

CHAPTER 46

Inflammation = Multiple Sclerosis, Parkinson's, Dementias (including Alzheimer's Disease), Cancers.....



Every chronic disease is an inflammatory disease.

Inflammation - If you've ever been stung by an insect, cut, hit, fallen, broken out in hives, or come down with a nasty cold, then you know what acute inflammation is. And you understand that your body responds to these various assaults in the form of bruising, swelling, itching, aches, and pain. Inflammation is a critically important defense mechanism. It's your natural siren to alert you that a body part needs attention -- much like the call from the firehouse, which moves firefighters to action. Inflammation is your body's immune response to heal itself from some type of damage caused by a virus, bacteria, fungus, environmental toxin, or an injury. The blood vessels near the site become miraculously permeable and the site becomes warm and red due to the increased blood flow (warm, hence inflammation). Neutrophils and macrophages engulf microorganisms and phagocytes are called in. Some immune cells try to "eat" the invaders; others excrete hydrogen peroxide (and other oxidative chemicals) trying to kill the invaders so they can be cleaned up by the phagocytes and their friends.

Without the crucial process of acute inflammation, the body could not heal itself. All inflammation starts in this acute phase. Whenever your body becomes damaged in some capacity due to a foreign agent, and it responds immediately to repair the damage. In many cases, this reaction goes undetected, or your symptoms are so mild that they are even unnoticeable. Once the threat (fire) is gone, the body is able to go back to a non-emergency state—and the acute inflammation process turns off. Chronic inflammation occurs when your body has to continuously and unsuccessfully try to get rid of an ongoing (smouldering embers) bacterial or viral infection, fungus, heavy metal and/or chemical contamination. When this happens to you, your body's inflammation process fails to shut down - and your body is progressively weakened over time because it is overstressed. Pro-inflammatory cytokines are the part of our immune systems that attack and kill cells with oxidative chemicals. If they don't stop their attacks, they will start killing the good cells that our bodies need.

The chronic inflammation process can be compared to a light bulb. When left on continuously, a light bulb will burn out a lot quicker than if it's turned off during any/all non-use. When the inflammation process can not turn off, your immune system is simply overworked and overused and your entire immune system is compromised, **ALL forms of chronic disease can now occur—not just inflammatory diseases.** So, while chronic inflammation may not be the visible, obvious cause of many illnesses, it is the catalyst for all chronic diseases. Chronic inflammation is called the silent killer because it unlike its acute form, chronic internal inflammation can occur undetected - because it falls just below the radar of pain and visible swelling. You feel nothing, or you may experience vague, unexplained symptoms for which there are no conventional answers. Lab results may continue to come back normal leading you from doctor to doctor in frustration. And while you search for answers or even ignore your symptoms altogether, your body's inflammation process carries on for weeks, months, or even years—which compromises your entire immune system.

Wellness is the absence of inflammation, according to Dr. Barry Sears, author of the [The Anti-Inflammation Zone](#). Simply put by Dr. Sears, if you have inflammation, you cannot be well. Chronic inflammation has become an epidemic in America, and it threatens to overburden the health care system and destroy many future lives with the most serious chronic, degenerative diseases. The key to optimal health and disease prevention is to detect chronic inflammation and treat its root causes promptly and effectively. This may take time, and you and your doctor may have to do a bit of detective work to find out the true culprits of inflammation. You can proactively prolong your health—and your life—by preventing your body from entering into a state of chronic, untreated inflammation.

Testing for Chronic Inflammation - C-reactive protein is a solid indicator for disease potential. Interestingly, research reveals that chronic inflammation increases the level of C-reactive protein (CRP) in the blood. As such, the American Heart Association and the Centers for Disease Control and Prevention (CDC) jointly recommend using inflammatory markers such as CRP to assess heart disease and stroke risk. Taking it a step further, high C-reactive protein levels may alert you to the potential for other diseases, not just heart disease and stroke. CRP is a simple blood test. While the CRP test does not specifically diagnose a particular disease, it is a general marker of infection and inflammation that alerts medical professionals that further testing and treatment may be necessary. CRP tests can also tell you if you're getting better, or if medical treatments and therapies are working. For instance, CRP levels decrease when anti-inflammatory aspirin is administered to cardiac patients.

Every chronic disease is an inflammatory disease. No matter what so-called disease you have, from cancer to the common cold, inflammation is a major part of your problem. Most Americans suffer from chronic inflammation, caused by a variety of factors that seriously undermine health and ages us prematurely. Common inflammatory diseases include allergies, Alzheimer's, asthma, arthritis, autoimmune diseases, bursitis, cancer, cervicitis, colitis, cystitis, diabetes, gastritis, heart disease, hepatitis, infections, myocarditis, nephritis, neuritis, osteoporosis, prostatitis, sinusitis, tendonitis and vaginitis. Most Americans eat an acidic diet caused by too much salt, sugar, white flour, dairy, meat and cola drinks. **Many experts consider over-acidity to be one of the major causes of chronic inflammation, with increasing acidity causing increasing amounts of inflammation.**

Multiple sclerosis, Parkinson's, dementias (including Alzheimer's disease), ALS are all inflammatory neurodegenerative diseases. Inflammation is just another word for acidity that affects the central nervous system and causes a variety of symptoms including changes in sensation, visual problems, muscle weakness, depression, speech and coordination difficulties, severe fatigue, short-term memory loss, balance impairment, overheating and pain. Multiple sclerosis, Parkinson's, Alzheimer's as well as ALS all negatively affect neurons. Neurons are the cells of the brain and spinal cord that carry information, create thought and perception, and allow the brain to control the body. The loss of the myelin sheath insulating the nerves, otherwise known as demyelination, is caused by glucose, acetaldehyde, lactic acid, alcohol and other acids stripping this protective 'fatty sheath' off the nerves. When myelin degrades, conduction of signals along the nerve is either impaired or lost and the nerve eventually withers.

Chronic pain can be caused by a variety of things but most likely it is due to acidity in the body. If you are a regular American you probably eat a Standard American Diet (SAD) which is high in acidic foods: meat, dairy, processed foods, white flour products and alcohol. All of these things contribute to an acidic body chemistry which in turn cause inflammation and pain. Even the water we drink can cause an acidic body. There are many other things you can do to help contribute to the alkalizing of your body but one of the fastest ways is to add lemon juice from 4-6 lemons to your daily water intake. Drink your water thru a straw as lemon juice is harmful to your teeth. Lemon juice is also high in vitamin C which is a powerful antioxidant which helps to eliminate free radicals in your body. It is also high in potassium which can help to lower high blood pressure. Lemons were also highly coveted on ships in the old days for they prevented scurvy. If you bring your pH back to a healthier range - in a few days you will see a noticeable reduction in redness and acne; after about two weeks rosacea will disappear.

What is Inflammation? Inflammation is an immune response; a response to an infection, an irritation or an injury. Immune cells are called to the site through the blood stream. The blood vessels near the site become permeable and the site becomes warm and red due to the increased blood flow (warm, hence inflammation). An important result of inflammation is the recruitment and activation of phagocytes. These cells function to engulf and attack and kill invading pathogens. Neutrophils, monocytes and macrophages are the three major types of phagocytes. Some immune cells try to "eat" the invaders; others excrete hydrogen peroxide (and other oxidative chemicals) trying to kill them so they can be cleaned up by the phagocytes and friends. Inflammation is a part of the body's natural defense system against injury and disease.

What is Chronic Inflammation? Chronic inflammation, on the other hand, is a disease. The system instead of protecting the organism (our bodies) starts to kill the organism (us), slowly but surely. The Author believes that chronic inflammation is the main contributing factor to all chronic degenerative diseases:

Allergy — Inflammatory cytokines induce autoimmune reactions

Alzheimer's — Chronic inflammation destroys brain cells

Anemia — Inflammatory cytokines attack erythropoietin production

Aortic valve stenosis — Chronic inflammation damages heart valves

Arthritis — Inflammatory cytokines destroy joint cartilage and synovial fluid

Cancer — Chronic inflammation causes many cancers

Congestive heart failure — Chronic inflammation contributes to heart muscle wasting

Fibromyalgia — Inflammatory cytokines are elevated

Fibrosis — Inflammatory cytokines attack traumatized tissue

Heart attack — Chronic inflammation contributes to coronary atherosclerosis

Kidney failure — Inflammatory cytokines restrict circulation and damage nephrons

Lupus — Inflammatory cytokines induce an autoimmune attack

Pancreatitis — Inflammatory cytokines induce pancreatic cell injury

Psoriasis — Inflammatory cytokines induce dermatitis

Stroke — Chronic inflammation promoted thromboembolic events

Surgical complications — Inflammatory cytokines prevent healing

When the body is overloaded with stress and/or toxins, it can respond only in one way: chronic inflammation. Smoke, pesticides, cleaning chemicals, allergens, dust, contaminants, herbicides all contribute to toxic overload just as much as nutritional deficiencies. The overall solution to the problem of chronic inflammation is simple: Alkalize.

What are some natural products that can help remove inflammation?

- **Baking Soda** - Very useful in keeping the body healthily alkalized is half to one teaspoon a day of baking soda in water. Don't take it with or within an hour of meals, though, as the stomach needs to retain its acidity in order to perform its digestive functions effectively. A great deal of tap water (or even store-bought spring water) is surprisingly acidic; filtration will remove toxins but will not affect the pH balance of the water. (Baking soda can be used to reduce the

corrosion of acidic drinking water in municipal water supplies, therefore reducing the toxicity of the lead and copper, which are dissolved from the pipes.) You can purchase a pH testing kit for home use very cheaply, and if the water you usually drink is acidic (i.e., with a pH of less than 7.0) you could remedy this cheaply and easily by adding a pinch of baking soda to all the water you consume. Baking soda is also effective for polishing teeth (without scratching the tooth surface) and fighting bad breath (sprinkle a little on the toothbrush bristles). It can even be tried for exfoliating skin when acne is a problem (add a little to a facial cleanser in place of using a commercial facial scrub). When baking soda is added to bath water, sunburn sufferers often experience a notable reduction in pain. Place a cup (8 ounces) of baking soda under the running bath tap so it dissolves completely, and soak in a lukewarm tub for about half an hour. Such a bath will soothe the pain – and you won't have to endure the stinging sensation of a shower. Adding baking soda to a hot bath at any time also helps wash acid wastes out of the body. In addition, baking soda can be used in cool (but not cold) bath water to soothe other skin irritations and alleviate itching from prickly heat, bee stings, insect bites, and other minor skin ailments. A paste (made with just enough water to get the desired sticky consistency) placed on an insect bite or sting and allowed to dry is a time-tested approach for drawing out and neutralizing poisons. People with skin allergies who tend to react to commercial laundry detergents might find that washing their clothing and bedding in baking soda is less irritating. Simple baking soda may also weaken the desire for a cigarette as well as reduce the desire for sugar and sweets. It's used in kidney dialysis to reduce the level of acids in the bloodstream, and acts to prevent bacterial growth in food products. **For general purposes of alkalizing the body, quarter to half a teaspoon twice a day in water is usually enough.** The medicinal and self-care uses of baking soda were recognized by the United States Pharmacopoeia (USP) more than 150 years ago. For years, baking soda has been recommended because of its antacid effects, mainly to neutralize stomach acids that can cause heartburn, acid indigestion and related discomforts. As it mixes with the hydrochloric acid in the stomach, baking soda triggers a chemical reaction, and its end products are salt (NaCl, or sodium chloride), carbon dioxide (CO₂) and water. The water is harmless, and the carbon dioxide gets released as a gas, producing a familiar burp once the acid is neutralized.

- **Birch** taken as a tea and made from the bark or leaves, is a diuretic and anti-inflammatory herb used for gout, kidney stones, and rheumatism. Oil and creams are used for swollen joints. Do not use if you are allergic to aspirin.
- **Berries** are wonderful antioxidants — Raspberries, acai berries, goji berries, blueberries, cranberries and strawberries. All your antioxidants are needed to help fight chronic inflammation; antioxidants are anti-inflammatory.
- **Black cohosh** (*Cimicifuga racemosa*) is a Native American remedy, used mainly for "women's problems" (menopause). It is also used for tinnitus (ringing in the ears) and arthritis. It contains alicyclic acid, tannins, resin and bitter glycosides, so it is contraindicated if you are allergic to aspirin. It is an aspirin substitute, but should be avoided if pregnant, nursing, or using anticoagulants or are on HRT therapy.
- **Boswellia** is a rainforest herb that in clinical studies has been shown to improve symptoms in patients with osteoarthritis and rheumatoid arthritis. Like Curcumin, its active ingredients block the production of inflammatory prostaglandin hormones and other inflammatory chemicals.
- **Butterbur**, a plant from the UK and Europe, is an amazing anti-inflammatory and antispasmodic (prevents cramps). Just recently, studies in the British Medical Journal found that butterbur treated allergies (hay fever) just as well as expensive medicines. Another study showed that it was far superior to the traditional allergy medications. In a combined study from Germany and Switzerland using a group of 330 patients, they discovered that an extract used, called Buterbur Ze339, was just as effective as Claritin and Tavist with no drowsiness. Dosage: 50mg twice daily with meals. ["Treating intermittent allergic rhinitis: a prospective, randomized, placebo and antihistamine-controlled study of Butterbur extract Ze 339." Phytotherapy Research Vol. 19, Issue 6.]
- **Vitamin C** has long been recognized for its anti-inflammatory properties and works best when taken as a Vitamin C Complex (with bioflavonoids such as quercetin and copper, calcium, and l-lysine). In a study of people exposed to simulated sunlight, researchers found that vitamins C and E worked synergistically to reduce skin inflammation. In a cell study, Italian researchers noted that quercetin and vitamin C worked together to protect cells from inflammation-induced damage. The daily dosage should be 1,000-2,000 mg if you live in a relatively non-toxic neighborhood, up to 6,000 mg per day if you live in a more polluted neighborhood.
- **Capsicum/Hot Pepper** a/k/a *Capsicum frutescenscan*, or Cayenne Pepper, helps fight dangerous blood clots, can "cool" a number of inflammatory responses including burns, ulcers, some nerve-ending disorders and even possibly arthritis. Has definite fibrinolytic activity (can break down blood clots through enzymatic mechanism to some degree), also may be helpful in the pain of rheumatoid arthritis and a number of bowel diseases. Topical capsicum cream cools pain of several nerve ending disorders such as shingles and post-therapeutic neuralgia, a drop or two to the gum around an aching tooth works wonders. The cream can be helpful for pain due to diabetic neuropathy, and the pain which occurs after an amputation or mastectomy, as well as other peripheral neuropathies such as those that occur in AIDS patients. If you are taking anticoagulants or have a bleeding problem (slow clotting time) do not take capsicum without your doctor's approval. If the pepper you have eaten is too hot and starts burning you up, eating a banana will quickly cool you down.
- **Carnosine**, at least 1000 mg a day, and/or 300 mg of the European drug aminoguanidine can inhibit pathological glycation [the bonding of sugars to proteins] reactions in the body which are now known to contribute to inflammation.
- **Cat's Claw**, known as una de gato and *Uncaria tomentosa*, is a Peruvian herb with a long history as a remedy for

inflammatory arthritis. Recent cell-culture and animal experiments at the Albany Medical College, New York, Studies show that cat's claw inhibits inflammation by blocking the activity of NF-kB.

- **Celery seed** (*Apium graveolens*) has a calming effect on the nervous system, helps to lower blood pressure, and can aid in a urinary infection. The seeds are traditionally used to improve circulation to muscles and joints and helps excrete uric acid. Celery seed is contraindicated if you are pregnant or suffering from kidney disease. Like Curcumin, celery seed can cause photosensitivity if taken in large doses.
- **Chuchuhuasi** is an herb from the rainforests of Peru and is used to treat a multitude of ailments. It is first and foremost an anti-inflammatory with immunostimulant properties. It also repairs DNA damage and has anti-tumor properties. People traditionally have combined this with pau d'arco in their battle against cancer. Most herbalists recommend taking between 1,000 and 3,000 mg daily.
- **Coconut Oil** is antiviral, antibacterial, and parasitocidal (kills parasites). Inflammation begins with a bad terrain and germs. Coconut oil can improve the terrain and help get rid of the germs.
- **Curcumin** is the natural yellow pigment found in turmeric, a spice from India. Curcumin is also a powerful antioxidant; is active against a range of bacterial and fungal infections; a superb liver tonic; helps normalize blood cholesterol, and thins the blood. In a study from Cornell University, it was found that curcumin blocked the activity of Cox-2. which might explain some of the herb's anticancer effects. Curcumin has various properties such as antioxidant, immunomodulation, antiangiogenesis and induction of apoptosis. It was shown to effectively inhibit growth of normal human oral epithelial cells and cell lines derived from both oral precancerous lesions and squamous cell carcinomas decreased incidence and volume of chemically induced oral cancers in rats. Oral intake of curcumin up to 8g/day had no toxic effects in humans and led to histologic improvement of oral leukoplakia in 2 of 7 patients during 3 months of administration. Many studies show that curcumin targets various molecular pathways in head and neck cancers. Curcumin is contraindicated if you are taking anticoagulants, suffer from gall stones or obstructive gallbladder disease. **Curcumin also increases your sensitivity to the sun, so it is advisable to avoid long periods in strong sunlight.** The daily dosage is usually 2.8 mg.
- **Devil's claw tuber** (*Harpagophytum procumbens*) contains glycosides, phytosterols (suspected to have some effect in cancer prevention), flavonoids and harpagoquinone. It is a bitter, anti-inflammatory herb, useful for a wide-range of joint and muscular problems, including Rheumatoid Arthritis. It is also a digestive stimulant. Devil's claw tuber is contraindicated if you are suffering from stomach or duodenal ulcer, taking anti-coagulant therapy, or are pregnant.
- **DHEA** is a hormone that decreases with age. DHEA has been shown to suppress IL-6, an inflammatory cytokine that often increases as people age. Typical doses of DHEA are 25-50 mg daily, although some people take 100 mg daily.
- **Vitamin E** is a protective antioxidant with anti-inflammatory properties. A vitamin E complex that contains gamma tocopherol and tocotrienols provides the most broad-spectrum protection. Take 1-2 capsules (400 - 800 IU) daily. Vitamin E is a blood thinner. Use d-alpha tocopheryl acetate - Natural E.
- **Ginger** inhibits Cox-2 and another proinflammatory compound, 5-lipoxygenase. This simple herb and condiment contains almost 500 different compounds, many of which are anti-inflammatory. It contains many volatile constituents, including zingiberene, zingiberole, phellandrene, borneol, cineole and citral, and can also be used externally. Ginger is contraindicated if you are taking anticoagulants. Large doses are contraindicated if you are pregnant or suffering from an ulcer. The daily dosage is 100 mg.
- **GLA:** Although GLA (Gamma-linolenic acid) is an omega-6 fatty acid, it has anti-inflammatory properties. Very little GLA is converted to arachidonic acid and prostaglandin E2; GLA actually increases production of the anti-inflammatory prostaglandin E1. Robert B. Zurier, MD, of the University of Massachusetts Medical Center, Worcester, gave GLA supplements or placebos to 41 patients with rheumatoid arthritis. Two-thirds of those receiving GLA had a 25 percent reduction in their arthritic symptoms. The daily dosage is 2-3 grams.
- **Greentea:** Researchers at Case Western Reserve University, Cleveland recently reported that the antioxidant polyphenols in green tea had anti-inflammatory properties by inhibiting Cox-2 and TNF α . Genistein inhibits prostaglandin E2 and Cox-2, and quercetin inhibits the activity of inflammation-promoting "adhesion" molecules. It's likely that Pycnogenol, grape seed extract, and other bioflavonoids work through similar mechanisms. The daily dosage is 25-500 mg.
- **Greens:** Green food by its very nature is anti-inflammatory! Eliminate all grains for a week and instead eat dark green leafy salads, not iceberg lettuce! Get some mixed organic greens and some romaine and flood your body with natural anti-cancer, anti-inflammatory, alkaline nutrients or juice them and make a green smoothie. You can heal serious degenerative diseases as well as cure allergies, asthma, chronic pain, fatigue, colds, flu, bronchitis and many other diseases with greens, especially if you add pineapple, possibly nature's best anti-inflammatory gift to mankind.
- **Vitamin K** helps reduce levels of IL-6, a pro-inflammatory messenger. Vitamin K also helps in the treatment of osteoporosis by regulating calcium and promoting bone calcification. One 10-mg capsule daily is recommended for prevention purposes. Vitamin K is found in leafy green vegetables.
- **Meadowsweet** flowering tops (*Filipendula ulmaria*) contains salicylic acid, tannin and citric acid. It is an excellent digestive remedy, that reduces acidity in the stomach and helps to alleviate gastritis and peptic ulceration, which makes it tremendously useful for those with arthritic conditions who cannot take aspirin or other NSAIDs due to the side effects on the stomach. Quite a large dosage is needed for treating arthritis, but it does combine well with other herbs (mentioned above), but avoid if you are allergic to aspirin.

