.

It is not recommended for clients under 25 years of age or clients with known large stones unless under a professional's guidance. Before doing this flush it is recommended that the body be tested through Kinesiology to find out if there are gallbladder stones and if the body is strong enough to tolerate such a flush.

For those people who cannot do the flush on Saturday and Sunday, the days can be changed to fit into your schedule.

### **You can also do an herbal gallbladder cleanse as follows:**

- For two days take 8 ounces of apple juice every two hours until 1/2 gallon has been taken.
- Take 2 or more Fasting Plus every two hours and do not eat. Every 4 hours take 1 Cascara Sagrada to stimulate bile flow.
- At bedtime on the 2nd day, take 2-4 ounces of virgin olive oil mixed with 2 ounces of fresh lemon or grapefruit juice.
- Repeat in 1/2 hour.
- Sleep on your right side.
- Within 24 hours you should expel stones, mucous, or sludge through the bowel.

### **Testimonial by Shelley Charlesworth**

I did a 'liver cleanse' or gallbladder flush about 6 nights ago! I'm a 50 year old female in good health. I'm not overweight and have no health problems. I'm active and have been a schoolteacher for 25 years. I did not have any symptoms of gallstones nor did I have an ultrasound. I just had always been curious to try a gallbladder flush and see if anything came out- as they say most everyone has these gallstones and it's good to get them OUT. I did the flush at about 9:30 p.m. And I vomited about 12:30! I thought oh hell what an un-pleasant waste of time. BUT the next morning I DID pass some (25?) gelatinous looking things that were greenish - none larger than a small pea. I felt lousy - bloated and not hungry the next day. But since then I've felt great! I think I vomited because I ate some plain white rice and drank some carrot juice about 5pm. I have been researching various liver/gallbladder cleanses and most say NOT to eat all day and to drink organic apple juice and only that for at least 2 days prior. I took only 4oz of fresh squeezed lemon juice followed by 4 oz of olive oil at about 10 PM. I nearly gagged **\*\*YUK\*\*** as I was taking it! I will do it again but will follow your directions. I wish I had come across this web site BEFORE I did my flush!

### **Testimonial By: Gene Saunders**

I am a sixty-two year old male, six foot three inches, and one hundred and eighty pounds. I went back to my logbook and found out I have done sixteen liver flushes and my wife (Bobbi) has done twenty. The tenth flush resulted in the largest number of stones (fifty Lima bean size stones in a grand total of four hundred (the rest were pea to rice size)). My sixth flush resulted in the largest stone (as large as the end of my thumb). Bobbi no longer gets stones and will probably only do one flush a year as a safeguard in the future. Bobbi and I read up on liver flushes for several months before doing our first. I found it hard to get around for fear of the unknown, but then we did it, found out that it worked, and that we felt and looked better. All stones were black in color on the last flush. Prior flushes have resulted in light to dark green stones. I no longer use apple juice since I can not see that it has any effect. The first flushes I did followed John Thomas's book "Young Again"; latter flushes

followed Hulda Regehr Clark's book "the Cure for all Diseases". On my last flush I went my own way and did a three day water fast before the flush, did the Epsom salt routine, and used olive oil and fresh grapefruit juice (tastes better and works as well as lemon juice). This gave the best results for me. Prior flushes have been varied on the number of stones, (three small pea size minimum to fifty or so maximum) and how I feel during the flush (the sicker I feel the more stones I get. Hope this information is of some use.

### **Testimonial By: Carla Houchen**

My son and I completed your liver flush this weekend. He reported that he had at least 5000. I didn't have that many but mine were extremely large. Both of us have been tired but feel good if that makes any sense. We will be trying this again in two weeks because of the size and amount.

## **KIDNEY FLUSHES**

### **Healthy Kidneys**

Just under your shoulder blades are the tops of your two kidneys, two bean-shaped organs that regulate the fluid in your body. They also excrete too much acid or alkaline elements and clear the blood of toxins. About 2.5 pints of water are excreted as urine every day. Urine is about 96% water. The kidneys cannot do their job without a sufficient amount of water, so remember to drink enough water.