- **Minerals** such as calcium, magnesium and potassium help to fight acidity and inflammation.
- **NAC** is an amino acid with antiviral and liver protectant properties. One 600 mg capsule daily is recommended.
- **Nettle leaf** has been shown to suppress the pro-inflammatory cytokine TNF- α . It contains amines including histamine, choline, acetylcholine and serotonin. It is usually charged with minerals such as calcium, potassium, silicic acid and iron. It strengthens and supports the whole body. In addition to its major role as a skin herb, nettle improves elimination of wastes via the kidneys, in particular uric acid, making it a useful cleansing remedy and helpful in gout. You can find many preparations of nettle leaf at health food stores, but picking the young leaves and making tea is one of the best ways to take this herb, just strain well (and wear gloves when picking it).
- **Olive Leaf Extract** is antibacterial, antifungal, and antiviral. Clearing up systemic yeast is another good start.
- **Olive Oil** (extra virgin) contains oleocanthal, a compound that prevents the production of COX-1 and COX-2 enzymes. Apparently, some studies have shown that three and a half tablespoons is equal to 200 mgs of ibuprofen. Omega-3 essential fatty acids found in fish oils contain EPA (eicosapentaenoic acid) and DHA (docosahexaenoic acid) which are essential building blocks for the body's anti-inflammatory prostaglandins (e.g., prostaglandin E1) and for turning off Cox-2 and the body's pro-inflammatory cytokines (IL-1, IL-6 and TNF α). In addition, omega-3 fatty acids block the activity of an enzyme that breaks down joint cartilage.
- **DHA** might just be the most effective non-prescription supplement to suppress pro-inflammatory cytokines. The daily dosage is 3 or more grams. Your body can make DHA and EPA from linoleic acid (flax seed oil) if you've got healthy probiotics.
- **Onions** are loaded with sulfur compounds that, besides relieving inflammation directly, inhibit enzymes that cause joint inflammation. The stronger the onion, the more phenols and flavonoids. Researchers have found that the strongest is the yellow onion, containing eleven times the flavonoids than the white. The shallot contains the most antioxidant activity.
- **Oregano** is one of the most magical herbs in your garden. It is an anti-inflammatory and a powerful antioxidant. The best form of oregano is probably the essential oil; however, you can find oregano in capsules. TAKE WITH FOOD. The wild form of oregano contains 31 known anti-inflammatories, 28 antioxidants, and four known COX-2 inhibitors.
- **Quercetin** is a bioflavonoid compound that blocks the release of histamine and other anti-inflammatory agents at supplemented doses; a minimum 100 mg per day. Rosemary is a common kitchen herb rich in ursolic acid. In laboratory experiments, researchers found that the ursolic acid extract of rosemary was a potent inhibitor of Cox-2 activity. The daily dosage is 100 mg.
- **St. John's wort** is better known for its antidepressant effect, but this herb also has anti-inflammatory properties. Researchers from the University of Freiburg, Germany discovered that hypericin, one of the phytochemicals in St. John's wort, inhibited NF- κ B, which activates pro-inflammatory genes.
- **Silymarin** is the antioxidant extract of milk thistle. Studies have shown that it inhibits Cox-2 formation. This role of silymarin might explain why earlier studies found it to inhibit the growth of prostate, breast and skin cancers. Daily dosage is 100-200 mg.
- **Systemic enzymes** fight inflammation, fibrosis (scar tissue), and viruses; modulate the immune system and cleanse the blood. Bromelain is the name of a group of powerful protein-digesting, (proteolytic) enzymes that are found in the pineapple plant. These enzymes are anti-inflammatory and have been proven to suppress the inflammation and pain of many forms of arthritis, sports injuries and joint conditions. Papain is also used to remove fibrin from wounds, treating jellyfish, insect stings, and edemas. It is a powerful inflammatory that accelerates wound healing, swelling, and adhesions after surgery. Serrapeptase (Serratia peptidase), is a proteolytic enzyme found naturally in the intestine of the silkworm, which is used by the silkworm to dissolve the cocoon and emerge as a moth. It is a powerful anti-inflammatory agent, used for bruises, for fibrocystic breast disease, bronchitis (loosens and expels mucous), edema, and lupus. Serrapeptase digests dead tissue, blood clots, cysts, and arterial plaque. The late German physician Dr. Hans Nieper used serrapeptase to treat arterial blockage in his coronary patients. In addition to its anti-inflammatory abilities, serrapeptase reduces pain. Physicians throughout Europe and Asia have been using serrapeptase for years, especially as an alternative to COX2 inhibitors, NSAIDS, ibuprofen and aspirin.
- **Tumeric** is a yellow spice most often associated with Indian food, curry and yellow mustard. It is a very powerful anti-inflammatory that can safely quash pain and swelling in arthritis, bursitis, tendonitis, and carpal tunnel syndrome. Tumeric helps in gastrointestinal problems such as ulcers, irritable bowel syndrome and ulcerative colitis. Tumeric is also an immunomodulator that can bring down an excessive immune response in conditions such as allergies, asthma, and, in animals studies, curcumin (a main ingredient in tumeric) appears to inhibit development of amyloid plaques, which would give relief in Alzheimer's disease and multiple sclerosis. Tumeric has also shown to prevent atherosclerosis and protects the liver from chemical and viral damage. Curcumin, the active ingredient also has been shown to modify more than 250 oncogenes and processes that can trigger cancer tumorigenesis, proliferation, and metastasis. Though tumeric can be taken in food as a spice, it must be supplemented to get its full benefits, usually two capsules, two to three times daily. Because it also thins the blood, people with bleeding problems or who are on blood thinners should not take it, and it tends to release bile, so for people with bile duct blockage Tumeric is contraindicated.
- **Wild yam** (*Dioscorea villosa*) contains plant estrogens that might help suppress the symptoms of menopause. It is also an anti-inflammatory herb, useful in joint pain; is anti-spasmodic which seems to help in Irritable Bowel Syndrome; and

it is a bitter herb that stimulates digestion and supports the liver function. Wild yam is contraindicated if you are taking HRT or are pregnant or nursing or taking birth control pills.

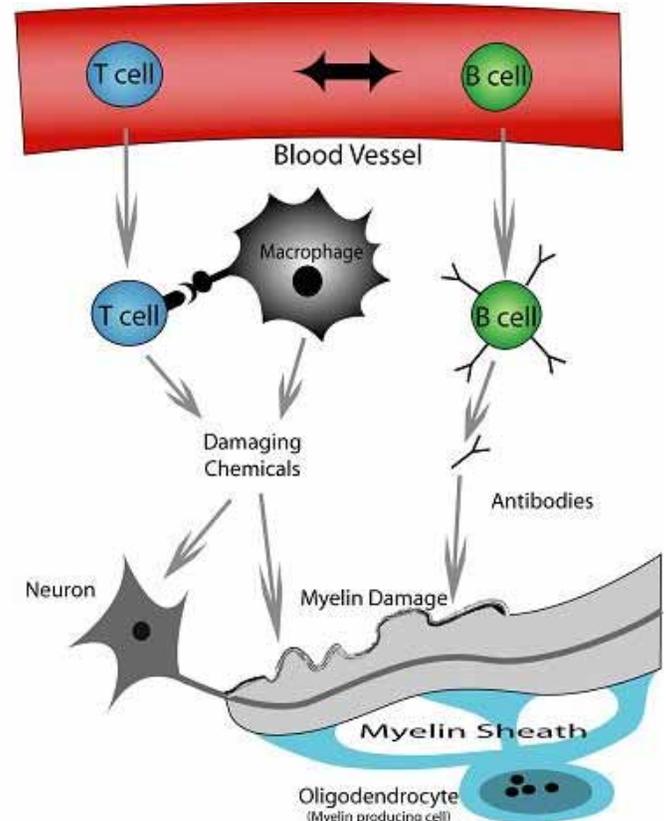
- **Yarrow** has an aspirin effect, and is a pain reliever and anti-inflammatory herb. Used for muscle spasms and is a good wound healer. Do not take if you are taking aspirin. Works like white willow. Helps blood coagulate, unlike aspirin which prevents clotting. Both yarrow and birch should not be used if you are allergic to aspirin.

Harmful Bacteria, Cancer and Viruses All Refuse to Live in Alkalinity but they all thrive in Acidity. Stress, bad eating habits, pesticides, alcohol, pollution, etc. create acidity in our bodies - Acidity is the perfect environment for destroying our bodies in a slow/painful manner. The bottom line ... harmful bacteria and viruses will vacate your body as long as you keep your body in a state of alkalinity. By maintaining your drinking/baking soda water at 7.2 to 7.5 pH, you are greatly enhancing your body's ability to prevent any health related problems. Studies in respected medical journals worldwide consistently support the use of a simple dirt-cheap product for reversing acidity -- baking soda. Since there's no money in baking soda for drug companies, its excluded from medical school curriculum and/or associated health training/education. Most odors we experience are bacteria related. A simple test is to sprinkle a bit of baking soda in your stinky shoes and/or under your smelly arm-pits -- odor diminishes readily. Odor from areas of the body that stay wet and/or dark for awhile are a result of/ or caused by bacteria and/or the symbiotic relationship it has with fungus. Fungus (vaginal candidiasis or candida, jock itch, athlete's foot, etc.) is odor-producing. Cavities and bacteria (bad breath) are best-buddies too. Sugar creates an acidic environment in the mouth, thus a reason why dentists recommend avoiding sugar-related foods.

More than two-out-of-three Americans are overweight, and fat cells, especially those that form around the abdomen, produce large amounts of inflammatory chemicals. This is a huge source of inflammation, and is the reason why overweight people suffer so much more disease and disability. Environmental toxins are also inflammatory. Synthetic fibers, latex, glues, adhesives, plastics, air fresheners, cleaning products and perfume are examples of everyday chemicals that can trigger an inflammatory response. Chronic exposure, at even low doses, can drive your immune system crazy, resulting in inflammatory autoimmune diseases. Chronic stress produces hormones that result in chronic inflammation. Stress produces inflammatory chemicals that can make your skin break out or your intestines go into revolt. Likewise, insomnia causes inflammation. People who are sleep deprived have higher levels of inflammatory chemicals. Inflammation is a common element in virtually all disease. By causing chronic inflammation we are aging ourselves prematurely, causing us to look old, feel tired, and suffer every imaginable disease. Controlling chronic inflammation takes a combination approach because it arises from a combination of causes, but most of it is under your control. By learning how to prevent and reverse inflammation you can achieve power over aging and disease. What a wonderful goal – and so easy to do. If you want to prevent disease, or if you want to get well, consume a healthy diet high in a variety of fresh, organic vegetables, fruits, nuts and seeds. Lose weight. Take high quality anti-inflammatory supplements and you will be well on your way to a longer, higher quality, disease-free life.

Multiple Sclerosis (MS) is an autoimmune disease that affects the brain and spinal cord (central nervous system) Nerve fibers inside and outside the brain are wrapped with many layers of insulation called the myelin sheath. Much like the insulation around an electrical wire, the myelin sheath permits electrical impulses to be conducted along the nerve fiber with speed and accuracy. When myelin is damaged, nerves don't conduct impulses properly.

The Author would like to note that nerve poisons/pesticides adversely damage our cholinesterase. Cholinesterase (ko-li-nes-ter-ace) is one of many important enzymes needed for the proper functioning of the nervous systems of humans, other vertebrates, and insects. Certain chemical classes of pesticides, such as organophosphates (OPs) and carbamates (CMs) and chlorinated derivatives of nicotine attack bugs by interfering with, or 'inhibiting' their cholinesterase. While the effects of cholinesterase inhibiting products are intended for insect pests, these chemicals can also be poisonous/toxic to people and pets. Electrical switching centers, called 'synapses' are found throughout the nervous systems of humans, other vertebrates, and insects. Muscles, glands, and nerve fibers called 'neurons' are stimulated or inhibited by the constant firing of signals across these synapses. Stimulating signals are usually carried by a chemical called 'acetylcholine' (a-see-till-ko-leen). Stimulating



signals are discontinued by a specific type of cholinesterase enzyme, acetylcholinesterase, which breaks down the acetylcholine. These important chemical reactions are usually going on all the time at a very fast rate, with acetylcholine causing stimulation and acetylcholinesterase ending the signal. If cholinesterase-affecting insecticides are present in the synapses, however, this situation is thrown out of balance. The presence of cholinesterase inhibiting chemicals prevents the breakdown of acetylcholine. Acetylcholine can then build up, causing a "jam" in the nervous system. When a person receives too great an exposure to cholinesterase inhibiting compounds, the body is unable to break down the acetylcholine and sickens/dies.

Preliminary research shows a link between pesticide exposure and neurological diseases like Parkinsons and Alzheimers. Dr. Patrick Carr says there's clear evidence pesticide exposure at relatively low doses affects brain cells. "Some areas of the brain displayed what I would call physical changes -- in other words, a loss of neurons in particular regions of the brain," says Carr. "In other regions of the brain you wouldn't notice a change in the number of cells present there, but now the cells that are present there are expressing chemicals in different amounts, compared to normal rats." As an example, Dr. Carr found cells responsible for production of a substance called myelin were damaged or destroyed. Myelin is a substance made up of fats and proteins that encloses nerves. It helps transmit signals along the nerves. Loss of myelin causes nerve damage in neurological diseases such as Multiple Sclerosis.

Multiple Sclerosis is a disorder in which the nerves of the eye, brain, and spinal cord lose patches of myelin. Children who spend more time in the sun have a lower risk for developing Multiple Sclerosis as adults. Something in relation to sunlight and/or vitamin D exposure during childhood seems to play a protective role. Multiple Sclerosis (MS) affects more women than men. The disorder is most commonly diagnosed between ages 20 and 40, but can be seen at any age. MS is caused by damage to the myelin sheath, the protective covering that surrounds nerve cells. When this nerve covering is damaged, nerve signals slow down or stop. The nerve damage is caused by inflammation. Inflammation occurs when the body's own immune cells attack the nervous system. This can occur along any area of the brain, optic nerve, and spinal cord. Viruses, Vitamin D Deficiency and Environmental factors may play a role. You are slightly more likely to get this condition if you have a family history of MS or live in an part of the world where MS is more common. There are a large number of studies confirming lack of sun exposure as a risk factor for Multiple Sclerosis. And viral infection has always been a compelling argument basically since MS was first diagnosed.

The term Multiple Sclerosis comes from the multiple areas of scarring (sclerosis - a/k/a plaques or lesions) that represent many patches of demyelination in the nervous system. The possible neurologic signs and symptoms of Multiple Sclerosis are so diverse that doctors may miss the diagnosis when the first symptoms appear. Multiple Sclerosis symptoms often include reduced or abnormal sensations, weakness and fatigue, visual changes, clumsiness, loss of bladder control, and so on. Symptoms of Multiple Sclerosis might appear in any combination and be mild or severe. They are usually experienced for unpredictable periods of time. While Multiple Sclerosis often worsens slowly over time, affected people usually have periods of relatively good health (remissions) alternating with debilitating flare-ups (exacerbations). Fatigue is the most common symptom of Multiple Sclerosis and is associated with a reduced quality of life. It is described as the worst symptom of their disease by 50% - 60% of MS patients. Yoga helps reduce fatigue in patients with Multiple Sclerosis. Brain fog occurs in Multiple Sclerosis with problems in thinking or being able to focus clearly. Erectile dysfunction is a common symptom with Multiple Sclerosis. Investigators in Japan have found that Multiple Sclerosis symptoms were more common in the warmest (July and August) and coldest (January and February) months. Multiple Sclerosis (abbreviated MS, also known as disseminated sclerosis or encephalomyelitis disseminata) is an autoimmune condition in which the immune system attacks the central nervous system (CNS), leading to demyelination. It may cause numerous physical and mental symptoms, and often progresses to physical and cognitive disability. Disease onset usually occurs in young adults, is more common in women, and has a prevalence that ranges between 2 and 150 per 100,000 depending on the country or specific population. Multiple Sclerosis is one of the most common causes of neurological disability in young and middle-aged adults. About 400,000 Americans, mostly young adults, suffer from, have it. MS was first described in 1835 by Jean-Martin Charcot.

Possible MS triggers - Although inflammation, demyelination and axonal injury are all involved, the primary pathogenic process is not clear. On-the-job exposure to organic solvents and pesticide POISONS may increase a person's risk of developing Multiple Sclerosis. Infection with a common bacteria known as C. pneumonia may increase the risk of developing Multiple Sclerosis. Immunization with the synthetic hepatitis B vaccine may be associated with an increased risk of developing Multiple Sclerosis. Those with Multiple Sclerosis should avoid excessive body heat elevation such as sauna, whirlpool, sun bathing or spending time outdoors in high heat. Infection with Epstein-Barr virus (EBV), resulting in infectious mononucleosis, which primarily effects adolescents and young adults, more than doubles the risk of developing Multiple Sclerosis (MS) later in life. Elevated serum levels of Epstein-Barr virus (EBV) antibodies can be seen in multiple sclerosis patients decades before the clinical onset of disease. Cerebrospinal fluid from Multiple Sclerosis patients commonly contains varicella zoster virus DNA. The use of immune suppressive therapy could more easily lead to viral reactivation and to the development of viral diseases in Multiple Sclerosis patients. MS patients who smoke have a speedier progression of the disease. Archives of Neurology, July 2009. A woman's risk of developing MS during her lifetime is doubled if she was

obese at age 18. [Neurology, online November 12, 2009.](#)

Viral Exposure - In 2000, German researchers have shown that there may be a connection between the Epstein-Barr Virus (EBV) and disease activity in MS patients over time. The study evaluated 108 MS patients for the persistence of antibodies against EBV, Herpes Simplex Virus (HSV), and cytomegalovirus (CMV). All of the patients tested positive for antibodies against EBV. And out of the 19 that were followed monthly for one year, viral reactivation was seen in more than 72 percent of patients with worsening symptoms. The Authors of the study concluded that EBV might be an "activator" of the underlying disease process involved in MS. Note: Herpes virus is related to chicken pox, cold sores, mononucleosis and shingles. Having the chicken pox or herpes vaccine will introduce this virus into your system.

Vitamin D Deficiency - A study in 2011 has demonstrated that low levels of sunshine together with infectious mononucleosis could heighten your risk of developing MS. The researchers concluded that the effect of sunlight on generating vitamin D seems to be the most likely candidate for explaining its relationship with MS. In fact, it was identified as far back as 1922 that the farther away you live from the equator, the greater your chances of acquiring the autoimmune disease.

Symptoms - Symptoms vary, because the location and severity of each attack can be different. Episodes can last for days, weeks, or months. These episodes alternate with periods of reduced or no symptoms (remissions). Fever, hot baths, sun exposure, and stress can trigger or worsen attacks. It is common for the disease to return (relapse). However, the disease may continue to get worse without periods of remission. Because nerves in any part of the brain or spinal cord may be damaged, patients with Multiple Sclerosis can have symptoms in many parts of the body. The Author would like to note that saunas can be fabulous ways to aid in detoxification with MS and other toxic conditions so long as it is done properly under careful medical supervision.

Medical Treatment - Because "they" do not know the cause of MS - there is no known/acceptable treatment and/or medical/pharmaceutical (drug) cure for Multiple Sclerosis at this time. but.....An Italian doctor has been getting dramatic results with a new type of treatment for Multiple Sclerosis, or MS, which affects up to 2.5 million people worldwide. In an initial study, Dr. Paolo Zamboni took 65 patients with relapsing-remitting MS, performed a simple operation to unblock restricted bloodflow out of the brain - and two years after the surgery, 73% of the patients had no symptoms. Dr. Zamboni's thinking could turn the current understanding of MS on its head, and offer many sufferers a complete cure. Multiple Sclerosis, or MS, has long been regarded as a life sentence of debilitating nerve degeneration. More common in females, the disease affects an estimated 2.5 million people around the world, causing physical and mental disabilities that can gradually destroy a patient's quality of life. It's generally accepted that there's no medical cure for MS, only treatments that treat or mitigate the symptoms - but a new way of looking at the disease has opened the door to a simple treatment that is causing radical improvements in a small sample of sufferers. Italian Dr. Paolo Zamboni has put forward the idea that many types of MS are actually caused by a blockage of the pathways that remove excess iron from the brain - and by simply clearing out a couple of major veins to reopen the blood flow, the root cause of the disease can be eliminated.

Dr. Zamboni's revelations came as part of a very personal mission - to cure his wife as she began a downward spiral after diagnosis. Reading everything he could on the subject, Dr. Zamboni found a number of century-old sources citing excess iron as a possible cause of MS. It happened to dovetail with some research he had been doing previously on how a buildup of iron can damage blood vessels in the legs - could it be that a buildup of iron was somehow damaging blood vessels in the brain? He immediately took to the ultrasound machine to see if the idea had any merit - and made a staggering discovery. More than 90% of people with MS have some sort of malformation or blockage in the veins that drain blood from the brain. Including, as it turned out, his wife. He formed a hypothesis on how this could lead to MS: iron builds up in the brain, blocking and damaging these crucial blood vessels. As the vessels rupture, they allow both the iron itself, and immune cells from the bloodstream, to cross the blood-brain barrier into the cerebro-spinal fluid. Once the immune cells have direct access to the immune system, they begin to attack the myelin sheathing of the cerebral nerves - Multiple Sclerosis develops. He named the problem Chronic Cerebro-Spinal Venous Insufficiency, or CCSVI.