About 2.4 million nephrons inside the kidneys filter the blood. They help to regulate the sodium/potassium ratio, vital for energy production, etc. All in all, about 300 pints of water are filtered each day.

With such a big job to do, certain nutritional elements are important to keep them healthy so you don't experience the various kinds of pain produced by discontented kidneys such as bladder infections, kidney stones, or pain in the lower back.

The kidneys can be poisoned, clogged, malnourished, ruptured by blows, and overworked until they begin to break down. Blood in the urine is a sign, or could be an infection of the filtering tubules. To help you maintain strong kidneys, here are some guidelines to follow:

- Eat enough fruits and vegetables. Green drinks, Aloe Vera juice, cranberry juice, or cranberry apple juice, lemon juice, or watermelon juice along with the seeds are all good choices. By taking 2 tablespoons of apple cider vinegar in a glass of water, much strength can be gleaned. Too much meat is hard on kidneys (ham and pork being the worst), and causes potassium and calcium to be lost while causing a build-up of uric acid, which is hard on the urinary system.
- Cornsilk is a great diuretic that is mild and effective. Parsley is also important and helps clear the kidneys/bladder of gravel and stones. Other herbs perform this same service like Hydrangea, and Uva Ursi.
- Herbal combinations may perform several functions. Urinary System combinations feed the whole system and are great for maintaining healthy organs. Potassium combinations may be needed in times of stress, diarrhea and long fasts.
- Vitamins to help the kidneys would of course include Vitamin C, a natural diuretic and detoxifier, Vitamin A for tissue health and immunity, and the mineral Magnesium to help manage calcium levels and prevent kidney stones. The kidneys are vital, so treat them with special care.

### **Following are several kidney flushes that have been successful for our clients:**

1. Drink lemon juice every hour. Drink ½ glass warm water with 1 lemon. Excellent for dissolving kidney stones.
2. Drink ¼ cup lemon juice (fresh squeezed is best) every 2 hours for 3 days. On the odd hours you can have water or "one kind" of juice. No food. At the end of the third day be ready for bed and do the following: Take 1/3 cup of castor oil or cod liver oil and 2 ounces of lemon juice. Drink it and get into bed and stay in bed. Make sure you do not get up for a least 20 – 30 minutes.

## Herbs that should not be used with Medications

### Quick Reference -Medications/Herbs

#### Please Note

**This is not a complete list. Other herbs not listed are not necessarily safe. You should always be informed concerning herbs and other medications you are taking.**

If you are on these Medications	Be cautious about possible interactions with these Herbs
<b>Anticoagulants</b> <ul style="list-style-type: none"><li>• Warfarin (Coumadin)</li></ul>	Alfalfa Chinchona Bark Clove Oil Gihkgo Garlic Ginger Ginseng Feverfew
<b>Antiplatelet Drugs</b> <ul style="list-style-type: none"><li>• Aspirin</li><li>• NSAIDs</li><li>• Ticlopidine (Ticlid)</li><li>• Clopidogrel (Plavix)</li></ul>	Alfalfa Chinchona Bark Clove Oil Ginkgo Garlic Ginger Ginseng Feverfew
<b>CNS Stimulants</b> <ul style="list-style-type: none"><li>• Decongestants</li><li>• Methylphenidate (Ritalin)</li><li>• Dextroamphetamine (Dexedrine)</li><li>• Beta2 Agonists</li><li>• Caffeine/Theophylline</li></ul>	Guarana Kola Ma Huang St. John's Wort Yohimbe
<b>CNS Depressants</b> <ul style="list-style-type: none"><li>• Alcohol</li><li>• Benzodiazepines</li><li>• Opioids</li><li>• Antihistamines</li></ul>	Hawthorn Kava-Kava Skullcap Valerian
<b>Antidepressants</b> <ul style="list-style-type: none"><li>• Tricyclics</li><li>• MAO Inhibitors</li><li>• SSRIs</li></ul>	Ginseng Ma Huang Passion Flower St. John's Wort Yohimbe

## Quick Reference-Conditions/Herbs

### Please Note

This is not a complete list. Other herbs not listed are not necessarily safe. You should always be informed concerning herbs and a specific condition.

#### **If you have these Conditions**

#### **Be cautious about possible interactions with these Herbs**

Diabetes

These may affect glycemic control:

- Garlic
- Ginger
- Ginseng
- Hawthorn
- Ma Huang
- Nettle

Hypertension

- Devil's Claw
- Ginseng
- Goldenseal
- Hawthorn
- Licorice
- Ma Huang
- Squill
- Yohimbe

Depression

- Valerian
- Kava-Kava

Allergies to Asteraceae Composite Family (ragweed, daisy, aster, chrysanthemum)

- Chamomile
- Echinacea
- Feverfew
- Yarrow

Allergies to other pollens

- Goldenrod
- St John's Wort
- Slippery Elm

Pregnancy of Nursing Special caution is always indicated for a woman who is pregnant or nursing. At least the herbs listed are contraindicated or not recommend, but this is not a complete list. Contraindicated or not recommended:

- Aloe (internal)
- Black Cohosh
- Dong Quai
- Feverfew
- Ginseng
- Kava-Kava
- Saw Palmetto

Safety not fully established

- Garlic
- Ginger
- St. John's Wort
- Valerian

## Herbs and Surgery - The Combination Could be Dangerous

Many people who suffer from sleep disorders take herbal medication, not only to promote sleep, but for other health problems. Many people who suffer from sleep disorders have to undergo surgical procedures, not only for conditions relevant to sleep, but also for other medical reasons.

In the July 11 issue of JAMA (the Journal of the American Medical Association) an article reports that physicians from the University of Chicago have researched several common herbal remedies and investigated the danger of their use in conjunction with surgical procedures. Some of the most common remedies can cause dangerous complications for people during or shortly after surgery.

JAMA lists eight such herbal remedies, preparations commonly used by many people. Two herbs often used by people with insomnia or other sleep problems are kava and valerian. Both these herbs promote sleep, reduce stress and anxiety and calm the body. They are, in fact, mild sedatives and this is where the danger of taking them in conjunction with surgery comes in. They may well increase the sedative effects of the anesthetic or other sedatives prescribed by your doctor. They should not be taken for a week or more before surgery and for several days after surgery is over.

People take herbal remedies for many conditions besides using them to promote sleep.

- **Garlic** - Reduces blood pressure and helps to ward off infection.
- **Ginkgo biloba** - Not only increases circulation, it also helps with concentration and memory problems. There is a danger in using these in conjunction with surgery because both of these herbs interfere with the clotting properties of the blood and could cause severe bleeding problems. It would be wise to discontinue them a week before the date of your operation.
- **Echinacea** - Promotes healing and fights infection. Sounds like this would be desirable when you have surgery, but beware. Echinacea can cause a problem because it boosts your immune system and impairs immune suppressive drugs. Echinacea is especially dangerous if your surgery involves a transplant. Use of this herbal product should be discontinued as far in advance of surgery as possible.
- **Ephedra** - Often taken for its decongestant properties. However, this herb also increases your heart rate and raises the blood pressure. Stop using it at least 24 hours before surgery or heart attack or stroke could occur.
- **Ginseng** - Taken to improve the general health and well being and to reduce stress, also interferes with the clotting of the blood. Stop using it at least a week before surgery.
- **St. John's Wort** - Used for anxiety and depression, has already been under fire for its dangerous interactions with prescription medications. It alters the rate of metabolism of other drugs and may either increase or decrease the desired effect. Don't use St. John's Wort for at least 5 days before surgery.

The JAMA article goes on to state that herbal remedies and dietary supplements don't undergo the rigorous testing and controls of prescription medications. To add to the difficulty, many people don't report adverse effects of using herbal or dietary supplements. Also, many times labels on herbal supplements may be wrong as to content or strength.

If you are taking any herbal medication or dietary supplements, be sure to let your physician know. This is important at any time, as these supplements may have an adverse reaction when combined with your prescription medicines. It's doubly important to inform your doctor of everything you are taking if you're slated for surgery.