Dr. Zamboni immediately scheduled his wife for a simple operation to unblock the veins - a catheter was threaded up through blood vessels in the groin area, all the way up to the effected area, and then a small balloon was inflated to clear out the blockage. It's a standard and relatively risk-free operation - and the results were immediate. In the three years since the surgery, Dr. Zamboni's wife has not had an attack. Widening out his study, Dr. Zamboni then tried the same operation on a group of 65 MS-sufferers, identifying blood drainage blockages in the brain and unblocking them - and more than 73% of the patients are completely free of the symptoms of MS, two years after the operation. In some cases, a balloon is not enough to fully open the vein channel, which collapses either as soon as the balloon is removed, or sometime later. In these cases, a metal stent can easily be used, which remains in place holding the vein open permanently. Dr. Zamboni's lucky find is yet to be accepted by the medical community, which is traditionally slow to accept revolutionary ideas. Still, most agree that while further study needs to be undertaken before this is looked upon as a cure for MS, the results thus far have been very positive. It's not just the cancer industry that keeps you away from non-pharmaceutical and non-invasive treatments

that actually work for complete recovery or reversal. The Multiple Sclerosis Society works with Big Pharma and the AMA (or whatever national doctor's union) to make sure MS remains incurable but costly.

http://www.naturalnews.com/034983_Multiple_Sclerosis_cures_nutrition.html#ixzz1vLXPhaU

Author's note: There are many (non-invasive) alternative therapies to open the patient's veins including EDTA chelation, cayenne pepper, serrapeptase, tumeric, etc.

DETOX - The Author suggests that everyone needs to get the toxins out of their bodies and suggests that you, the reader, read and understand his free Chapter on How to Detox. http://www.stephentvedten.com/40_Detoxification.pdf

Alternative Inflammation Treatments - there are some natural alternative treatments for inflammation - there are a number of excellent anti-inflammatory herbs. The most important are:

Turmeric (*Curcuma longa*): Turmeric accounts for the yellow color of curry and American mustard and has a distinctive sharp flavor. The Author recommends turmeric for all inflammatory disorders, including arthritis, tendonitis, and auto immune conditions. Take 400 to 600 milligrams of turmeric extracts (available in tablets or capsules) three times per day or as directed on the product label. Whole turmeric is more effective than isolated curcumin, its major constituent. Look for products standardized for 95% curcuminoids. Be patient: the full benefit can take up to two months to develop. Don't use turmeric if you have gallstones or bile duct dysfunction. Pregnant women shouldn't use it without their doctors' approval. In rare cases, extended use can cause stomach upset or heartburn. (See Black Pepper blow.)

Ginger: Powdered dry ginger is an excellent anti-inflammatory. Take one to two capsules (500 to 1,000 mg) twice a day with food. As with turmeric, you won't get the full effect for two months.

Boswellin: This is the extract of the herb Boswellia, used in Ayurvedic medicine and available in capsule form. It may be useful for generalized inflammatory conditions such as fibromyalgia. The dosage is two capsules twice a day unless the product label directs differently.

In addition to the above anti-inflammatory herbs - there is **Serrapeptase** - For the millions of people who take anti-inflammatory medications to relieve pain and promote cardiovascular health, there is a safe natural supplement that shows great promise. The name of this supplement is Serrapeptase, and doctors in Europe have been prescribing it to treat everything from pain to atherosclerotic plaques. Serrapeptase (commonly misspelled as serapeptase) is an enzyme that is produced in the intestines of silk worms to break down cocoon walls. This enzyme is proving to be a superior alternative to NSAIDs (Non Steroidal Anti-Inflammatory Drugs) traditionally used to treat rheumatoid arthritis and osteoarthritis. Serrapeptase has been used to treat chronic sinusitis, carpal tunnel syndrome, sprains and torn ligaments, fibrocystic breast disease, ovarian cysts, ear, nose and throat infections, fibromyalgia, varicose veins, emphysema, asthma, bronchitis, migraines (vascular), Inflammatory Bowel Diseases (IBD) including Crohn's, colitis and cystitis, enlarged prostate, pain, and postoperative inflammation. Some researchers believe Serrapeptase can play an important role in arterial plaque (hardening of the arteries) prevention and removal.

NSAIDs are traditionally used to treat pain, inflammation, rheumatoid arthritis and osteoarthritis. Non-selective (COX1 and COX2) NSAIDs include Ibuprofen, Acetaminophen and salicylates (Aspirin). Selective NSAIDs include COX2 enzyme inhibiting products, including a popular drug recently taken off the market. With the recent reports linking COX2 enzyme inhibiting drugs to heart attacks, stroke, intestinal bleeding, kidney or liver impairment, and respiratory infections, many are looking for safe, natural alternatives. **Recent surveys have found that drugs are 250,000 times more dangerous than natural products.** Unlike over-the-counter NSAIDs, Serrapeptase has not been shown to cause ulcers and stomach bleeding. In fact, Serrapeptase, like many natural health products, produces numerous "side benefits." In over 25 years of use and in published studies, no dangerous side effects have been found. When combined with nattokinase, another amazing fibrinolytic enzyme, and other natural products including omega 3 fatty acids and Terminalia arjuna - natural health practitioners have a powerful method of improving cardiovascular health without the side effects of drugs.

Conclusion: If you suffer from inflammatory diseases, rheumatoid arthritis, osteoarthritis, sinusitis, carpal tunnel syndrome, snoring, fibrocystic breast disease, ovarian cysts, fibromyalgia, varicose veins, Inflammatory Bowel Disease, migraine headaches, enlarged prostate, tennis elbow, lung problems, arteriosclerosis, edema (swelling), pain, or cardiovascular plaque build up, Serrapeptase may provide the relief you've been looking for, without the dangerous side effects of NSAIDs and COX2 enzyme inhibiting drugs. Read more: <http://www.aviva.ca/article.asp?articleid=9#ixzz1vKoj3fOr>

Coconut Oil is Anti-Viral and Pro-Vitamin D - Coconut oil kills EBV, the virus that causes infectious mononucleosis or glandular fever. Other suspected viruses such as the coronavirus, Herpes Simplex Viruses (HSV 1 & 2), and measles virus are also killed by Medium Chain Fatty Acids (MCFA) mostly found in coconut oil. The types of fats you eat influence your body's reaction to sunshine. Unlike unsaturated fats like soybean oil (polyunsaturated) and olive oil (monounsaturated), highly saturated coconut oil does not decrease the binding of vitamin D to D-binding proteins. And MCFA-rich coconut oil

does not block the sun's Ultraviolet (UV) rays necessary for vitamin D assimilation and utilization. Coconut oil destroys several of the viruses suspected of playing an important role in the development of MS.

<http://www.coconut-oil-central.com/multiple-sclerosis-causes.html>

Environmental triggers and the need to Detox - Detoxing your body from everything like pesticides and heavy metals such as mercury to neurotoxins like MSG and artificial sweeteners, e.g., aspartame, is very important. Start with a quality organic nutritional program. Determine what you may have been exposed to and start a detox program - please read the Author's Detox Chapter 40 at: http://www.stephentvedten.com/40_Detoxification.pdf .

Also check out: <http://en.wikipedia.org/wiki/Neurotoxin>,

<http://en.wikipedia.org/wiki/Neurotoxicity> ,

<http://the-best-nest.blogspot.com/2010/08/15-point-hit-list-neurotoxins-and-adhd.html> ,

<http://toxipedia.org/display/toxipedia/Neurotoxins>.

If you are a commercial driver or work with ground up tires, you can be exposed to cadmium dust from tires on the road - http://www.ehhi.org/reports/turf/health_effects.shtml.

In 1999, a patient was diagnosed with Multiple Sclerosis (MS) and an neurologist explained that there is no known cure for MS. However, it was later discovered that the patient's MS was really Mercury Toxicity from dental work. The patient was receiving an ongoing overload of mercury because her "silver fillings" are actually made of 50% mercury. When the patient underwent numerous procedures to remove all the heavy metals, her "MS" symptoms faded away. The Patient has been completely cured of MS ever since! <http://www.hopeandhealingbook.com> Note: There are dentists who know how to safely remove mercury fillings.

Re-balancing the Immune Response with Glyconutrients - There are eight essential sugars (glyconutrients) that are key to effective cellular communication and proper cell function. Correct cellular communication is essential. If the body does not have all the correct sugars to spell out correct immune messages, the body turns on itself. It can not signal for the proper response. It has been established by the world's leading scientists and researchers that 8 essential sugars are vital for proper cell function. These are the eight sugars: xylose, fucose, galactose, glucose, mannose, N-acetylglucosamine, N-acetylgalactosamine, N-acetylneuraminic acid. This small group of very special carbohydrates actually work to prevent bacteria and viruses from finding binding sites. In fact, they literally trap and destroy them. In addition, they also work to trap and destroy antibodies; thus halting infection-caused disease and autoimmune diseases in their tracks. In test after test conducted at leading institutes around the world, Glyconutritional (Phytonutrients, Saccharides) have been shown to lower cholesterol, increase lean muscle mass, decrease body fat, accelerate wound healing, ease allergy symptoms, and allay autoimmune diseases such as arthritis, psoriasis, and diabetes. Bacterial infections, including the recurrent ear infections that plague toddlers, often respond remarkably to saccharides, as do many viruses--from the common cold to the flu, from herpes to HIV. The debilitating symptoms of chronic fatigue syndrome, fibromyalgia, and Gulf War syndrome frequently abate after adding saccharides. And, for cancer patients, saccharides mitigate the toxic effects of radiation and chemotherapy--while augmenting their cancer-killing effects, resulting in prolonged survival and improved quality of life. Marine Phytoplankton and Goji (Lycium) berries are a rich source of saccharides/glyconutrients. Glyconutrients are not vitamins, minerals, amino acids or enzymes, but are in a class of their own as nutritional supplements derived from plants. Glyconutritional supplements are formulated based on new understanding in the biochemistry of how the human body maintains health at the cellular level. Healthy cells lead to healthy tissue - healthy tissue leads to healthy organs - and healthy organs lead to healthy bodies. Despite the relatively recent discovery of glyconutrients and their functions, medical doctors and the general public are becoming increasingly aware of their importance in treating underlying causes of disease and in maintaining good health. A glyconutritional approach gets at the root cause rather than treating only the symptoms. Please see: <http://www.yeastinfectionadvisor.com/immunesystemsupplements.html> and <http://www.shirleys-wellness-cafe.com/glyconutrients.htm> .

Nutritional Sources of Glyconutrients - If you have a doctor treating your MS, make your doctor aware of some of these preliminary alternatives, and perhaps he or she will wish to monitor you while you give them a try. Keep in mind that nutritional approaches all have slight variations, but the essential fact remains: you don't need toxic chemicals and harsh surgeries to cure most diseases. Always keep the dosages low at first until you have a grasp on how they are influencing your condition or whether they are interfering or improving the actions of the pharmaceutical medicines and/or alternative treatments. <http://www.raysahelian.com/multiplesclerosis.html>

Aloe Vera - There is a long history of Aloe Vera's healing properties at:

<http://www.jonbarron.org/immunity/barron-report-aloe-immune-system-boosters>

Alpha lipoic acid has been helpful in a mouse study and recently showed biochemical marker improvement in a human trial. A dose of 10 to 25 mg of R lipoic acid may be appropriate. Most R lipoic capsules come in 50 mg, so opening a capsule and taking a portion is one option.

Beta glucan is a scientifically proven biological defense modifier that nutritionally potentiates and modulates the immune response. Beta glucan has various therapeutic healing effects generated by the immune cells. Beta glucans 1,3/1,6 are polysaccharides derived primarily from yeast cell wall, various fungi, grains and mushrooms. <http://www.betaglucan.org> . Medicinal mushrooms are used to treat and prevent a wide array of illnesses through their use as immune stimulants, immune modulators, adaptogens and antioxidants. Over 30 species are commonly used as medicinals in the form of mycelium or mushroom fruiting-body. The most well known and researched of these are reishi, maitake, cordyceps, blazei, split-gill, turkey tail and shiitake. However, many other mushrooms are currently being used medicinally and have shown positive clinical results including mesima, chaga, oyster, tinder polypore and enoki, among others. These various mushrooms contain numerous constituents that have a variety of physiological effects and are also rich in "essential sugars". http://www.mushroomharvest.com/extra_pages/med_mushrooms.htm

Carnitine has been found helpful in reducing fatigue in patients with multiple sclerosis. Curcumin blocks the progression of multiple sclerosis in a laboratory study. Six hundred and eighty-eight studies, more than 400 of them published within the last four years, confirm curcumin's remarkable anticarcinogenic, anti-inflammatory, and antioxidant properties. In particular, within the last year several studies have shown curcumin's potential as a neuroprotective agent: Epidemiological studies showing that in elderly Indian populations, among whose diet turmeric is a common spice, levels of neurological diseases such as Alzheimer's are very low. A November 2001 study conducted at the Departments of Medicine and Neurology at the University of California, Los Angeles reported curcumin slows the progression of Alzheimer's in mice. In the most recent study, curcumin was shown to exert significant protection against multiple sclerosis.

- Fish oil from cold water fish (organic salmon) may be helpful because of their omega 3 fatty acids.
- Flavonoids may also be helpful.
- Ginkgo biloba has shown intriguing preliminary evidence of efficacy.
- Larch (*Larix americana* or *Larix laricina*) has been used for jaundice, colic, eyewash, earache, rheumatism, gout, neuralgia, bronchitis, consumption, asthma, constipation, poisonous insect bites, and skin ailments. Gargled for sore throat, sores of the mouth, bleeding gums. Poulticed on sores, ulcers, help overcome the itch, kills nits and lice, swellings, and burns and scalds. Leaf tea is astringent, used for piles, diarrhea, and dropsy; poulticed for burns, abscesses, gangrene, and headaches. Gum is chewed for indigestion. <http://medicinalherbinfo.org/herbs/Larch.html>
- Vitamin C and EFA oils - Organic (real) vitamin C (not ascorbic acid) and EFA oils will protect (and rebuild) the myelin sheath. Beware! About 99% of all vitamin-C products on the market today are synthetically made ascorbic acid or variations such as calcium carbonate, calcium ascorbate, or calcium citrate.
- Vitamin D supplementation may be of benefit. There appears to be an association between vitamin D levels and MS relapse rate. It may be possible that vitamin D supplementation could have an impact on the course of this disease. Perhaps increased sun exposure and higher vitamin D levels may help to protect against the risk of developing this condition.

Ezekiel 47:12 - "And on the banks, on both sides of the river, there will grow all kinds of trees for food. Their leaves will not wither, nor their fruit fail, but they will bear fresh fruit every month, because the water for them flows from the sanctuary. Their fruit will be for food, and their leaves for healing." The Author searched back for 28 years and found that there have been 0 deaths as a result of vitamins and over 3 million deaths related to prescription drug use in the USA alone. In fact, looking back 55 years there have only been 11 claims of vitamin-related death, all of which provided no substantial evidence to link vitamins to the cause of death. **If G-d made it - the Author will use it - if man made it - the Author will use it only after checking out all possible safe alternatives.**

Non-nutritional alternatives

- **Accupuncture** - You might also try acupuncture (the traditional type) for the control of some MS.
- **Placebo** - A simple placebo effect can be powerful. Even when a remedy does not create a true effect, the belief that it will is often powerful medicine, according to Scientific American magazine. Placebo responses are due to active processes in your brain. Subliminal mechanisms often control processes in your body you are not aware of consciously, leading to changes in immune responses and hormone release, for example. Reports confirm that sham treatments actually provide a benefit in nearly all areas of medicine including inflammatory disorders, Parkinson's disease, cancer, depression, anxiety and pain, according to Scientific American.
- **PRAYER** - Changes things.
- **Yoga** is helpful in improving muscle and neural function. You might also try acupuncture (the traditional type) for the control of some MS.

- **Association with HDL cholesterol** - Dr. Bianca Weinstock-Guttman from the State University of New York at Buffalo analyzed clinical, demographic and HDL data on 186 MS patients whose average age was 50 years. At the start of the study, almost 20 percent of the participants had low HDL levels while close to 50 percent had high levels. Over the next 6 years, an association between the level of HDL cholesterol and the level of disability became apparent. Patients with greater disability were almost twice as likely to have low HDL levels compared to patients with less disability. Dr. Bianca Weinstock-Guttman thinks high HDL levels are associated with lower inflammation. April 2009.
- **Avoid smoking** since it makes MS worse - Smoking cigarettes increases the risk of MS, but the substance that makes cigarettes addictive, nicotine, doesn't seem to be at fault. It's not clear why cigarette smoking might increase MS risk, although there are many theories. Cyanide is one of the many harmful compounds found in cigarette smoke and it's known to damage nerve tissue. Smokers' greater vulnerability to infections, which have been linked to MS risk, could also be a factor.
- **Multiple Sclerosis fatality - sun exposure?** A 27-year-old white woman with a history of Multiple Sclerosis was found dead lying on a lounge, clad in a bathing suit. She had been sunbathing for 4 hours. Autopsy findings consisted of numerous variably-sized demyelinated plaques involving the periventricular cerebral white matter and cerebellum. Elevation of core temperature in patients with Multiple Sclerosis leading to transient or permanent adverse neurologic signs and symptoms has been documented for several decades. This case illustrates that a modestly increased core body temperature, even from a usually innocuous activity such as sunbathing, may be fatal in such patients. The Author would like to note that Saunas, can be fabulous ways to aid in detoxification with MS and other toxic conditions so long as it is done properly under careful medical supervision.
- **Multiple Sclerosis Treatment - Medical therapy** Injectable beta-interferon, a relatively new Multiple Sclerosis treatment, reduces the frequency of relapses. Other promising MS treatments still under investigation include other interferons, oral mSelin, and glatiramer to help keep the body from attacking its own myelin. The benefits of plasmapheresis and intravenous gamma globulins haven't been established, and these treatments aren't practical for long-term therapy. Corticosteroids such as prednisone taken by mouth or methylprednisolone given intravenously for short periods to relieve acute MS symptoms have been the main form of therapy for decades. Treatment with high-dose steroids for MS and other disorders may impair long-term memory, according to a report in the medical journal Neurology. The good news is that mental functioning usually returns to normal a few days after stopping the drug. Multiple Sclerosis treatment with cannabinoids (marijuana) may help prevent episodes of urge incontinence. Treatment with Marinol, a synthetic version of cannabinoid chemicals found in marijuana, can reduce the pain often experienced by people with Multiple Sclerosis. (There has never been a recorded death from marijuana any time in US history, but it is illegal. Compare this interesting fact with the "legal" USA drug deaths. Tobacco kills about 390,000 people and alcohol kills about 80,000 people every year.)
- **Pregnancy** - Pregnant women being treated with beta-interferon, a drug used to fight Multiple Sclerosis and other diseases, face an increased risk of miscarriage or having a low birthweight baby. While women with MS have a somewhat heightened risk of certain pregnancy complications, by and large, their pregnancies are as healthy as other women's unless being treated with certain medications.
- **Reflexology** treatment relieves symptoms of multiple sclerosis: a randomized controlled study. Multiple Sclerosis. 2003. - To evaluate the effect of reflexology on symptoms of Multiple Sclerosis in a randomized, sham-controlled clinical trial. Seventy-one Multiple Sclerosis patients were randomized to either study or control group, to receive an 11-week treatment. Reflexology treatment included manual pressure on specific points in the feet and massage of the calf area. The control group received nonspecific massage of the calf area. The intensity of paresthesias, urinary symptoms, muscle strength and spasticity was assessed in a masked fashion at the beginning of the study, after 1.5 months of treatment, end of study and at three months of follow-up. Fifty-three patients completed this study. Significant improvement in the differences in mean scores of paresthesias, urinary symptoms and spasticity was detected in the reflexology group. Improvement with borderline significance was observed in the differences in mean scores of muscle strength between the reflexology group and the controls. The improvement in the intensity of paresthesias remained significant at three months of follow-up. Specific reflexology treatment was of benefit in alleviating motor; sensory and urinary symptoms in multiple sclerosis patients.

Many of us have a cabinet full of herbs and spices we use to help improve the flavor our meals that can also heal us. Here are a few examples:

- **CAYENNE** - Cayenne pepper has wonderful cardiovascular benefits, including lowering blood pressure. Famed herbalist Doctor John Christopher noted that a couple of teaspoons of cayenne pepper never failed to stop a heart

attack in only minutes. When added to food, cayenne increases appetite, improves digestion and relieves gas, nausea and indigestion. It also thins phlegm and eases its passage from the lungs.

- **GARLIC** - Garlic is a natural antiseptic and powerful cancer fighter with numerous other health benefits. It helps lower cholesterol, reduces plaque, lowers blood pressure, and lowers the risk of atherosclerosis (hardening of the arteries). Garlic is also effective against digestive ailments and diarrhea.
- **TURMERIC** - The curcumin contained in turmeric provides powerful anti-cancer properties, especially for smokers and past smokers. Curcumin has clinically proven anti-inflammatory effects, including significant beneficial effects in relieving rheumatoid arthritis and carpal tunnel syndrome. Turmeric is also packed with antioxidants, including vitamins A, C and E, and may help prevent cataracts. Turmeric prevents hardening of arteries by lowering cholesterol and inhibiting fat oxidation.
- **CINNAMON** - Cinnamon contains a compound that kills a variety of illness causing bacteria, including the E.coli, Salmonella, and Staphylococcus aureas. Research shows that cinnamon can also stop the growth of the Asian flu virus. Cinnamon helps lower blood pressure and helps regulate menstrual cycles. In addition, cinnamon has a tranquilizing effect that helps reduce anxiety and stress.
- **PARSLEY** - South American, nonhybrid Parsley is a nutrient powerhouse with high levels of natural beta carotene, vitamin B12, chlorophyll, calcium and more vitamin C than citrus fruits. It supports the liver, uterus, spleen, kidneys and adrenal glands, purifies blood and body fluids. Parsley concentrate promotes good digestion and is an extraordinary immune system booster. It contains key flavonoids including furanocoumarins.
- **OREGANO** - Oregano is a powerful natural antiseptic. It contains 19 chemical compounds with antibacterial actions as well as four compounds that soothe coughs. In addition, oregano helps soothe stomach muscles, making it a good digestive aid, and it helps lower blood pressure.
- **GINGER** - Ginger is a wonderful digestive aid which stimulates saliva flow and digestive activity, settles the stomach, relieves vomiting, and eases pain from gas and diarrhea. Ginger is also effective as an anti-nausea remedy. Researchers have found that ginger is more effective against motion sickness than the most commonly used over-the-counter medication. Ginger is also used as a pain reliever and it helps lower bad cholesterol.
- **FENUGREEK** - Fenugreek seeds help treat diabetes, lower blood sugar and lower bad cholesterol. Fenugreek also helps maintain good metabolism, prevents constipation, purifies the blood and helps flush out harmful toxins. Fenugreek seeds and leaves are good for increasing breast milk in lactating women.
- **BASIL** - Basil is an herbal carminative, which can relieve gas and soothe stomach upsets. Research has also indicated that basil helps prevent aging.
- **CLOVE** - Oil of clove is 60 to 90 percent eugenol, which is a potent pain deadening anti-microbial. Clove has earned the official endorsement of the FDA as an effective stopgap measure for tooth pain. Clove also helps lower blood sugar by helping the body use insulin more effectively. Cloves were also found in one study to speed healing of dreaded cold sores.
- **BLACK PEPPER** - Black pepper is one of the oldest and most commonly used spices. It has a stimulating effect on the digestive organs and produces an increased flow of saliva and digestive juices. Black pepper can help relieve indigestion as well as flatulence. It also helps improve absorption and utilization of curcumin, which the body normally does not absorb very well.

BANANAS - Bananas contain three natural sugars - sucrose, fructose and glucose combined with fiber. A banana gives an instant, sustained and substantial boost of energy. Research has proven that just two bananas provide enough energy for a strenuous 90-minute workout. No wonder the banana is the number one fruit with the world's leading athletes. But energy isn't the only way a banana can help us keep fit. It can also help overcome or prevent a substantial number of illnesses and conditions, making it a must to add to our daily diet.

1. **Depression:** According to a recent survey undertaken by MIND amongst people suffering from depression, many felt much better after eating a banana. This is because bananas contain tryptophan, a type of protein that the body converts into serotonin, known to make you relax, improve your mood and generally make you feel happier.
2. **PMS:** Forget the pills - eat a banana. The vitamin B6 it contains regulates blood glucose levels, which can affect your mood.

3. **Anemia:** High in iron, bananas can stimulate the production of hemoglobin in the blood and so helps in cases of anemia.
4. **Blood Pressure:** This unique tropical fruit is extremely high in potassium yet low in salt, making it perfect to beat blood pressure. So much so, the US Food and Drug Administration has just allowed the banana industry to make official claims for the fruit's ability to reduce the risk of blood pressure and stroke.
5. **Brain Power:** 200 students at a Twickenham (Middlesex) school (England) were helped through their exams this year by eating bananas at breakfast, break and lunch in a bid to boost their brain power. Research has shown that the potassium-packed fruit can assist learning by making pupils more alert.
6. **Constipation:** High in fiber, including bananas in the diet can help restore normal bowel action, helping to overcome the problem without resorting to laxatives.
7. **Hangovers:** One of the quickest ways of curing a hangover is to make a banana milkshake, sweetened with honey.. The banana calms the stomach and, with the help of the honey, builds up depleted blood sugar levels, while the milk soothes and re-hydrates your system.
8. **Heartburn:** Bananas have a natural antacid effect in the body, so if you suffer from heartburn, try eating a banana for soothing relief.
9. **Morning Sickness:** Snacking on bananas between meals helps to keep blood sugar levels up and avoid morning sickness.
10. **Mosquito bites:** Before reaching for the insect bite cream, try rubbing the affected area with the inside of a banana skin. Many people find it amazingly successful at reducing swelling and irritation.
11. **Nerves:** Bananas are high in B vitamins that help calm the nervous system.
12. **Overweight and at work?** Studies at the Institute of Psychology in Austria found pressure at work leads to gorging on comfort food like chocolate and chips.. Looking at 5,000 hospital patients, researchers found the most obese were more likely to be in high-pressure jobs. The report concluded that, to avoid panic-induced food cravings, we need to control our blood sugar levels by snacking on high carbohydrate foods every two hours to keep levels steady.
13. **Ulcers:** The banana is used as the dietary food against intestinal disorders because of its soft texture and smoothness. It is the only raw fruit that can be eaten without distress in over-chronicler cases. It also neutralizes over-acidity and reduces irritation by coating the lining of the stomach.
14. **Temperature control:** Many other cultures see bananas as a 'cooling' fruit that can lower both the physical and emotional temperature of expectant mothers. In Thailand , for example, pregnant women eat bananas to ensure their baby is born with a cool temperature.
15. **Seasonal Affective Disorder (SAD):** Bananas can help SAD sufferers because they contain the natural mood enhancer tryptophan.
16. **Smoking & Tobacco Use:** Bananas can also help people trying to give up smoking. The B6, B12 they contain, as well as the potassium and magnesium found in them, help the body recover from the effects of nicotine withdrawal.
17. **Stress:** Potassium is a vital mineral, which helps normalize the heartbeat, sends oxygen to the brain and regulates your body's water balance. When we are stressed, our metabolic rate rises, thereby reducing our potassium levels. These can be rebalanced with the help of a high-potassium banana snack.
18. **Strokes:** According to research in The New England Journal of Medicine, eating bananas as part of a regular diet can cut the risk of death by strokes by as much as 40%! Warts: Those keen on natural alternatives swear that if you want to kill off a wart, take a piece of banana skin and place it on the wart, with the yellow side out. Carefully hold the skin in place with a plaster or surgical tape! So, a banana really is a natural remedy for many ills. When you compare it to an apple, it has four times the protein, twice the carbohydrate, three times the phosphorus, five times the vitamin A and iron, and twice the other vitamins and minerals. It is also rich in potassium and is one of the best value foods around So maybe it's time to change that well-known phrase so that we say, 'A banana a day keeps the doctor away!' PS: Bananas must be the reason monkeys are so happy all the time! Want a quick shine on your shoes?? Take the INSIDE of the banana skin, and rub directly on the shoe...polish with dry cloth. Amazing fruit !!!

<http://www.scribd.com/doc/91298/Bananas>

There can be many health problems with some "foods" found in our cupboards/cabinets/refrigerators.

MILK - The following thoughts on milk were partially taken from an article courtesy of Dr. Kradjian - <http://www.afpafitness.com/articles/MILKDOC.HTM> . "MILK" Just the word itself sounds comforting! Milk was our very first food. Now, we are a nation of milk drinkers. Nearly all of us: Infants, the young, adolescents, adults and even the aged. We drink dozens or even several hundred gallons a year and add to that many pounds of "dairy products" such as cheese, butter and yogurt. Can there be anything wrong with this? You may be surprised to learn that most of the human beings that live on planet Earth today do not drink or use cow's milk. Further, most of them can't drink milk because it makes them ill. Indeed, of all the mammals, only humans--and then only a minority, principally Caucasians--continue to drink milk beyond babyhood. From 1988 to 1993 there were over 2,700 articles dealing with milk recorded in the 'Medicine' archives. The main focus of all the published reports seems to be on intestinal colic, intestinal irritation, intestinal bleeding, anemia, allergic reactions in infants and children as well as infections such as salmonella. More ominous is the fear of viral infection with bovine leukemia virus or an AIDS-like virus as well as concern for childhood diabetes. Contamination of milk by blood and

white (pus) cells as well as a variety of chemicals and insecticides were also discussed. Among children (and teenagers) the problems were acne, pimples, allergy, ear and tonsillar infections, bedwetting, asthma, intestinal bleeding, colic and childhood diabetes. In adults the problems seemed centered more around heart disease and arthritis, allergy, sinusitis and the more serious questions of osteoporosis, leukemia, lymphoma and several forms of cancer.

WHAT IS MILK? Milk is a maternal lactating secretion, a short-term nutrient for new-borns. Nothing more, nothing less. Invariably, the mother of any mammal will provide her milk for a short period of time immediately after birth. When the time comes for 'weaning', the young offspring is introduced to the proper food for that species of mammal. A familiar example is that of a puppy. The mother nurses the pup for just a few weeks and then rejects the young animal and teaches it to eat solid food. Nursing is provided by nature only for the very youngest of mammals. IS ALL MILK THE SAME? Is it wise to drink the milk of another species of mammal? Consider for a moment, if it was possible, to drink the milk of a mammal other than a cow, let's say a rat. Or perhaps the milk of a dog or a pig would be more to your liking. Possibly some horse milk or cat milk. Do you get the idea? Well, I'm not serious about this, except to suggest that human milk is for human infants, dogs' milk is for pups, cows' milk is for calves, cats' milk is for kittens, and so forth. Clearly, this is the way nature intends it. Milk is not just milk. The milk of every species of mammal is unique and specifically tailored to the requirements of that animal. For example, cows' milk is very much richer in protein than human milk. Three to four times as much. It has five to seven times the mineral content. However, cow's milk is markedly deficient in essential fatty acids when compared to human mothers' milk. Mothers' milk has six to ten times as much of the essential fatty acids, especially linoleic acid. (Incidentally, skimmed cow's milk has no linoleic acid). Cow's milk simply is not designed for humans.

WELL, IS COW'S MILK "PURE"? Any lactating mammal excretes toxins through her milk. This includes bacteria contaminations, antibiotics, pesticides, chemicals and hormones. Also, all cows' milk contains blood! The inspectors are simply asked to keep it under certain limits. You may be horrified to learn that the USDA allows milk to contain from one to one and a half million white blood cells per millilitre. (That's only 1/30 of an ounce). If you don't already know this, I'm sorry to tell you that another way to describe white cells where they don't belong would be to call them pus cells. To get to the point, is milk "pure" or is it really a chemical, biological and bacterial cocktail? The United States General Accounting Office (GAO) tells us that the DA and the individual States are failing to protect the public from drug residues in milk. Authorities test for only 4 of the 82 drugs in dairy cows. A huge study showed that human breast milk in over 14,000 women had contamination by pesticides! Further, it seems that the sources of the pesticides are meat and--you guessed it--dairy products. Well, why not? These pesticides are concentrated in fat and that's what's in these dairy products. (Of interest, a subgroup of lactating vegetarian mothers had only half the levels of contamination). There are dozens of studies describing the prompt appearance of cows' milk allergy in children being exclusively breast-fed! The cows' milk allergens simply appear in the mother's milk and are transmitted to the infant. In late 1992, Dr. Benjamin Spock, possibly the best known pediatrician in history, shocked the country when he warned parents that cows' milk from the carton has definite faults for some babies.

Human milk is the right one for babies.

WELL, WHAT ARE THE BENEFITS? Is there any health reason at all for an adult human to drink cows'milk? It's hard for me to come up with even one good reason other than simple preference. But if you try hard, in my opinion, these would be the best two: milk is a source of calcium and it's a source of amino acids(proteins). Let's look at the calcium first. Why are we concerned at all about calcium? Obviously, we intend it to build strong bones and protect us against osteoporosis. And no doubt about it, milk is loaded with calcium. But is milk a good calcium source for humans? I think not. These are the reasons. Excessive amounts of dairy products actually interfere with calcium absorption. Secondly, the excess of protein that the milk provides is a major cause of the osteoporosis problem. Dr. Hegsted in England has been writing for years about the geographical distribution of osteoporosis. It seems that the countries with the highest intake of dairy products are invariably the countries with the most osteoporosis. Eskimos have an exceptionally high protein intake estimated at 25 percent of total calories. They also have a high calcium intake at 2,500 mg/day. Their osteoporosis is among the worst in the world. The other instructive group are the Bantus of South Africa. They have a 12 percent protein diet, mostly plant protein, and only 200 to 350 mg/day of calcium, about half our women's intake. The women have virtually no osteoporosis despite bearing six or more children and nursing them for prolonged periods! When African women immigrate to the United States, do they develop osteoporosis? The answer is yes, but not quite are much as Caucasian or Asian women. Thus, there is a genetic difference that is modified by diet. To answer the obvious question, "Well, where do you get your calcium?" The answer is: "From exactly the same place the cow gets the calcium, from green things that grow in the ground," mainly from leafy vegetables. After all, elephants and rhinos develop their huge bones (after being weaned) by eating green leafy plants; so do horses. Carnivorous animals also do quite nicely without leafy plants. It seems that all of earth's mammals do well if they live in harmony with their genetic programming and natural food. Only humans living an affluent life style have rampant osteoporosis. Milk is a deterrent to good bone health. □

THE PROTEIN MYTH — Vegetable protein is identical for all practical purposes to animal protein and has no cholesterol and vastly less saturated fat. (Do not be misled by the antiquated belief that plant proteins must be carefully balanced to avoid deficiencies. This is not a realistic concern.) Therefore, virtually all Americans, Canadians, British and European

people are in a protein overloaded state. This has serious consequences when maintained over decades. The problems are the already mentioned osteoporosis, atherosclerosis and kidney damage. There is good evidence that certain malignancies, chiefly colon and rectal, are related to excessive meat intake. Barry Brenner, an eminent renal physiologist, was the first to fully point out the dangers of excess protein for the kidney tubule. The dangers of the fat and cholesterol are known to all. Finally, you should know that the protein content of human milk is among the lowest (0.9%) in mammals. □

Remember the lactose in milk? This is the principal carbohydrate of milk. It seems that nature provides new-borns with the enzymatic equipment to metabolize lactose, but this ability often extinguishes by age 4 or 5 years. What is the problem with lactose or milk sugar? It seems that it is a disaccharide which is too large to be absorbed into the blood stream without first being broken down into monosaccharides, namely galactose and glucose. This requires the presence of an enzyme, lactase plus additional enzymes to break down the galactose into glucose. Let's think about this for a moment. Nature gives us the ability to metabolize lactose for a few years and then shuts off the mechanism. Is Mother Nature trying to tell us something? Clearly all infants must drink milk. The fact that so many adults cannot seems to be related to the tendency for nature to abandon mechanisms that are not needed. At least half of the adult humans on this earth are lactose intolerant.

How does this break down? Certain racial groups, namely blacks, are up to 90% lactose intolerant as adults. Caucasians are 20% to 40% lactose intolerant. Orientals are midway between the above two groups. Diarrhea, gas and abdominal cramps are the results of substantial milk intake in such persons. Most American Indians cannot tolerate milk. The milk industry admits that lactose intolerance plays intestinal havoc with as many as 50 million Americans. A lactose-intolerance industry has sprung up and had sales of \$117 million in 1992 (Time May 17, 1993.) The association with anemia and occult intestinal bleeding in infants is known to all physicians. This is chiefly from its lack of iron and its irritating qualities for the intestinal mucosa. The pediatric literature abounds with articles describing irritated intestinal lining, bleeding, increased permeability as well as colic, diarrhea and vomiting in cows'-milk-sensitive babies. The anemia gets a double push by loss of blood and iron as well as deficiency of iron in the cows' milk. Milk is also the leading cause of childhood allergy.

Pasteurization - Destroys part of the vitamin C contained in raw milk and actually encourages the growth of harmful bacteria. Probably pasteurization's worst offence is that it makes insoluble the major part of the calcium contained in raw milk. This frequently leads to rickets, bad teeth, and nervous troubles, for sufficient calcium content is vital to children; and with the loss of phosphorus also associated with calcium, bone and brain formation suffer serious setbacks. Pasteurization also destroys 20 percent of the iodine present in raw milk, causes constipation and generally takes from the milk its most vital qualities. <http://www.realmilk.com/rawvpasteur.html>

SUMMARY There is only one valid reason to drink milk or use milk products. That is just because we simply want to. Because we like it and because it has become a part of our culture. Because we have become accustomed to its taste and texture. Because we like the way it slides down our throat. Because our parents did the very best they could for us and provided milk in our earliest training and conditioning. They taught us to like it. And then probably the very best reason is ice cream! It has been described as "to die for". Robert M. Kradjian, MD had one patient who did exactly that. He had no obvious vices. He didn't smoke or drink, he didn't eat meat, his diet and lifestyle was nearly a perfectly health promoting one, but he had a passion. You guessed it, he loved rich ice cream. A pint of the richest would be a lean day's ration for him. On many occasions he would eat an entire quart and, yes, there were some cookies and other pastries. Good ice cream deserves this after all. He seemed to be in good health despite some expected "middle age spread" when he had a devastating stroke which left him paralyzed, miserable and helpless, and he had additional strokes and died several years later, never having left a hospital or rehabilitation unit. Was he old? His Doctor didn't think so. He was in his 50's. Please also see: <http://www.notmilk.com/kradjian.html>

REFINED SUGAR — This "food" is often found in our dwellings, but refined sugar is really a poison because it has been depleted of all its life forces, vitamins and minerals. All that is left are "pure", refined "empty" or "naked" calories. The body cannot utilize these "pure" refined starches and carbohydrates unless all of the depleted proteins, vitamins and minerals which were present in the sugar beet or cane from whence it came are replaced. Refined sugar is worse than nothing because it drains and leaches your body of precious vitamins and minerals through the demand its digestion, detoxification and elimination makes upon one's entire system. In addition: Sugar taken every day produces a continuously overacid condition, and more and more life-giving minerals are required from deep in the body in the attempt to rectify the imbalance. Sugar can cause drowsiness and decreased activity in children and loss of strength in athletes. Sugar can reduce helpful high density cholesterol (HDLs). Sugar can promote an elevation of harmful cholesterol (LDLs). Sugar can cause hypoglycemia. Sugar contributes to a weakened defense against bacterial infection. Sugar can cause kidney damage. Sugar can increase the risk of coronary heart disease. Sugar may lead to chromium/copper deficiencies. Sugar interferes with absorption of calcium and magnesium. Sugar can increase fasting levels of blood glucose. Sugar promotes tooth decay and can produce an acidic stomach. Sugar can raise adrenaline levels in children. Sugar can lead to periodontal disease. Sugar can speed the aging process, causing wrinkles and grey hair. Sugar can increase total cholesterol. Sugar can contribute to weight gain and obesity. High intake of sugar increases the risk of Crohn's disease and ulcerative colitis. Sugar can contribute

to diabetes and osteoporosis. Sugar can cause a decrease in insulin sensitivity and glucose tolerance. Sugar can cause cardiovascular disease and increase systolic blood pressure. Sugar causes food allergies. Sugar can cause free radical formation in the bloodstream. Sugar can cause toxemia during pregnancy. Sugar can contribute to eczema in children. Sugar can overstress the pancreas, causing damage. Sugar can cause atherosclerosis. Sugar can compromise the lining of the capillaries. Sugar can cause liver cells to divide, increasing the size of the liver and can increase the amount of fat in the liver causing it to swell like a balloon. Sugar can increase kidney size and produce pathological changes in the kidney. Sugar can cause depression and can increase the body's fluid retention. Sugar can cause hormonal imbalance, hypertension and headaches, including migraines. Sugar can cause an increase in delta, alpha and theta brain waves, which can alter the mind's ability to think clearly. Excessive sugar has a strong mal-effect on the functioning of the brain. Too much sugar makes one sleepy; our ability to calculate and remember is lost. Sugar can literally make you stupid. Sugar can increase blood platelet adhesiveness which increases risk of blood clots and strokes. Sugar can increase insulin responses in those consuming high-sugar diets compared to low sugar diets. Sugar increases bacterial fermentation in the colon. The dictionary gives an even broader definition for the word "poison" it means: "to exert a harmful influence on, or to pervert". To the Author - that is exactly what refined sugar is. But refined sugar is both omnipresent and very addictive and extremely hard to remove from one's diet. The U.S. Department of Agriculture estimates that each American consumes about 35 pounds of high-fructose corn syrup every year in snacks, sweets, soft drinks and meals, and nearly 47 pounds of cane sugar. According to the USDA, HFCS consists of 24% water, and the rest sugars. The most widely used varieties of high-fructose corn syrup are: HFCS 55 (mostly used in soft drinks), approximately 55% fructose and 42% glucose; and HFCS 42 (used in beverages, processed foods, cereals and baked goods), approximately 42% fructose and 53% glucose. HFCS-90, approximately 90% fructose and 10% glucose, is used in small quantities for specialty applications, but primarily is used to blend with HFCS 42 to make HFCS 55. Both cane sugar and beet sugar are both relatively pure sucrose.