## Herbal Weight Loss: No "Magic Formula" - by Melanie McLean

I don't have to tell you that there isn't such thing as a pill or remedy out there that will magically make the pounds melt away, but herbs can promote weight loss in a variety of ways. The action of certain herbs "trick" the brain into thinking the stomach is full, while others function thermogenically (speed up the body's metabolism).

### How They Work

Thermogenic herbs (most classified as stimulants) contain substances like caffeine that speed up body functions like heart rate, digestion, and respiration. Their effects may get you up off the couch and keep you moving. Some thermogenic herbs like green tea, nettle, and dandelion are safe as, or safer, than prescription and over the counter weight loss drugs. Other herbs act as diuretics (water reducers) by causing water weight loss. Buchu and uva-ursi rid your body of excess fluid, but weight returns quickly when the herb is halted. Even though some can be very beneficial, others can be potentially dangerous and even toxic.

## Beware of These Herbs

It should be noted that the FDA (Food and Drug Commission) has linked the following to cause serious side effects and even death -- so AVOID THEM

- **Herbal Laxatives** - Usually sold as a diet tea, cascara, senna, buckthorn, aloe and rhubarb root. These herbs can cause cramping, diarrhea, and if overused, could cause your bowels to no longer function without laxative stimulation.
- **Ephedra** - Also known as ma huang, in high doses can raise blood pressure, increase heart rate, and over stimulate the central nervous system. The FDA reports more than 800 reports of side effects linked with the use of ephedra, including heart palpitations, seizures, stroke, chest pain, and heart attack. This herb has caused at least two deaths.
- **Herbal fen-phen** - Ephedra is the main ingredient in the version of the dangerous diet drug known as fen fen. Herbal fen-phen has not been shown to even work in clinical trials, but we know its misuse is associated with severe side effects, from heartbeat irregularities to death from heart attack and stroke.

## What is Safe?

- **Cayenne** - If you aren't plagued by spicy food, try sprinkling a dash of cayenne on your food. It contains an ingredient called capsaicin that stimulates saliva, stimulates digestion and accelerates your metabolism at a safer level.
- **Green Tea** - This tea is a natural stimulant that behaves much like coffee but with the added benefit of vitamin C and flavonoids (compounds that are antioxidants). You can regulate the strength of the stimulant by steeping the tea quickly or for a long time. It can be purchased in a tea bag, or loose. It also is available in capsules, but is said to be better assimilated as a liquid.
- **Seaweed** - A good source of trace minerals such as chromium and iodine, seaweed is a natural thyroid stimulant. It is usually contained in kelp capsules or tablets. If you suspect your weight problem is due to a thyroid problem, or if you currently take any thyroid medication, you should check with a doctor before taking kelp or seaweed.

Good luck in exploring all your herbal options. Remember your health is very important and herbal remedies should be viewed with the same precaution as taking any medication. If you want to make herbs a part of your health regime, you should research and thoroughly investigate all our earth has to offer!

## Removing Clients from Medications

Unless you are a MD, it is illegal in the United States to prescribe, diagnose, or change your client's medications. You can be fined or even put in jail if you are found guilty of any of the above. This is why it is vital that you have all of your clients complete a waiver before you see them. Be sure to have your client sign 2 copies of the waiver. You give one copy to your client and you keep the other copy. This waiver will basically state that you are not a doctor, you will not diagnose them, you will not prescribe to them, and you will only speak to them from the knowledge that you have gained through training. A waiver for Iridology is attached. Edit it for your own business and use it when you consult with your clients.