Please do not substitute high-fructose corn syrup (HFCS) for sugar. High-fructose corn syrup (HFCS)—also called glucose-fructose syrup in the UK, glucose/fructose in Canada, and high-fructose maize syrup in other countries—comprises any of a group of corn syrups that has undergone enzymatic processing to convert some of its glucose into fructose to produce a desired sweetness. There are the food companies who say that these syrups are natural because they are derived from corn, a natural vegetable. Then there are the natural food advocates are saying that these substances (which are engineered from corn and are simply not natural at all) and that they are lethal weapons/poisons in our food system. These sweeteners have been blamed for everything from obesity to diabetes, heart attack to stroke. Critics of the extensive use of HFCS in food sweetening argue that the highly processed substance is more harmful to humans than regular sugar, contributing to weight gain by affecting normal appetite functions, and that in some foods HFCS may be a source of mercury, a known neurotoxin. During the 1970s, the American food industry introduced high-fructose corn syrup, or HFCS, as a sweet substitute for sucrose (which we recognize as table sugar). Processed from corn — it gets its "high-fructose" name because its fructose content is higher than the corn from which it originates — the syrup contains about the same number of calories as sucrose or honey but has a greater shelf life. It's also far cheaper than sugar, which has helped beverage manufacturers keep prices low. The additional shelf life was a boon for processed foods, and, as a result, HFCS can now be found in just about every packaged item in the grocery store. From cookies to bagels, it's nearly replaced sucrose in sweetened goods, although its real forte has been in liquids: Nearly two-thirds of all HFCS in the United States are found in beverages, namely soda. In a study by Princeton researchers, psychology professor Bart Hoebel noticed a disturbing trend in HFCS consumption. "When rats are drinking high-fructose corn syrup at levels well below those in soda pop, they're becoming obese — every single one, across the board. Even when rats are fed a high-fat diet, you don't see this; they don't all gain extra weight." What is in a name? The Corn Refiners Association have lobbied to rename HFCS as "corn sugar" - but whatever "they" decide to call HFCS, the Author recommends that you avoid it.

<http://elev8.com/210125/why-you-should-avoid-high-fructose-corn-syrup/>

The Dangers of Gluten – Do you ever experience gas, bloating, loose or oily stools, or constipation? Do you ever experience abdominal pain, nausea, abdominal distention, or flatulence? Do you ever experience joint or muscle pain that does not appear to be caused by activity or exercise? Do you ever experience an enlarged or inflamed tongue, gastric and duodenal ulcers or esophageal reflux? Women, have you experienced difficulty getting or miscarriages? Do you experience fatigue, mood changes, depression, or anxiety? Have you ever been diagnosed with an autoimmune disease such as thyroid malfunctions, diabetes mellitus, lupus, rheumatoid arthritis, childhood asthma, or polymyalgia rheumatic? If you answered yes to any of these questions you may be suffering from gluten sensitivity. If you wake each morning with thick mucus congestion, blow mucus for an hour after waking, quit gluten. If you have asthma, quit gluten. If you get the bi-annual flu or headcold, sore throat, fevers, or suffer from frequent ear, nose and throat infections, quit gluten for a few months. When you switch to BIBLE BREAD for breakfast, and include no other flour in your diet, you will note a lack of daily mucus flow from your nose. The hidden glands in throat are no longer packing large storage areas of mucus. You now have an immune system ready to fight off germs and viruses that enter by mouth or nose. If when you go back to eating gluten, your body and that of the kids again make thick mucus that must be expelled for hours each morning - stop eating any gluten.

What Is Gluten? Gluten is a protein that is found in grains, grains such as wheat, rye, barley, spelt, triticale, kamut, and

possible oats. It is hidden in pizza, pasta, bread, wraps, rolls and most processed foods. Clearly, gluten is a staple of the American diet. Gluten is a protein that is hard to digest and, therefore, can irritate not only your digestive tract but also your organs. Research shows that as many as 90 million Americans may be negatively affected by gluten and as many as 10 million may have an illness due to the root cause of gluten sensitivity.

<http://www.divinecaroline.com/22181/77826-dangers-gluten>

How Gluten Causes Disease - When one's digestive system is healthy - undigested or partially-digested proteins will be eliminated as fecal matter. However, if one's digestive system becomes weakened due to poor food choices, food intolerances, alcohol consumption, eating processed foods and sugars as well as from the normal day-to-day stresses of life - the ability of the body to digest gluten proteins can become difficult. As a result, the undigested proteins floating through the bloodstream can cause an autoimmune reaction. In addition, the protective mucus lining of the intestinal track gets attacked as well. Like the skin on your body, this protective mucus lining is a first line of defense in protecting the body from illness and disease. When this lining breaks down it leads to leaky gut syndrome therefore making one's entire immune system vulnerable and weak. <http://www.gluten-symptoms.com/why-dont-people-know-about-the-dangers-of-gluten/>

BIBLE BREAD - You can purchase BIBLE BREAD at a Health Food Store or learn to make your own BIBLE BREAD. This method of preparation entails soaking whole grains overnight, rinsing, tossing the acidic water and creating dough of the NOW-SPROUTING grains by using a VITA MIX grinder. This paste is no longer mucus producing, which is disease hosting! All other breads make acidity in the mouth for hours after you eat it, promoting tooth decay. BIBLE BREAD does not. And there are other great features. Please read: <http://www.masterjules.net/biblebread.htm> . Two American clinicians, James Braly and Ron Hoggan, have published a book, Dangerous Grains, claiming that what was thought to be a relatively rare condition may be more widespread than was previously thought. Celiac disease, they suggest, should be renamed "gluten sensitivity" (GS) and, in an appendix to the book, they claim that no fewer than 192 disorders, ranging from Addison's disease and asthma to sperm abnormalities, vasculitis, rheumatoid arthritis and hyperthyroidism, are "heavily overrepresented among those who are Gluten Sensitive (GS)". Dangerous Grains contains more than a dozen case histories of people who have recovered from a wide variety of chronic conditions - back pain, chronic fatigue, the auto-immune disorder lupus - simply by following a gluten-free diet. Both authors claim great personal benefits from such a change. "After eliminating gluten grains," writes Hoggan, "I realized how uncomfortable and chronically ill I had been for most of my life."

<http://wholehealthsource.blogspot.com/2008/11/book-review-dangerous-grains.html>

The Dangers of Frankenfoods - In the most complete study yet on the health dangers of Monsanto's genetically modified corn, researchers from CRIIGEN and the universities of Caen and Rouen have revealed new side effects linked with their consumption. The analysis of Monsanto's trials clearly highlights adverse effects on kidneys and liver, the dietary detoxifying organs, as well as damage to the heart, adrenal glands, spleen and other organs. This new research only became possible when the European Union obtained Monsanto's raw data and made it publicly available. Now, for the first time, researchers have been able to objectively and independently analyze Monsanto's data! Needless to say, there is a huge difference between how Monsanto wants to spin the studies versus what independent scientists concluded --- that all three GMOs contain new pesticide residues which can cause serious health risks. The scientists called for immediate prohibition on the import and cultivation of these GMOs in Europe and have strongly recommended additional long-term (up to two years) and multi-generational animal feeding studies on at least three species to provide true scientifically valid data on the acute and chronic toxic effects of GM crops, feed and foods. <http://www.rawfoodlife.com/monsantofrankenfoodsexposed.html>

Practically all GE crops in the market now are soy, corn, cotton or canola. The majority of these (soy and canola) were engineered by the Monsanto corporation to be resistant to Roundup, a herbicide made by the same Company, and are known as Roundup Ready crops. The rest (corn and cotton) were engineered to be pest-resistant and are known as Bt crops. Over 90% of farm acreage devoted to GE crops in the world is in the Americas. Three countries alone account for most of this acreage: The United States, Canada and Argentina. US-based Monsanto is the undisputed world leader in agricultural biotechnology, accounting for 90% of the world's GE crops. In the United States, 85% of all soy acreage, 45% of all corn acreage and 76% of all cotton is genetically engineered. It is estimated that 70% of processed foods sold in American supermarkets are either GE or contain GE ingredients. the Frankenfood "industry" is adamantly opposed to labeling GE products, and has invested substantially in the US and internationally to this end.

INHERENT RISKS? Questions over the safety of GE foods were raised as far back as in 1998, when renowned scientist Arpad Pusztai, of Scotland's Rowett Research Institute, tested an experimental GE potato on laboratory rats. At the time of this experiment, there was very little in the peer-reviewed scientific literature on the safety of GE foods (a full two years after their introduction into the market!); Pusztai's was the first independent study to that end. The rats fed on the GE potatoes suffered substantial damage to their immune systems, plus abnormal weight loss in various organs, including the brain, testicles and liver. Some also had abnormal growth in their intestinal cells, which could indicate a prelude to cancer. Despite a long and concerted industry campaign to discredit Pusztai, part of the results of his GE potato study were duly peer-reviewed and published in the scientific literature. However, despite the industry and scientific establishment dismissing his

work, there has been little attempt made to independently repeat and confirm the study, as is usually the case in science. Pusztai has published other results of his experiments since, which raise serious question over the safety of GM foods. The Independent Science Panel In 2003, Pusztai joined over a dozen colleagues with expertise in agroecology, agronomy, botany, medical chemistry, ecology, microbial ecology, nutritional biochemistry, physiology, toxicology and virology, to form the Independent Science Panel. The group released a report on GE crops and foods that reviewed the literature and concluded that: 1. Contrary to the claims of proponents, these crops have not been proven safe. The regulatory framework was fatally flawed from the start. It was based on an anti-precautionary approach designed to expedite product approval at the expense of safety considerations. 2. By far the most insidious dangers of genetic engineering may be inherent in the process itself. 3. There have been very few credible studies on GE food safety. Nevertheless, the available findings already give cause for concern. 4. There is already experimental evidence that transgenic DNA from plants has been taken up by bacteria in the soil and in the gut of human volunteers. 5. Transgenic DNA is known to survive digestion in the gut and may jump into the genome of mammalian cells, raising the possibility for triggering cancer. 6. There has been a history of misrepresentation and suppression of scientific evidence in the promotion of agricultural biotechnology. Key experiments were not performed, or were performed badly and then misrepresented. 7. Sufficient evidence has emerged which raises serious safety concerns, that if ignored could result in irreversible damage to health and the environment. GE crops should be firmly rejected now.



The Mon 863 Report On May 22, 2005 the British daily The Independent reported the existence of a secret Monsanto report about its genetically-engineered Mon 863 corn variety. According to the 1,139-page report, rats fed this corn for 13 weeks had abnormally high white blood cell counts, something that happens normally in cases of cancer, poisoning or infection. The rats also had kidney weight loss, liver necrosis and high blood sugar, among other negative effects. Alleging "confidentiality", Monsanto initially published an 11-page summary. The report was made public only after a court order in Germany. It must be pointed out that this information was first made public only because of some anonymous whistleblower. And yet, Mon 863 was approved for planting and human consumption by the US authorities. Monsanto knowingly fed this product to humans despite information about its hazards and had initially kept it confidential.

The Australian Pea Study In 2005, a GE pea developed by Australia's Commonwealth Scientific and Industrial Research Organization provoked a strong immune response in laboratory rats when tested by scientists from the John Curtin Medical Research School in the city of Canberra. The tests carried out on the pea were of the kind normally undertaken on drugs, not on food, and are not required by US law. This means that this pea would have made it right through the approval process of the Food and Drug Administration (FDA) and the Department of Agriculture (USDA) and entered the US market. The tests carried out on the Australian GE pea are not the norm, anywhere in the world. In fact, they were unprecedented. According to Pusztai and other experts, such thorough testing had never been done before on a biotech product. The FDA "does not regulate GE foods," according to the environmental group Friends of the Earth USA. Instead, the FDA has a "voluntary consultation" process that allows biotechnology companies to decide which, if any, safety tests to conduct and how they will be performed. "The company determines which data, if any, are shared with regulators. In fact, the company even determines whether it will consult with the FDA at all."



One of the Friends of the Earth's main experts on biotechnology, William Freese, is co-author of "Safety Testing and Regulation of Genetically Engineered Foods," a paper published in Biotechnology and Genetic Engineering Reviews. According to the paper's authors, safety assessment for GE products in the US is inadequate, as it is based on wrong assumptions and poor research. According to the Union of Concerned Scientists, the FDA has little power to compel companies to submit food safety data and does not carry out independent and scientifically rigorous reviews of new transgenic food products. The New York Times reported in 2001 that according to data from the Center for Disease Control, food was now responsible for twice the number of illnesses in the US as scientists thought seven years earlier, a period that coincides with the massive introduction of GE foods into the market. The cases reported include 5,000 deaths and 325,000 hospitalizations. Whether these cases are linked, at least in part to GE foods, is an open question since no one has looked into it. Meanwhile in England, soy allergy cases went up 50% during a period that matches the introduction of GE soy, according to studies done by the York Nutritional Laboratory. No thorough attempt has been made to see if GE foods have indeed contributed to greater allergies.



http://www.organicconsumers.org/articles/article_410.cfm

The Author has tested GE and non-GMO corn and found that mice eat the heirloom corn but will avoid the GE corn. The Author has also placed a stick of unwrapped Margarine on a table in Florida and nothing ate it for over seven years! Always remember to eat well and as organically as possible! The word "disease" tells you what it really is - you are literally "not at ease"!!

Pancreatitis, Inflammation, More on Cancer, Etc.

Pancreas Overview - The pancreas is a soft, elongated gland situated at the back of the upper abdominal cavity behind the stomach. It is divided into the head (through which the common bile duct runs as it enters the duodenum) and the body (which extends across the spine and the tail), which is close to the left kidney and to the spleen. Because the pancreas lies at the back of the abdominal cavity, diseases of the pancreas may be difficult to diagnose. The pancreas performs several important functions, including the production of digestive juices to help break down macronutrients, the regulation of your blood sugar levels and the production of chemicals that neutralize your stomach acids.

Digestive juices produced by the pancreas include enzymes and bicarbonate. They travel through a small tube called the pancreatic duct that connects the pancreas to the small intestine (duodenum). There, the digestive enzymes help in the break down of proteins and fats in the foods that you eat to permit the nutrients to be absorbed. Digestive enzymes play key roles in our health by enabling our bodies to digest and utilize all the nutrients we ingest to the greatest extent possible. Moreover, these enzymes also play a key role in the elimination of toxins and the digestion and removal of scar tissue that builds up inside all of us as we age.

Digestive Enzymes Fight Inflammation: Inflammation is the cause of pain associated with many different conditions such as sports injuries, muscle sprains, sciatica, chronic back pain and even arthritis and fibromyalgia. Systemic digestive enzymes can be a healthy alternative to nonsteroidal anti-inflammatory drugs (NSAIDs), such as acetaminophen, ibuprofen and aspirin. Digestive enzymes help reduce joint and muscle inflammation, act as a natural pain reliever, and help reduce C-Reactive proteins, a marker for inflammation. In addition, digestive enzymes may lower inflammation by removing toxins and debris in the circulatory system and may reduce the inflammation associated with Sjogren's syndrome.

Learn more: http://www.naturalnews.com/026909_enzymes_digestive_health.html#ixzz1wMbVChqS The bicarbonate neutralizes stomach acid.

Digestive hormones, mainly insulin and glucagon, are released into the bloodstream. They control the body's blood sugar level, a major source of energy, and are an important role in the cause of diabetes. Pancreatic Enzymes - Generally, the first immune system building product that is mentioned in alternative cancer treatment circles are the pancreatic enzymes: trypsin and chymotrypsin. That is interesting because these enzymes do not build the immune system, but they do "clear the way" for the immune system to do its job. "Digestive enzymes-also called pancreatic enzymes include three classes: proteolytic enzymes needed to digest protein, lipases needed to digest fat, and amylases needed to digest carbohydrates. In several conditions that cause malabsorption, such as pancreatic insufficiency and cystic fibrosis, doctors sometimes prescribe digestive enzymes to improve absorption of food." http://www.herbs2000.com/miss/digestive_enzymes.htm It is the proteolytic enzymes (i.e., proteases) that we are interested in here, and particularly trypsin and chymotrypsin. When they are done digesting the meat in the digestive tract (of course, it is hoped that there is no meat in the digestive tract because virtually all cancer diets forbid meat, largely for this reason), they start to clear the proteins that surround cancer cells and clear the way for the immune system to kill the cancer cells. It should be the intent of a person with cancer to focus on treatments that quickly increase the count of the cancer-killing white blood cells - http://www.cancertutor.com/faq/faq_immunity .

Cancer note: Did you know what your T-cells use to kill cancer cells? They inject hydrogen peroxide into the cancer cells and the cancer cells die. Otto Warburg won a Noble Prize proving cancer lives in a low oxygen environment. Every time he lowered the oxygen level in a healthy cell it became cancerous. Then when he would raise the oxygen level in cancerous cells and the cancer would die. The Author takes hydrogen peroxide capsules to help him breathe.

There are numerous pancreas-related health problems, although three in particular are well-known, including pancreatic cancer, pancreatic insufficiency, and both acute and chronic pancreatitis. Pancreatic cancer is a life-threatening illness. The National Center for Biotechnology Information states that, in over 80 percent of patients, your pancreatic cancer has metastasized, or spread to other parts of your body, by the time you are diagnosed. Pancreatic insufficiency is a condition in which your pancreas no longer produces sufficient levels of insulin, while pancreatitis is inflammation of your pancreas.

Pancreatitis or the inflammation of the pancreas has various causes. Once the gland becomes inflamed, the condition can progress to swelling of the gland and surrounding blood vessels, bleeding, infection and damage to the gland. There digestive juices become trapped and start "digesting" the pancreas itself. If this damage persists, the gland may not be able to carry out normal functions. Pancreatitis may be acute (new, short-term) or chronic (ongoing, long-term). Either type can be very severe, even life-threatening. Either type can have serious complications.

Acute pancreatitis usually begins soon after the damage to the pancreas begins. Attacks are typically very mild, but about 20% of them are very severe. An attack lasts for a short time and usually resolves completely as the pancreas returns to its normal state. Some people have only one attack, whereas other people have more than one attack, but the pancreas always returns to its normal state.

Chronic pancreatitis begins as acute pancreatitis. If the pancreas becomes scarred during the attack of acute pancreatitis, it cannot return to its normal state. The damage to the gland continues, worsening over time.

Acute Pancreatitis is an inflammation of the pancreas, caused by the pancreas juices being caught in the pancreas, and self-digesting itself. Know for certain that scarring from pancreatitis does exist, and each time an acute flare-up happens, the chances of having a permanent, chronic pancreatitis increases. About 80,000 cases of acute pancreatitis occur in the United States each year. Pancreatitis can occur in people of all ages, although it is very rare in children. Pancreatitis occurs in men and women, although chronic pancreatitis is more common in men than in women. The main best solution for pancreatitis is to give it COMPLETE and TOTAL rest....that means seeking medical professional for intravenous nutrients, and hydration. You can NOT take anything orally, as that will stimulate the pancreas to secrete its enzymes.

When pancreatitis becomes chronic, sufferers must find all sorts of ways to supplement the diet, especially with digestive enzymes. Because of enzyme deficiency, poor nutrition is inevitable... not all nutrients can be absorbed properly because the nutrients have not been broken down to a usable form. The use of all sorts of supplements does NOT completely resolve the problem of mal-absorption. Supplements do help to shorten the length of attacks, and to minimize the intensity of attacks. Pancreatitis poses interesting problems, because no matter what, you must eat to receive nutrients. The pancreas secretes enzymes to digest proteins, fats and carbohydrates. Further, it secretes other enzymes that help to break down the smaller particles from the first stage of its digestion. And it secretes hormones, like insulin, to allow the body's cells to use glucose properly for energy. The pancreas has many functions, some are "simple" and some are intricately balanced. You cannot live without a pancreas....unless you take enzyme supplements and take insulin....then remember that the pancreas also secretes glucagon which also helps to change fat back into energy (the losing weight hormone). Pancreatitis is EXTREMELY painful. Many cases are from drinking alcohol, some are physical deformities, some are from blocked ducts from foreign objects (gallstones), and the cause of some are unknown completely.

There is help for pancreatitis:

- Flush your liver every 2 weeks
- Improve your diet (eat more raw vegetables and fruit)
- Improve your lifestyle (more outside, more fresh air, more physical activity like walking, rebounding, swimming, hiking ..)
- Cleanse also your kidneys to prevent kidney stones - The Author uses apple cider with extracts of Hydrangea and Gravel Root to remove calcium stones.

Eliminate from your diet:

- sugar
- alcohol
- fried foods
- any heated vegetable oils (oil used for frying)
- industrially processed foods
- grilled foods
- refined foods
- margarine
- aspartame and all other artificial sweeteners
- MSG
- food additives - <http://curezone.com/foods/ennumbers.asp>

Include in your diet:

- freshly pressed vegetable juices
- cold pressed oils
- seafood and fish (not fried fish)
- seaweed

Helpful Herbal Remedies - Herbal remedies may be used in treating various pancreatic conditions, although the effectiveness of herbs for pancreatic cancer and pancreatic insufficiency is unknown. However, herbal remedies have long been used in treating pancreatitis. Phyllis A. Balch, a certified nutritional consultant, nutrition researcher and author of "Prescription for Nutritional Healing," states that helpful herbal remedies in strengthening and stimulating your pancreatic function include gentian, goldenseal, echinacea and cedar berries. Dandelion and olive leaf may also help treat your pancreatitis or improve your pancreatic health. Licorice root has been used to support all glandular functions, including the functions of your pancreas.

Botanical Remedy - Dandelion root may be a helpful adjunct therapy in the treatment of your pancreatic problems and

may support the health and function of your pancreas. Dandelion root may help stimulate bile production, notes Balch, and it helps cleanse your blood and liver, which in turn decreases the burden on your pancreas. Other organs that may benefit from the use of this herbal medicine include your kidneys, spleen and stomach. Discuss proper dosage of this herb and other herb-related issues with your primary care provider before ingesting it.

What causes Inflammation? The medical profession will usually tell you that they do not know. The Author and many health professionals and researchers know that ALL health problems are caused by diet. Serrapeptase helps heal the Author's body as it clears out all of the inflammation and dead tissue. By alleviating the inflammation, and clearing away the problem tissue it relieves the symptoms and allows the healing system to rapidly repair the problem. Start with 3 Tablets of Serrapeptase x 3 times per day on an empty stomach and increase daily if no relief, up to 30 per day if necessary. Then gradually reduce to 1 x 1. Can you take too many tablets or can it interfere with any drugs you are taking? No. It has been used for over 25 years with no side effects reported.

Curcumin (Turmeric) Also Suppresses Inflammation and Pain - Turmeric is a spice derived from the rhizomes of *Curcuma longa*, a member of the ginger family. Curcuminoids are polyphenolic compounds that give turmeric its yellow color; curcumin is the principal curcuminoid in turmeric. Research shows curcumin acts as a scavenger of nitric oxide and inhibits COX-2, a pro-inflammatory substance. Also a potent scavenger of superoxide, the anti-inflammatory activity and superoxide scavenging property of curcumin are proven correlated. Clinically, curcumin has worked as well as cortisone or phenylbutazone for rheumatoid arthritis, osteoarthritis and post-operative inflammation.

<http://curcumin-turmeric.net/inflammation.html> . The Author daily takes Curcumin because it has similar anti-inflammatory action as NSAIDS, but without side effects. Unlike aspirin and other classical COX-inhibitors, curcumin selectively inhibits synthesis of inflammatory prostaglandin thromboxane without affecting prostacyclin synthesis, and curcumin thereby protects against vascular thrombosis. COX-inhibitors and NSAIDS have dangerous side-effects; COX-2 inhibitors are required to include black-box warnings. Curcumin is safe, even in doses up to 8,000 mg per day! Curcumin also inhibits COXs better than indomethacin, a currently prescribed mixed COX inhibitor. A double-blind crossover study in patients with "definite" rheumatoid arthritis compared the antirheumatic activity of curcumin (1200 mg/day) with phenylbutazone, a corticosteroids drug (300 mg/day). The curcumin therapy resulted in "significant" improvements over corticosteroids. Curcumin better relieved morning stiffness and joint swelling, and improved walking time. Best of all, curcumin was well-tolerated and produced no side-effects. Research is ongoing about how curcumin heals cancer, cystic fibrosis, Alzheimer's disease, etc. Please see: <http://lpi.oregonstate.edu/infocenter/phytochemicals/curcumin/>

Aspirin is now being touted as the new anti-cancer drug - The Author believes that anything that is anti-inflammatory like aspirin works to control/heal cancer - but there are safer alternatives that do not cause 10,000 people to die each year from intestinal bleeding.

Considerations - Pancreatic problems may be serious. In some cases, pancreas-related problems may even cause deaths. Do not use herbal remedies in place of other health measures suggested by your health care practitioner. Because certain herbs may trigger side effects and drug interactions, it is always prudent to consult a health care professional who has been trained in herbal medicine before using herbs. Please consult with your physician, pharmacist, or health care provider before taking any home remedies or supplements or following any treatment suggested by anyone on this site. Only your health care provider, personal physician or pharmacist can provide you with advice on what is safe and effective for your unique needs or diagnose your particular medical history.

A Few Final Comments on Inflammation and Cancer

“Medical malpractice alone kills an estimated 45,000 people annually (in the U.S.), making it the leading cause of accidental injury and death.” -- Adriane Fugh-Berman, MD - The Center for Disease Control estimates that each year roughly 1 in 6 Americans (or 48 million people) gets sick, 128,000 are hospitalized, and 3,000 die of foodborne diseases. Why then is there so much FDA regulatory concern over the zero accidental deaths caused from dietary supplements?

A few more notes on Natural Alternatives that are anti-inflammatory supplements/foods

Neem and turmeric both have antimicrobial properties. Both are anti-inflammatory and both improve enzyme activities in the body. There are other herbs that work synergistically with neem and turmeric like *Andrographis paniculata* which has similar broad spectrum therapeutic activity. Neem (*Azadirachta indica*) leaf and its constituents have been demonstrated to exhibit immunomodulatory, anti-inflammatory, antihyperglycemic, antiulcer, antimalarial, antifungal, antibacterial, antiviral, antioxidant, antimutagenic and anticarcinogenic properties. The component, nimbidol, is bioactive against tubercle bacillus and protozoa and can be used in anti-protozoal therapies. The aqueous extracts of neem and cinnamon were capable of interfering with and eliminating the intracellular development of *T. gondii* without harm to host

cells. While drugs exhibit immunosuppressive effects, it has been demonstrated that neem leaf glycoprotein (NLGP) are immuno-stimulatory and augment the CD3-CD56+ natural killer (NK) and CD8+CD56 T-cell-mediated tumor cell cytotoxicity and might be effective to recover the suppressed cytotoxic functions of NK and T cells. Neem has a unique immuno-stimulatory effect in which the number of splenic T lymphocytes (CD4+ and CD8+) and NK cells increased in mice with no toxic effects at immunostimulatory doses.

In Swahili, the Neem tree is known by the name "Mwarobaini", which mean forty trees because it makes medicine to treat 40 different diseases. Among the treatments are an infusion from the leaf and fruit to treat eczema. An extract from the wood relieves asthma symptoms. The leaf extract is used to treat fever and the powdered root bark is applied to a toothache. The oil from the seed is applied to treat wounds, sores and cuts. Neem leaves have been prescribed to aid the digestive system, to decrease levels of glucose in the blood of diabetics and to stimulate the liver. Neem-based insecticides have been shown to be effective against over 200 different types of insects including head lice, fleas, locusts and mosquitoes.

<http://www.blackherbals.com/neem.htm>

The most analyzed compounds in Neem are as follows:

- Nimbin - anti-inflammatory, anti-pyretic, antihistamine, anti-fungal
- Nimbidin - anti-bacterial, anti-ulcer, analgesic, anti-arrhythmic, anti-fungal
- nimbidol - anti-tubercular, anti-protozoan, anti-pyretic
- gedunin - vasodilator, anti-malaria, anti-fungal
- Sodium nimbinate - diuretic, spermicide, anti-arthritis
- queceretin - anti-protozoal
- salannin - repellent
- Azadirachtin - repellent, anti-feedant, anti-hormonal

Medical Uses Of Neem:

AIDS: Neem contains immune modulating polysaccharide compounds; the polysaccharide may be responsible for increasing antibody production. Other elements of neem may stimulate immune function by enhancing cellular mediated response. This dual action can help the body ward off the frequent infections that generally accompany AIDS.

Arthritis: The phenolic compounds containing catechin (which possess anti-inflammatory properties) may produce the anti-inflammatory effects. Another investigation found that quercetin, an antibacterial compound, exists in neem leaves. Other studies have shown that the polysaccharides in neem reduce the inflammation and swelling that occur in arthritis. Not only does neem help reduce inflammation; it also has pain suppressing properties. Neem can also help create a balance in the immune system, directly affecting the progression of arthritis.

Birth Control: Neem has been shown to be a powerful, relatively inexpensive birth control agent for both men and women. Using neem as a vaginal contraceptive inhibits the spread of micro-organisms including *Candida albicans*, *Tropicalis*, *Niesseria gonorrhoeae*, herpes simplex-2 and HIV-1, as well as resistant strains of *E. coli*, and *Staphylococcus aureus*, in part by boosting immune-system activity in the vagina. Neem initially stimulates TH1 cells and macrophages, then causes an elevation of both immunoreactive and bioactive TNF-alpha and gamma-interferon in serum and mesenteric lymph nodes.

Cancer: It has been found that polysaccharides and liminoids in neem bark, leaves and seed oil reduced tumors and cancers and were effective against lymphocytic leukemia. Neem's success has been noticeably remarkable with skin cancers. A number of reports have been made by patients that their skin cancers have disappeared after several months of using a neem-based cream on a daily basis. Injections of neem extract around various tumors have shown sizable reduction in a few weeks' time. Neem leaf extract significantly alters cancer development at extrahepatic sites by influencing hepatic biotransformation enzymes and antioxidants.

Dental Care: Neem twigs contain antiseptic ingredients necessary for dental hygiene. Neem powder is also used to brush teeth and massage gums. Neem extracts prevent tooth decay and periodontal disease.

Diabetes: Because neem is a tonic and a revitalizer, it works effectively in the treatment of diabetes, as well.

Heart Disease: Major causes of a heart attack include blood clots, high cholesterol, arrhythmic heart action and high blood pressure. Neem has been helpful in these conditions too. Its leaf extracts have reduced clotting, lowered blood pressure and bad cholesterol, slowed rapid or abnormally high heartbeat and inhibited irregular heart rhythms. Some compounds may produce effects similar to mild sedatives, which reduce anxiety and other emotional or physical states that may prompt a heart attack. The antihistamine effects of the nimbidin in its leaves cause blood vessels to dilate. This may be why the leaves help reduce blood pressure.

Malaria: Both water and alcohol based neem leaf extracts have been confirmed as effective. It has been shown to block the development of the gamete in an infected person. Neem leaf extract greatly increases the state of oxidation in red blood cells, which prevents normal development of the malaria virus. Irocin A, an active ingredient in the leaves, is toxic to resistant strains of malaras; 100 percent of the malaria gamete are dead within seventy-two hours with a 1 to 20,000 ratio of active ingredients. Gedunin and quercetin, compounds found in the leaves, are also effective against malaria.

Rheumatism: Neem leaves have anti-inflammatory activity, similar to that in drugs such as phenyl butazone and cortisone.

They can relieve pain and reduce acute pain edema.

Stress: The explanation of neem's antianxiety effect may be its ability to increase the amount of serotonin in the brain. Because it works well in small amounts, it could be safer than drugs currently used for stress, which may cause many side effects.

Gastro-intestinal Problems: In the Ayurvedic medical tradition, neem is considered a useful therapy for ulcers and gastric discomfort. Compounds in neem have been proven to have antiulcerative effects. Peptic ulcers and duodenal ulcers are treated well with neem leaf extracts; nimbidin from seed extracts taken orally prevents duodenal lesions and peptic ulcers, and provides significant reductions in acid output and gastric fluid activity.

Vitiligo: Vitiligo is believed to be an autoimmune disorder that causes patches of skin to lose their color. It occurs in about five percent of the human population regardless of race, but most commonly in dark-skinned people. The two most common treatments are exposure to sunlight (or PUVA) or corticosteroid drugs, but these are not always effective. Other studies showed that the internal use of neem leaves and bark were effective even without the cream. It may be possible that neem oil applied to the affected areas could aid in the reversal of discoloration.

Chagas Disease: Extracts of neem reportedly affect the kissing bugs that transmit the much-feared Chagas' disease. They do not kill the insect; instead they "immunize" it against parasites that live inside it for part of their life cycle. Neem leaf extracts have negative effects on these pernicious insects. Feeding neem or more specifically a single dose of Azadirachtin to the bugs not only eliminate the parasites, but the Azadirachtin prevents the young from molting and the adults from reproducing. Neem leaf or seed extracts may also be sprayed throughout the home where the kissing bug lives; this eliminates the parasites and prevents the bugs from laying eggs.

Skin Diseases: Neem has been highly successful against harmful fungi, parasites, and viruses. Although it can destroy these, it does not kill off beneficial intestinal flora nor produce adverse side effects. Neem is toxic to several fungi that attack humans, including the causes of athlete's foot and ringworm and candida, which cause yeast infections and thrush. In fact, neem extracts are some of the most powerful Antifungal plant extracts found in the Indian pharmacopoeia that are used for these conditions. The compounds gedunin and nimbidol, found in the tree's leaves, control the fungi listed above.

Fungicides: Neem has proved effective against certain fungi that infect the human body. Such fungi are an increasing problem and have been difficult to control by synthetic fungicides. For example, in one laboratory study, neem preparations showed toxicity to cultures of 14 common fungi, including members of the following genera:

- Trichophyton-an "athlete's foot" fungus that infects hair, skin, and nails;
- Epidermophyton-a "ringworm" that invades both skin and nails of the feet;
- Microsporum- a ringworm that invades hair, skin, and (rarely) nails;
- Trichosporon-a fungus of the intestinal tract;
- Geotrichum-a yeastlike fungus that causes infections of the bronchi, lungs, and mucous membranes; and
- Candida-a yeastlike fungus that is part of the normal mucous flora but can get out of control, leading to lesions in mouth (thrush), vagina, skin, hands and lungs.

Antibacterials: In trials neem oil has suppressed several species of pathogenic bacteria, including:

- **Staphylococcus aureus.** A common source of food poisoning and many pus-forming disorders (for example, boils and abscesses), this bacterium also causes secondary infections in peritonitis, cystitis, and meningitis. Many strains are now resistant to penicillin and other antibiotics, one reason for the widespread occurrence of staphylococcal infections in hospitals.
- **Salmonella typhosa.** This much-feared bacterium, which lives in food and water, causes typhoid, food poisoning, and a variety of infections that include blood poisoning and intestinal inflammation. Current antibiotics are of only uncertain help in treating it. However, neem has many limitations as an antibiotic. In the latter test, neem showed no antibacterial activity against certain strains of the above bacteria, and none against Citrobacter, Escherichia coli, Enterobacter, Klebsiella pneumoniae, Proteus mirabilis, Proteus morgani, Pseudomonas aeruginosa, Pseudomonas, and Streptococcus faecalis.

Viral Diseases: In India, neem is also used to treat viral diseases such as small-pox, chicken-pox.

Immunity Booster: The fact that neem affects the cell-mediated immune system is particularly important to most people. Led by "Killer T" cells, the cell-mediated immune system is the body's first defense against infection. Killer T-cells are able to destroy microbes, viruses and cancer cells by injecting toxic chemicals into the invaders. Neem also boosts the body's macrophage response, which stimulates the lymphocytic system, and boosts production of white blood cells. Neem oil acts as a non-specific immunostimulant and that it selectively activates the cell-mediated immune mechanisms to elicit an enhanced response to subsequent mitogenic or antigenic challenges.

Curcumin - Only 2% - 5% of tumeric is curcumin. **Curcumin helps heal all cancers by killing cancer cells and acting as an antioxidant and anti-inflammatory product.** Curcumin mixed in any cold-pressed oil and rubbed on scabies, any cut, bruise and/or wound will speed the process of healing. Curcumin has been clinically shown to inhibit growth of various cancer cells including: Bone Cancer, Breast Cancer, Brain Tumors, Colon, Liver, Pancreatic, Stomach, Bladder, Kidney, Prostate, Leukemia, Ovarian, Melanoma, and more! One of its anti-cancer benefits comes from its ability to induce apoptosis (natural cell death) in cancer cells.

Baking Soda has been discussed previously as an efficient, inexpensive means of alkalizing your body and reducing inflammation.

Blueberries are an antioxidant powerhouse; they are high in phytonutrients that confer anti-inflammatory protection against many diseases such as cancer and dementia.

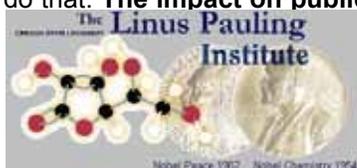
Broccoli is a highly nutritious vegetable that contains anti-inflammatory and anti-cancer phytonutrients such as sulforaphane which helps your body get rid of potentially carcinogenic compounds.

Coconut oil (*Cocos nucifera*) - Inexpensive and readily available Virgin coconut oil has a long history as a source of food, oil, beverage and traditional medicine:

- **Anti-bacterial** (kills bacteria that cause ulcers, throat infections, urinary tract infections, gum diseases, and other bacterial infections)
- **Anti-carcinogenic** (coconut oil has antimicrobial properties so it effectively prevents the spread of cancer cells and enhances the immune system)
- **Anti-fungal** (kills fungi and yeast that lead to infection.)
- **Anti-inflammatory** (appears to have a direct effect in suppressing inflammation and repairing tissue, and it may also contribute by inhibiting harmful intestinal microorganisms that cause chronic inflammation.)
- **Anti-microbial/Infection Fighting** (the medium-chain fatty acids and monoglycerides found in coconut oil are the same as those in human mother's milk, and they have extraordinary antimicrobial properties. By disrupting the lipid structures of microbes, they inactivate them. About half of coconut oil consists of lauric acid. Lauric acid, its metabolite monolaurin and other fatty acids in coconut oil are known to protect against infection from bacteria, viruses, yeast, fungi and parasites. While not having any negative effect on beneficial gut bacteria, coconut oil inactivates undesirable microbes.)
- **An Antioxidant** (protects against free-radical formation and damage)
- **Anti-parasitic** (fights to rid the body of tapeworms, lice and other parasites)
- **Anti-protozoa** (kills giardia, a common protozoan infection of the gut)
- **Anti-retroviral** (kills HIV and HLTV-1)
- **Anti-viral** (kills viruses that cause influenza, herpes, measles, hepatitis C, SARS, AIDS, and other viruses)
- **Infection fighting**
- **Has no harmful for discomforting side effects**
- **Known to improve nutrient absorption** (easily digestible; makes vitamins and minerals more available to the body)
- **Nontoxic to humans and animals - See 160 uses at:**
<http://wakeup-world.com/2012/03/02/160-uses-for-coconut-oil/>

An anti-inflammatory diet with coconut oil normalizes and enhances your immune system response by reducing your body's exposure to oxidized fats. Virgin coconut oil usually has not been bleached, deodorized, or refined - properly prepared, coconut oil can easily stay fresh for 2-3 years, "with or without" refrigeration. Dementia and Alzheimer's can be treated with virgin coconut oil with amazing results. Coconut oil is used for diabetes, heart disease, chronic fatigue, Crohn's disease, irritable bowel syndrome (IBS), Alzheimer's disease, thyroid conditions, energy and boosting the immune system. **Coconut oil is safe to use, and does not turn to fat in your body. It raises the metabolism, so you burn more fat and have more energy. It does not increase your cholesterol but actually helps lower it. Coconut oil is wonderful diet addition for just about everyone.**

Vitamin C - The current recommended dietary allowance (RDA) for vitamin C is around half what it needs to be to prevent disease - it was based on a handful of flawed studies and will only prevent scurvy. The RDA should be raised from the current recommended daily intake of 75 milligrams for women and 90 milligrams for men to 200 milligrams a day for all adults. Vitamin C plays an essential role, and needs to saturate cells and tissues – but needs to be at a far higher level to do that. **The impact on public health would be immense, say the researchers, and it could be achieved for around one penny a day.** As it is, many people around the world are deficient in the vitamin, and common symptoms include malaise, fatigue and lethargy. Higher levels of the vitamin can improve immune function, reduce inflammation and lower blood pressure. There are no side effects from taking a higher dose of around 200 milligrams, say the researchers from the Linus Pauling Institute at Oregon State University.