If you have a client who comes to you and is taking medications there are several steps that you can take with your client to help them "remove themselves" from their medications. The steps are:

1. Look up the medications they are on in a PDR (Physician's Desk Reference) to find out what it is for, how it works, and possibly what can be used instead. A lot of clients don't even know why they are on a particular drug and they don't even know how it works.
2. Once you have found out about the medication they are on, find out what "alternative" product can do the same thing for them. Find out what herbs, vitamins, lifestyle changes, and diet are necessary to help your client need less of the medication.
3. Once your client decides they want to be removed from their medication you need to work very closely with them. Be sure to have them take the herbs and vitamins each day but at a different time than their medication. Start at a low dose and move up. Once that particular herb or vitamin is built up in the body it should help your client so they can begin to reduce the amount of medication they are taking.
4. Remember that a lot of medications deplete essential vitamins, minerals, amino acids, and essential oils. Once you know which ones are depleted, put your client on a rebuilding program to replace

- those important nutrients.
5. It may take a year or more for your client to remove themselves from their medication. Be sure to work with them weekly or monthly depending on how much support they need.

## **Useful Web Sites**

### **Natural Medicine & Herbs**

#### **American Botanical Council- (<http://www.herbalgram.org>)**

- Learn about the use of Herbs and Phytomedicines
- Order Herbalgram, the Journal of the ABC
- Find out about Commission E Monographs
- Order books, Tapes
- Find about ethnobotanical trips to Belize, Costa Rica, the Peruvian Amazon, and Africa.

#### **PhytoPharmica ([www.phytopharmica.com](http://www.phytopharmica.com))**

- Check out their product line of over 180 nutritional supplements, natural medicines, and herbal extracts.
- Browse through numerous medical abstracts of popular natural health products and related health issues.
- Subscribe to their Email newsletter.
- Purchase their products from us.

#### **Columbines and Wizardry Herbs (Howie Bernstein)(a wildcrafter)**

##### **<http://www.teleport.com/~howieb/howie.html>**

- Find out about wildcrafting
- See the Columbines and Wizardry Herbs Catalog
- The 1998 Herbal Apprenticeship Program

### **Ethnobotany, Herbal Resources**

#### **Henriettes Herbal Homepage (<http://sunsite.unc.edu/herbmed/>)**

- Henriette's Herbal Homepage is one of the most complete general resources. Use the culinary Herb FAQ when you need information on gardening, harvesting, using and preserving herbs. This site also welcomes contributions from its reader's experience. You'll find many practical ideas. This is certainly a site worth exploring

#### **Kathie's Herb Page**

##### **(<http://www.muscanet.com/~kschmitt/> )**

Grow your own; Summary" I first started out growing herbs just because they are pretty, then I started with a simple tea garden of herbs, then continued with edible flowers, and now my main studies are medicinal herbs. !  
Cooking Recipes Making Cooking Oils"

### **Other useful websites**

- The National Council against Health Fraud ([www.quackwatch.com/](http://www.quackwatch.com/))
- Your Guide to Health Fraud, Quackery, and Intelligent Decisions
- Healthfinder (<http://www.healthfinder.gov/>) Federally sponsored program with patient health info Healthfinder? can lead you to selected online publications, clearinghouses, databases, web sites, and support and self-help groups, as well as the government agencies and not-for-profit organizations that produce reliable information for the public. The information you find can help you make better choices for yourself and your family about your health and human services needs.

CERTIFIED HEALTH & NUTRITION COUNSELOR ONLINE COURSE - SESSION 14 – **QUESTION & ANSWERS**

NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

PHONE: \_\_\_\_\_

FAX: \_\_\_\_\_

E-MAIL: \_\_\_\_\_

Please be sure to fill out the information above, complete the test and e-mail or fax it back to us at [iridology@netzero.net](mailto:iridology@netzero.net) or 425-955-4639. We will grade your question & answer session and will let you know if we have any questions or concerns.

1. **What is the difference between oral and intravenous chelation therapy?**
  
2. **Why would anyone want to have chelation therapy rather than orthodox therapy?**
  
3. **What is slanting used for?**
  
4. **What causes a stressed liver?**
  
5. **What can you do for a weakened liver?**
  
6. **What type of sugar is the most unhealthiest for the human body?**
  
7. **Why should anyone do skin brushing?**
  
8. **What herb reduces blood pressure?**
  
9. **What is the best enema to bring down a high fever?**
  
10. **What is a triglyceride? When is it too high or too low?**
  
11. **What is cholesterol? When is it too high or too low?**