Colloidal Silver - Colloidal silver is a suspension of pure silver in water. Colloidal silver is a powerful, natural antibiotic and preventative against infections and is used as a mineral supplement to augment the body's immune system. **Colloidal silver is anti-inflammatory and there are receptor sites for silver in the myelin sheath.**

Prior to 1938, colloidal silver was widely used by physicians as a mainstream antibiotic. It was produced by pharmaceutical

companies under various names, including Protargol and Argyrol. Colloidal silver has been approved by the EPA as a disinfectant for hospitals and medical centers. Compounds of silver also have a long history in medicine. Silver nitrate solutions were introduced by Crede in 1880 to protect newborn infants' eyes from infection, but have largely been replaced by antibiotic ointments since 1978. (Silver nitrate solutions are not the same thing as a suspension of colloidal silver.) Silver-containing cremes such as silver sulfadiazine have been used in burn centers for more than 100 years." Dr. Henry Crooks found that Silver in the colloidal state is highly germicidal, quite harmless to humans and absolutely nontoxic. Rather than in a chemical compound, the Silver, in the colloidal state, may be applied in a much more concentrated form, with correspondingly better results. All fungus, virus, bacterium, strep-tococcus, strphylococcus, and other pathogenic organisms are killed in three or four minutes; in fact, there is no microbe known that is not killed by Colloidal Silver is six minutes or less, a dilution of as little as five parts per million, though there are no side effects whatsoever from high concentrations. **Metallic Silver (Colloid) is non-toxic; however, silver nitrate and other compounds of silver are and should not be ingested.**

Acting as a catalyst, colloidal silver reportedly disables the enzyme that one-celled bacteria, viruses and fungi need for their oxygen metabolism. They suffocate without corresponding harm occurring to human enzymes or parts of the human body chemistry. The result is the destruction of disease-causing organisms in the body and in the food. Colloidal silver was in common use until 1938. Many remember their grandparents putting silver dollars in milk to prolong its freshness at room temperature. At the turn of the century, scientists had discovered that the body's most important fluids are colloidal in nature: suspended ultra-fine particles. Blood, for example, carries nutrition and oxygen to the body cells. This led to studies with colloidal silver. Prior to 1938, colloidal silver was used by physicians as a mainstream antibiotic treatment and was considered quite "high-tech." Production methods, however, were costly. The pharmaceutical industry moved in, causing colloidal research to be set aside in favor of fast working and financially lucrative drugs.

While studying regeneration of limbs, spinal cords and organs in the late 1970s, Robert O. Becker, M.D., author of *The Body Electric*, discovered that silver ions promote bone growth and kill surrounding bacteria. The March 1978 issue of *Science Digest*, in an article, "Our Mightiest Germ Fighter," reported: "Thanks to eye-opening research, silver is emerging as a wonder of modern medicine. **An antibiotic kills perhaps a half-dozen different disease organisms, but silver kills some 650. Resistant strains fail to develop. Moreover, silver is virtually non-toxic.**" **The article ended with a quote by Dr. Harry Margraf, a biochemist and pioneering silver researcher who worked with the late Carl Moyer, M.D., chairman of Washington University's Department of Surgery in the 1970s: "Silver is the best all-around germ fighter we have."** www.cs.kestar.com.au/scidi78.pdf **Washington University School of Medicine**

The presence of colloidal silver near a virus, fungus, bacterium or any other single celled pathogen disables its oxygen metabolism enzyme, its chemical lung, so to say. Within a few minutes, the pathogen suffocates and dies, and is cleared out of the body by the immune, lymphatic and elimination systems. Unlike pharmaceutical antibiotics, which destroy beneficial enzymes, colloidal silver leaves these tissue-cell enzymes intact, as they are radically different from the enzymes of primitive single-celled life. Thus colloidal silver is absolutely safe for humans, reptiles, plants and all multi-celled living matter. **High concentrations of silver do not kill disease germs more effectively than the safe range of 3 to 5 parts per million (ppm.).**

There are three distinctly different types of silver that are labeled and sold on the market as "colloidal silver"; they are ionic silver, silver protein, and true colloidal silver. Consumers seeking true colloidal silver are often at a disadvantage because each of these products represents themselves as colloidal silver. True colloidal silver products are the least prevalent type of colloidal silver on the market due to high degree of manufacturing complexity and the resulting high cost of production. In true colloidal silver, the majority of the silver content is in the form of silver particles. True colloids will typically contain more than 50% particles (often 50 – 80%), while the balance (20% to 49%) will be silver ions. When referring to colloidal silver, the word colloid means silver particles. Due to the very low concentration of ionic silver and small particle size, true silver colloids do not cause argyria - <http://silver-colloids.com/Papers/definitions.html>, a condition that causes the skin to turn blue-gray.

Colloidal Silver has been used successfully to heal: acne, allergies, appendicitis, arthritis, blood parasites, bubonic plague, burns (colloidal silver is one of the few treatments that can keep severe burn patients alive), cancers, cholera, conjunctivitis, diabetes, gonorrhea, hay fever, herpes, leprosy, leukemia, lupus, lymphangitis, Lyme disease, malaria, meningitis, parasitic infections both viral and fungal, pneumonia, rheumatism, ringworm, scarlet fever, septic conditions of the eyes, ears, mouth and throat, shingles, skin cancer, staph infections, strep infections, syphilis, toxemia, trenchfoot, all forms of viruses, warts and stomach ulcers. It can also be useful to heal your pet i.e. canine parvo virus. Colloidal Silver is also very handy in the garden since it can be used against bacterial, fungal and viral attacks on plants. Simply spray diluted Colloidal Silver on the leaves, and add colloidal silver to the soil water.

How to make your own Colloidal Silver.

It has been determined that 30 volts is the ideal for colloidal silver production, you can easily create a 27 volt generator simply by wiring three 9-volt batteries together.

So, gather three 9-volt transistor radio batteries, three battery snap-on lead connectors, 2 insulated alligator clips, 1 “grain-of-wheat” 24 volt 40 mA sub miniature incandescent bulb, a foot of 3/32” heat-shrink insulation tubing, a foot of 2-conductor stranded insulated wire for clip-leads, a small box to put it all in, and 10” of pure silver wire (.999 fine). Note: An ingot of silver cut in half works better than wire.

Solder your three snap-on battery clips in series (red to black) to provide 27 volts. Connect a 24V incandescent lamp in series with either positive or negative output lead.

Solder the red insulated alligator clip to the positive (anode) and the black insulated clip to the negative (cathode) 2-conductor lead wires. Insulation is shrunk over soldered connections using a heat gun or hair dryer.

Cut your 10” of silver wire in half. Bend top ends of your two 5” silver electrode wires so they can clip over the top rim of a plastic or glass cup (not metal). Only about 4” of each wire should be submerged.

WARNING! Use ONLY pure silver (.999 fine) electrodes. #14 gauge is the preferred thickness. Do not use sterling silver (.9275) since sterling contains copper and nickel. NICKEL CAN BE TOXIC. (With this in mind, you may want to have a chemical analysis (assay) of your purchased silver in addition to the written word of your supplier.) **If the Colloidal Silver is to be ingested or injected, be sure to use distilled water. Tap water is fine for other uses, such as for a topical spray or for plants.**

Start by pouring eight ounces of water into your glass. (The Author has often added a pinch of sea salt at this point but no longer does this - because if you use too much salt, you’ll be making silver chloride instead!). Insert both of the silver electrode wires. Placement of wires is not critical, but they must not be touching each other or the process will stop. (You cannot shock yourself in this process so do not be concerned.) Attach alligator clips to the ends of the silver electrode wires coming over the outside rim of the glass and you will see a grey mist inside the glass start to peel away from the positive polarity wire while bubbles of hydrogen rise from the other. Laboratory tests show that this method creates a silver colloid of approximately 1 ppm per minute of activation time. Since you are only taking microscopic particles from the silver wire, your silver wire may very well last for years. A fresh set of three alkaline batteries should make several hundred thousand batches of concentrated Silver Colloid.

When finished, detach alligator clips. Clean silver electrode wire after each use to remove dark oxide on the anode. Use a small piece of 1/4” thick nylon kitchen scouring pad to polish dried silver, then wipe with paper napkin to make them ready for next use.

Store your Colloidal Silver in dark, non-conductive glass containers. Keep away from light as even room light will degrade colloids rapidly by turning solution grey or black just as exposure to light darkens the silver in camera film. Stir thoroughly or shake each time before using. Keep cool, but do not refrigerate. You will find it tastes the same as untreated water. **Long-term use of improperly manufactured silver preparations can lead to argyria, a condition in which silver salts deposit in the skin, eyes, and internal organs, and the skin turns blue or ashen-gray. This can be minimized by taking the mineral selenium. The maximum dose is 200-400 mcg a day. This works best with natural Vitamin E d-alpha along with a well rounded supplement program.**

Aloe Vera - is a medicinal plant with many health properties. The gel extracted from this plant is used in a variety of cosmetic and health products. As a topical aloe vera is used for a series of injuries and skin disorders including, cuts... burns... and insect bites. Aloe vera juice is an internal healer for gastrointestinal problems including inflammation. The anti-inflammatory effects of aloe vera help to ease arthritis pain and increase joint mobility for sufferers.

Astaxanthin is produced only by the microalgae *Haematococcus pluvialis* when its water supply dries up, forcing it to protect itself from ultraviolet radiation. It’s the algae’s survival mechanism—Astaxanthin serves as a “force field” to protect the algae from lack of nutrition and/or intense sunlight. There are only two main sources of astaxanthin — the microalgae that produce it, and the sea creatures that consume the algae (such as salmon, shellfish, and krill). **Astaxanthin is now thought to be the most powerful antioxidant found in nature.** This pigment is the most commonly occurring red carotenoid in marine and aquatic animals and is what gives salmon their characteristic pink color. Astaxanthin leaps and bounds more powerful than beta-carotene, alpha-tocopherol, lycopene and lutein, other members of its chemical family. It exhibits VERY STRONG free radical scavenging activity and helps protect your cells, organs and body tissues from oxidative damage and inflammation.

Black Cherry Extract – Black cherries are a delicious fruit with many health benefits known to reduce inflammation in the joints of people with various types of arthritis. Black cherries are also potent antioxidants. No matter what the FDA has said,

research has demonstrated reduced amounts of uric acid buildup around joints which causes gout by ingesting fresh black cherries or consuming them in the form of a supplement, extract, or juice.

Boswellia - also known as boswellin or "Indian frankincense," comes from resin from the tree *Boswellia serrata*, that grows in the dry hills of India. For centuries, traditional Indian healers have taken advantage of the anti-inflammatory properties of the tree bark's gummy resin, called salai guggal. Modern preparations made from a purified extract of this resin and packaged in pill or cream form are used to reduce inflammation associated with osteoarthritis and rheumatoid arthritis. Unlike conventional NSAIDs (nonsteroidal anti-inflammatory drugs) such as ibuprofen - the "typical medical" treatments for joint inflammation - boswellia doesn't seem to cause stomach irritation. It also may be effective for back pain and certain chronic intestinal disorders. **Health Benefits:** Research has identified specific active anti-inflammatory ingredients in this herb, which are commonly referred to as boswellic acids. In animal studies, these acids have been shown to reduce inflammation significantly in several ways. Boswellic acids deter inflammatory white cells from infiltrating damaged tissue. They improve blood flow to the joints. They also block chemical reactions that set the stage for inflammation to occur in chronic intestinal disorders such as Crohn's disease and ulcerative colitis. Boswellia may help to ease symptoms of osteoarthritis and rheumatoid arthritis. Boswellia can be taken internally as well as applied topically to affected joints to relieve inflammation associated with these joint disorders. This may lessen morning stiffness and increase joint mobility. <http://EzineArticles.com/70123> . Boswellia burned as incense repels mosquitoes..

Boswellic acids are potent inhibitors of inflammatory compounds and they are cytotoxic (promote cancer cell death without harming healthy cells). They have been used in Ayurvedic medicine to cure, asthma, colitis, sores and snakebites - use ONLY Alpha AKBA not Beta. Oleogum resins from BOSWELLIA species are used in traditional medicine in India and African countries for the treatment of a variety of diseases. Animal experiments showed anti-inflammatory activity of the extract. The mechanism of this action is due to some boswellic acids. It is different from that of NSAID and is related to components of the immune system. The most evident action is the inhibition of 5-lipoxygenase. However, other factors such as cytokines (interleukins and TNF-alpha) and the complement system are also candidates. Moreover, leukocyte elastase and oxygen radicals are targets. Clinical studies, so far with pilot character, suggest efficacy in some autoimmune diseases including rheumatoid arthritis, Crohn's disease, ulcerative colitis and bronchial asthma. Side effects are not severe when compared to modern drugs used for the treatment of these diseases. <http://www.ncbi.nlm.nih.gov/pubmed/17024588>

Cat's Claw (*Uncaria tomentosa*) – Results of previous studies have indicated this herb to reduce inflammation, boost the immune system, knock out viruses while also protecting the heart against disease. Cat's claw is an anti-inflammatory herb, native to Brazil and Peru. It was traditionally used to treat arthritis, infections, gastrointestinal diseases, inflammations, rheumatism, tumors, and other forms of disease. Cat's claw can be taken in forms of a capsule, tablet, dry extract, tincture or tea.

Cayenne Pepper - also called chili pepper and bird pepper has one of the highest levels of anti-oxidant found in plants. Its Beta-Carotene contents helps to protect the body organs from free radical damage. It is such damage that can lead to colon cancer, atherosclerosis and diabetic complications including heart disease and nerve damage - it originated in tropical South America, and is a well-known member of the capsicum family of plants. This family includes the red bell peppers... which are commonly used in cooking, paprika often sold as a spice, and the hot peppers known as cayenne peppers. All members of the capsicum family including cayenne contain the active ingredient called capsaicin... which is the part of the pepper that tastes hot and spicy. Capsaicin is the active ingredient in a cayenne cream called Zostrix, that has been approved by the FDA as a shingles treatment. Capsaicin is a helpful pain-killer for many types of arthritis including gout. Water alone will activate capsaicin, so make sure that you use soap and water to wash it completely off your hands because capsaicin can cause severe pain if you get it in your eyes or your mouth.

Cayenne Pepper has an anti-inflammatory action that does not irritate the stomach, and will actually help to heal the lining of the stomach and can be used to treat migraine headaches. Studies by scientists in Mexico City have found that taking capsaicin reduces the carcinogenic effect of atmospheric pollutants. Although many natural health practitioners are aware of its effectiveness for heart problems, mainstream medicine is still investigating its use. The University of Maryland Medical Center are carrying out studies into its ability to aid heart disease and circulatory problems. Herbalists have traditionally suggested its use to strengthen your arteries, nerves and heart and for regulating the blood flow. The Author believes that cayenne pepper can stop a heart attack. Cayenne pepper helps to boost your metabolism, as it stimulates the body to burn the fat, instead of storing it. So, if you eat cayenne pepper for breakfast, as it may decrease your appetite for the rest of the day. **Some of the most potent anti-inflammatory vegetables are peppers and the spices derived from them, such as cayenne pepper. If you can handle the heat, Habanero Peppers contain 4-6 times more Capsaicin than Cayenne with a Scoville rating of 200,000 units.**

Cayenne pepper has anti-inflammatory, antioxidant, antiseptic, diuretic, analgesic, expectorant, and diaphoretic properties. The dried ripe fruit and seeds of the plant are used for medicinal purposes. Cayenne pepper is available in

many forms, including capsules, ointments, liniments, tinctures, creams, oils, and dried powders. Cayenne pepper is used worldwide to treat a variety of health conditions, including weak digestion, chronic pain, shingles, heart disease, sore throats, headaches, high cholesterol levels, poor circulation, and toothache. Indian Ayurvedic, Chinese, Japanese, and Korean medicines use cayenne to treat many different conditions. One Ayurvedic remedy for pain combines cayenne and mustard seeds into a paste to be applied to the affected area. Ayurvedic medicine also utilizes cayenne pepper to treat gas and poor digestion. Chinese medicine employs cayenne for digestive ailments. An ointment or tincture made from cayenne is used in China and Japan to heal frostbite and myalgia (muscle pains). The German Commission E has approved cayenne pepper in the treatment of painful muscle spasms, arthritis, rheumatism, neuralgia, lumbago, and chilblains.

The best way to take cayenne pepper is a teaspoonful in a cup of hot water – but be warned! To start off, use just a quarter of a teaspoon and gradually build up to a full teaspoon as you get used to it. If you really find it difficult to take anything hot and spicy, the good news is that you can buy cool cayenne pepper capsules. Swallowed with a glass of water, they will slip down to your stomach with no hot rush. Cayenne pepper helps to reduce allergic symptoms by its anti-inflammatory properties that desensitize the nasal passages when exposed to allergens and assist in breaking-up and loosening mucus formation. Cayenne pepper has been used traditionally for years to prevent food contamination from bacteria and cayenne pepper will help to break up congested mucus in colds and flu and get it moving, giving instant relief from many of the symptoms of colds and flu. Alternatively, you can add some slippery elm and molasses or honey to your cup of hot water and cayenne pepper and take in doses throughout the day for colds, sore throats and coughs.

Cayenne pepper helps to reduce atherosclerosis (which is a disease in which plaque builds up inside your arteries) while encouraging fibrinolytic activity (the ability of some proteolytic enzymes to dissolve the fibrin in blood clots facilitating wound healing) and preventing the formation of blood clots. At the same time, cayenne pepper helps to normalize blood pressure levels while ridding the body of LDL cholesterol and triglycerides. These actions help reduce the chances of you having a heart attack or stroke. Cayenne pepper will stimulate the digestive tract so that enzymes and gastric juices keep flowing, helping your body to metabolize both the food and the toxins that you ingest and cayenne pepper stimulates intestinal peristaltic motion to help with both assimilation and elimination. Cayenne pepper will cause you to sweat, a natural process for detoxing your systems. Combine that teaspoon of cayenne pepper in a cup of hot water with some lemon juice and honey for an every day detox beverage and appetite suppresant.

Cayenne Side Effects -The effect of its active ingredient capsaicin on the liver, means that the activity of a specific enzyme in the liver called CYP1A2 is reduced. This may mean that the side effects of any prescription drugs that you take can be increased. So speak to your doctor before using it.

<http://www.natural-health-and-healing-4u.com/health-benefits-of-cayenne-pepper.html#ixzz22552Dz00>

DLPA - The pain reliever DLPA (D,L-phenylalanine) contains two forms of the amino acid phenylalanine. The “L” form is a natural substance found in Protein-rich foods; it's believed to bolster mood-elevating chemicals in the brain, such as dopamine and norepinephrine. The “D” form of phenylalanine, on the other hand, is made synthetically in a laboratory; it appears to block a nervous system Enzyme that amplifies pain signals. In other words, it may prevent the breakdown of the brain's natural narcotics. DLPA supplements combine the “L” and “D” forms of phenylalanine, packing a potent one-two punch, and quickly relieving minor depression and physical discomforts. DLPA may help to ease depression, alleviate chronic pain, enhance concentration in those suffering from ADHD, improve the appearance of vitiligo and reduce the symptoms of Parkinson's disease. **Caution: If you have high blood pressure, use only under a doctor's supervision.**

Garlic: can help reduce inflammation, regulate glucose and help your body fight infections. Garlic is a very powerful anti-cancer spice. Studies all over the world have shown it to lower the risk of developing all types of cancers especially colon, stomach, intestinal, and prostate cancer. It has strong antibacterial properties as well as the ability to block formation and halt activation of cancer-causing substances. It can also enhance DNA repair; slow down cell reproduction and induce apoptosis.

Ginger: helps reduce inflammation and control blood sugar. Ginger tea is a great addition to any diet. Ginger has long been used in India to relieve pain and inflammation, and Dr Weil also recommends ginger for its anti-inflammatory properties. He advises taking capsules 500 to 1,000 mg twice a day with meals. A 1992 study conducted at Odense University in Denmark found that patients with inflammatory illnesses experienced relief of pain and related symptoms with ginger supplementation. A full 75 percent of the participants stated that they experienced “substantial relief” after supplementation. A 2005 paper published in the “Journal of Medicinal Food” presents the specific pharmacological properties of ginger that cause it to inhibit several genes that regulate inflammatory response.

<http://www.livestrong.com/article/268898-the-best-natural-anti-inflammatory-herbs/#ixzz222hGa3o9>

GLMO (green-lipped mussel oil) - GLMO is extracted from the New Zealand green-lipped mussel. It is a combination of Omega 3 fatty acids and lipids. It is advertised to be 100 times more potent than fish oil. Works for arthritis, inflammatory skin conditions, and premenstrual inflammatory symptoms. **If you are allergic to shell fish, you should first discuss taking**

this with a doctor. <http://www.green-lipped-mussel-oil.com/natural-anti-inflammatory-comparison.html>

Greens, berries, pineapples, cruciferous vegetables, red palm oil, pastured animal fat, wild fish fat and raw oysters are all great anti-inflammatory foods.

Green Tea - In recent years, green tea and its extracts have been used to prevent and treat hyperlipidemia, hypertension, atherosclerosis and cancer. Green tea and green tea supplements generally contain higher amounts of disease-fighting antioxidants called polyphenols than black tea. Studies on mice showed that green tea helped prevent prostate cancer growth. Green tea extract is also reported to induce cancer cell death and starve tumors by curbing the growth of new blood vessels that feed them. Tea's antioxidants may protect against some forms of cancer. They may also help prevent heart disease by relaxing blood vessels and preventing blood clots. University of California Los Angeles (UCLA) researchers used green tea extract on human bladder cells, some of which were cancerous. Their findings appear in the Feb. 15 issue of *Clinical Cancer Research*. The green tea extract targeted the cancer cells without harming healthy cells, say the researchers. Taking a closer look, they noticed something unusual about the cancer cells. The green tea extract apparently made the cancer cells more mature, making them bind together more closely. That made it harder for the cancer cells to become invasive and spread.

Drinking Green Tea which is very high in antioxidants will also help prevent chronic inflammation and the negative effects of alcohol. A new study has found that a compound in green tea may help people with rheumatoid arthritis avoid inflammation and joint damage. The study, conducted by University of Michigan researchers, was presented April 29 at the Experimental Biology 2007 conference in Washington, D.C. "Our research is a very promising step in the search for therapies for the joint destruction experienced by people who have rheumatoid arthritis," said Salah-uddin Ahmed, Ph.D., the study's lead researcher. According to the Arthritis Foundation, more than two million Americans have rheumatoid arthritis. Ahmed and his co-workers isolated cells called synovial fibroblasts, which form a lining of tissue that surrounds the joints. In cases of rheumatoid arthritis, this lining becomes inflamed, resulting in chronic pain and long-term joint damage. The researchers cultured synovial fibroblasts from rheumatoid arthritis patients and then exposed the cells to epigallocatechin-3-gallate (EGCG), a naturally occurring compound in green tea. They found that EGCG blocked two potent molecules that cause the bone breakdown in rheumatoid arthritis-affected joints. Ahmed stated that the EGCG "significantly" blocked the harmful molecules. He and his co-workers observed that EGCG also blocked production prostaglandin E2, which causes joint inflammation. Ahmed said that people might want to try drinking three or four 8-ounce cups of green tea per day. "Drink it continuously throughout the day," he said, to keep blood levels constant.

<http://www.naturalnews.com/022435.html#ixzz21ktznpW5>

Guggul Extract - is a type of gum resin originating from a thorny tree called commiphora mukul, native to India. Guggul is an herbal extract possessing medicinal properties and is effective in the treatment of arthritic pain and heart disease. It is an ingredient listed in various weight loss supplements and is useful in maintaining weight gain and lowering cholesterol. Research has shown guggul to have anti-inflammatory aspects which reduce levels of **C-reactive protein**. You can find guggul extract in tablet or capsule forms.

Iodine - Mountainous terrain and areas that have been covered by glaciers tend to be iodine deficient anywhere in the world. Large areas of the United States, particularly the mid-West and mountain states are our "goiter belt." Populations that live there are at increased risk of both goiter and cancer. In particular, cancer of the uterus, ovary and breast all correlate inversely to iodine intake. It may be that low iodine leads to increased pituitary gonadotrophin and increased estrogen, which is a tumor promoter. Before the use of iodized salt in 1924 about half the people of Michigan had thyroid goiters! **The ideal daily iodine intake appears to be 1100 mcg, i.e., 7 times the RDA, which is the amount contained in most multi-vitamin tablets or in a teaspoonful of iodized salt.** Ocean kelp contains about 5000 mcg per teaspoonful. By comparison, potassium iodide, which is available only on prescription, contains 30,000 mcg (ie. 30 mg) per drop. Evidently there are benefits from iodine beyond its essential role in the formation of thyroid hormone. Throughout the world the occurrence rates of breast, uterine and ovarian cancer all correlate inversely with dietary intake of iodine. **The higher the iodide intake the lower the rate of cancer. Iodine gets rid of cysts and nodules. There has been some research that indicates that oral iodine supplements have antifibrotic and anti-inflammatory effects.**

Magnesium - A study involving 3,713 postmenopausal women has shown that magnesium possesses amazing anti-inflammatory properties. Magnesium could also be another safe alternative to the unreliable and dangerous effects of anti-inflammatory pharmaceuticals. According to the study, inflammatory indicators in the body such as CRP (C-reactive protein), TNF (tumor necrosis factor alpha), and IL6 (interleukin 6) were all reduced when magnesium intake was increased. This means that magnesium plays a direct role in lowering common inflammatory markers, further adding to its beneficial properties. Inflammation in the walls of the arteries was also reduced in response to an increased intake of magnesium. What this means is with increased intake of magnesium, it is much harder for plaque to form on the lining of the arteries. Since plaque forms due to the inflammation of the arterial lining, this is great news for those who suffer from heart disease

or other cardiovascular health problems. Using magnesium regularly may contribute to good circulatory health as well.
http://www.naturalnews.com/030214_magnesium_inflammation.html#ixzz21vGkZx88

Dr. Doris Rapp has told the Author that when a person dies of a heart attack - it would be more accurate to say they died of a magnesium deficiency. You may want to read how to take an epsom salt (or magnesium chloride) bath in Chapter 16 of THE BEST CONTROL II. Inflammation has been tied to countless troubling medical conditions, causing millions to suffer every day. Supplementing with magnesium or even rounding out your diet to include more magnesium-rich foods should be the first step to combating inflammation. Avoid dangerous and expensive pharmaceuticals that only exacerbate the problem, and stick to natural solutions.

<http://shatterlimits.com/magnesium-is-a-powerful-natural-anti-inflammatory-mineral/>

http://www.wellnessresources.com/health/articles/magnesium_the_anti-inflammatory_mineral/

<http://health.usnews.com/health-news/diet-fitness/diet/articles/2010/09/09/most-americans-still-not-eating-enough-fruits-veggies.html>

<http://ods.od.nih.gov/factsheets/magnesium/>

Marshmallow root - is comprised of starch, sucrose, mucilage, asparagine, flavonoids, and phenolic acids. It has been used to relieve inflammation of the mucus membranes. Typically found as a tea.

Mushrooms - Shitake, Maitake, Enoki, oyster mushrooms. There is no better way to fight cancer and enhance your health than to feast on a plate of stir-fried anti-inflammatory mushrooms. **DO NOT DEEP FRY THEM!**

Olive Leaf Extract - is an amazing antibacterial and antiviral plant which has the ability to combat a range of illnesses. It has natural anti-inflammatory effects and studies have demonstrated the potency as a natural NSAID (nonsteroidal anti-inflammatory drug) similar to ibuprofen. Olive leaf extract is an immune enhancer and powerful antioxidant with proven clinical studies of beneficial effects for rheumatoid arthritis and osteoarthritis. Oleuropein is the olive leaf's main component along with polyphenols, hydroxytyrosol, and tyrosol which are the substances that give the olive leaf its health benefits. An excellent potency level for olive leaf extract is 20% oleuropein. Olive leaf is available in capsule, tea, tincture and powder forms.

Olive Oil - A substance (oleocanhol) found in extra-virgin olive oil acts as a natural pain reliever and has anti-inflammatory effects similar to those of ibuprofen. This anti-inflammatory action found in extra virgin olive oil helps explain why its use has been linked to heart attack prevention and why it alleviates the symptoms of arthritis. This non-steroidal substance called oleocanhol inhibits two enzymes (Cox-1 and Cox-2) involved in the process of inflammation. Inflammation plays a key role in the hardening of the arteries (atherosclerosis). Oleocanhol may be reduced or even eliminated in the refining process so use only extra-virgin olive oil. The Mediterranean Diet provides its users with a reduced risk of stroke, heart disease, lung cancer, breast cancer and some forms of dementia - all of which have been linked to inflammation.

Another important component of extra-virgin olive oil is hydroxytyrosol - an extremely rare, high potent polyphenol. Hydroxytyrosol can actually slow the aging process in the skin by stabilizing the cell plasma membrane. Olive oil polyphenols are very important anti-oxidants (natural anti-inflammatories) that are found in their highest concentrations in extra-virgin olive oil. They are essential to an anti-inflammatory diet! **Extra-virgin olive oil: decreases "bad" cholesterol, increases "good" cholesterol, lowers blood pressure, prevents osteoporosis, reduces the risk of breast and prostate cancers, lowers glucose levels in diabetics, stimulates pancreas secretion, helps gall bladder activity, decreases gastric acid secretions in ulcers, etc.**

The monounsaturated fats in olive oil are also turned into anti-inflammatory agents by the body that can lower occurrences of asthma and rheumatoid arthritis. Another good oil is **Avocado oil**; a/k/a alligator pear, avocado produces oil that has a fat composition similar to olive oil, containing high heart-beneficial monounsaturated fats. But it has an even higher smoke point than olive oil, making it the ideal oil for cooking.

Oregano has extremely high levels of antioxidants and antimicrobial compounds. One teaspoon of oregano has the same antioxidant power (ORAC) of two cups of red grapes! It contains the phytochemical Quercetin, which is known to slow cancer growth and also promote apoptosis. Oregano is a good source of vitamin K and iron.

Papaya - Christopher Columbus called Papaya 'the fruit of the angels', papaya contains papain, a protein-digesting enzyme. Together with other nutrients such as vitamin C and E, papain helps to reduce inflammation, improves digestion and healing from burns.

Quercetin - Many plant foods contain flavonoid compounds, which are known to inhibit inflammation. One of the most potent flavonoids is quercetin. One red onion, or a cup of berries, or three servings of greens provides about 10mg of quercetin. Other good sources of quercetin include red wine, tea, grapefruit, broccoli, squash, red grapes, cranberries and citrus fruits.

Quercetin is one reason why vegetarian diets have proven highly effective in reducing pain and inflammation. However, taking fifty times this amount, 500mg a day, quercetin becomes a potent anti-inflammatory inhibiting the production of the pro-inflammatory prostaglandins (type 2) and also inhibiting the release of histamine, which is involved in inflammatory reactions.

Seaweed - Seaweed therapy a/ka/ Thalassotherapy or Algae therapy, the amazing healing (antibacterial and anti-inflammatory) properties of seaweed have been known for thousands of years. Seaweed therapy benefits people with Arthritis, Osteo-arthritis and Rheumatoid Arthritis, people with Eczema and Psoriasis, hard working manual labourers, gardeners, craftsmen and women with stiff sore muscles and joints, all will benefit from the use of seaweed. For Insomnia and people with poor sleeping patterns, seaweed baths will help you sleep. The beauty benefits are often seen as the antioxidant, anti-aging and moisturising properties improve the skin. The results are positive and you will see and feel the difference. The ancient Greeks used seaweed and sea water for many healing benefits and held seaweed therapy baths in high regard.

Kelp such as kombu contains fucoidan, a type of complex carbohydrate that is anti-inflammatory, anti-tumor and anti-oxidative. A few studies on fucoidan in recent years have found promising results in using the brown algae extract to control liver and lung cancer and to promote collagen synthesis. The high fiber content of kelp also helps to induce fullness, slow fat absorption and promote weight loss. **Many types of seaweeds are edible, e.g., Wakame, Dulse, Nori, Kelp and Arame.** They contain more protein than meat, more calcium than milk and contain many important vitamins including anti-stress B vitamins, vitamin K and important minerals. Seaweed is rich in magnesium and manganese. **Most amazing is that seaweed has the ability to remove radioactive strontium and other heavy metals from our bodies. Rich in iodine, seaweed will help balance the thyroid, and significantly, will act as an anti-inflammatory, reducing painful swollen joints. Seaweed is a natural anti-fungal, anti-bacterial, anti-viral, antioxidant and also contains antiseptic properties. Seaweed is also said to have anti-cancer properties, with research currently under way in Japan with a view to reducing tumors!**

You may be aware that seaweed is often used when making sushi but that really is just a taste of what this super food has to offer. Sea Veggies as they are also known, are packed with minerals and trace minerals. The sea contains all 92 minerals necessary for complete nutrition and seaweed growing in the sea obviously has access to all these minerals. Have you ever wondered why people on a Western diet are always hungry, overeat and suffer from food cravings? Most commercially grown foods are a very poor source of nutrition. The hybridizing alone makes foods genetically weak and demineralised, never mind that the soil they are grown in is over-farmed and depleted of all micro-organisms. So, you may constantly “feel hungry” but that “feeling” is often simply a signal that your body is searching for more trace minerals.

Whenever possible, use only organic kelp/seaweed harvested from an unpolluted sea.

Serrapeptase - Serrapeptase a/k/a serratiopeptidase is a proteolytic enzyme, which means it chops up and digests protein - in other words, serrapeptase breaks down “non living” matter in the human body. Serrapeptase is an enzyme produced by serratia bacteria living on silkworms. With this enzyme the worms literally melt a hole out of the cocoon. The astonishing fact is that, unlike other biological enzymes, Serrapeptase affects only non-living tissue, like the silk cocoon. This is the reason the silkworm (Bombyx mori) is not harmed. Therefore the same serrapeptase enzymes can safely remove (silk-like) blockages in the body that impede healing and optimal health. You can imagine this enzyme as a pipe cleaner or bulldozer for the body that dissolves arterial plaque, blood clots, cysts, arterial plaque and scar tissue while banishing pain and inflammation. It's manufactured by bacteria in the bodies of silkworms and allows the emerging moth to escape by digesting their cocoons. Serrapeptase enteric coated supplements for human consumption are made from fermented enzymes extracted from the worms and marketed as an aid to normalize inflammatory response and improve overall tissue health. Serrapeptase has been used in Europe and Asia since the 1980s to treat everything from pain to narrowed arteries and for fighting inflammatory diseases. The Author has used it to help restore his badly deteriorated lungs - he found that the enzymes in serrapeptase removed all of the inflammation, mucus and dead/scar tissue in his lungs - which enabled his own body's natural healing system to better replace the bad tissue with healthy tissue which resulted in better lung function. Serrapeptase stands alone in fighting and removing the combined threats of fibrin, mucous and inflammation in the body. Serrapeptase is used to dissolve non-living tissues including: scar tissue, fibrosis, blood clots, cysts and arterial plaque. Serrapeptase can also play a key role in dissolving the outer protective layers of cancer cells and tumors to enable the immune system and other cancer fighters to better attack the cancer.

Serrapeptase promotes a reduction in levels of dead tissue in the circulatory system, which promotes smoother healthier flowing blood. Fibrin often builds up throughout the body and can manifest in many undesirable and unhealthy ailments. Serrapeptase fights fibrin build up in the cardiovascular system, organs and muscle tissue. The late German physician, Dr. Hans Nieper, used serrapeptase to treat arterial blockage in his coronary patients. He found that serrapeptase helps against stroke and is reportedly more effective and quicker than EDTA Chelation treatments in removing arterial plaque. He also

reports that serrapeptase dissolves blood clots and causes varicose veins to shrink or diminish. Dr. Nieper told of a woman scheduled for hand amputation and a man scheduled for bypass surgery who both recovered quickly without surgery after treatment with Serrapeptase .

A January 2008 study in the "Indian Journal of Pharmaceutical Sciences" found that serratiopeptidase showed better anti-inflammatory activity on inflammation in laboratory rats than aspirin. Caution:serrapeptase hasn't been studied long enough to determine side effects, although it seems to be fairly well tolerated. A few elderly people who uses the product over a long period of time experienced gastrointestinal irritation, and some patients with a history of lung problems had an increased risk of infection when using the supplement.

<http://www.livestrong.com/article/465890-does-serrapeptase-reduce-inflammation/#ixzz21puRsETT>

As we age, fibrosis becomes a leading cause of our eventual deaths. In our late 20's - our bodies begin to produce an ever-diminishing output of enzymes and by the time we reach our 40's we produce very little enzymes. Cystic fibrosis patients have virtually no enzyme production to speak of, and even cystic fibrosis children seldom make it past their 20's before they die due to the restriction and shrinkage in the lungs from the formation of fibrosis or scar tissue. As a result of diminishing enzyme production, our bodies are less and less able to reduce the over abundance of fibrin it deposits in nearly everything from simple cuts, to the inside of our internal organs and blood vessels. This inability is particularly noticeable in women, who frequently develop conditions such as fibrocystic breast disease, uterine fibroids, adhesions, and endometriosis. Men and women alike grow arterial sclerotic plaque (which is scar tissue). We are all also prone to have fibrin begin to spider its way into our internal organs, reducing the organs' size and function over time. As we age, our wounds heal with thicker, less pliable, weaker and more visible scars.

By replacing lost enzymes we can help control and reduce scar tissue and fibrosis, thus preventing many of the problems associated with lack of enzymes and excess fibrin. Adding vital enzymes can also help reverse and control existing conditions caused by fibrosis. Even old scar tissue can be dissolved and "eaten away" from surgical wounds, pulmonary fibrosis, kidney fibrosis and even keloids even years after their formation. Though doctors in the United States are only recently becoming aware of the benefits of added enzymes, doctors in Europe and Asia have been administering enzymes for decades. Among the best enzymes for removal of scar tissue are serrapeptase and nattokinase. Bromelain and quercetin are two botanicals with natural anti-inflammatory properties. Their synergistic combination is indicated for the inflammation, swelling and pain that often accompany a surgical procedure, injury, trauma or athletic event and chronic conditions such as rheumatoid arthritis, bursitis, and tendonitis. Chymotrypsin and pancreatin are considered to be especially valuable against cancer tumors, especially pancreatic cancer tumors. Serrapeptase is particularly sensitive to a low pH, thus the Author believes the supplement versions which are enterically coated are vastly superior.

http://www.naturalnews.com/028285_enzymes_scars.html#ixzz21q5HGm4v

Slippery Elm - soothes the GI tract. Research studies show that it helps inflammatory bowel diseases like Crohn's disease and ulcerative colitis. Unfortunately, places like the UK have had to ban the sale of this bark, as some women use the tree bark to induce abortion.

Spinach is such a rich source of anti-inflammatory and anti-oxidative flavonoids and carotenoids that it's almost impossible to believe. But it's true. And here's only a partial list: Vitamin A, B2, B6, C, E, K, calcium, folate, iron, magnesium, manganese, potassium and tryptophan. **But be sure to buy organic spinach whenever possible as it's also among the foods that are heavily sprayed with pesticide POISONS!**

Spirulina - a free-floating filamentous microalgae, is frequently described as the most complete food source in the world that can bring to us a diverse coverage of health benefits. Spirulina contains over 100 easily absorbed, life-enhancing nutrients:

- **Proteins:** protein content is between 55 and 70% of the cell weight
- **Vitamins:** B1(Thiamine), B2(riboflavin), B3 (nicotinamide), B6 (pyridoxine), B9(folic acid), C, D and E.
- **Minerals:** Potassium, calcium, iron , magnesium, sodium and zinc.
- **Essential fatty acids like DHA**
- **Photosynthetic pigments:** chlorophyll, beta-carotene (64 to 70 times more that spinach). In common belief, spirulina protein is containing all essential amino acids , compared to the proteins of meat, milk or eggs and so the vegetarians can use the this supplement for adding additional quality protein to their diet. Different sources of protein, such as legumes, whole grains or meat, provide protein in a lesser amount per cell weight.

Considering of the account of nutrients containing in the cell of spirulina the UN Food and Agriculture Organization recommends it for fighting dietary deficiency around the world, mostly India and Africa. In the USA, the NASA has appointed to use it for astronaut nutriment and plan to cultivate it in airspace stations. And in Russia it was studied in patients affected

by the Chernobyl catastrophe to act as a radiation shelter to the body and being one of their most important weapons in battling the symptoms found in patients living in the contaminated area. Some of the health benefits of spirulina are:

- **Fighting cancer**
- **Boosting immune system**
- **Normalizing Cholesterol**
- **Cushioning diabetes risks**
- **With no sugar or carbohydrates** being present in the plant and a large mass of protein spirulina can boost in weight loss.
- **Helps keeping the energy level very high in the organism.** Other health benefits are shown in recent studies to come from the anti-oxidative role that beta-carotene and phycocyanin plays in the metabolism of the cell. As long as you consume spirulina powder that has vitamins, protein, minerals, Omega 6 Fatty acids, chlorophyll and other phytonutrients, your body answers back in a very affirmatory way. NASA studies have demonstrated that two pounds of Spirulina powder has the same grand account of nutrients that are found in about 2000 pounds of "assorted vegetables". With its high nutritional value, Spirulina has been consumed as food for centuries in Central Africa. It is now widely used as nutraceutical food supplement worldwide. Recently, great attention and extensive studies have been devoted to evaluate its therapeutic benefits on an array of diseased conditions including hypercholesterolemia, hyperglycerolemia, cardiovascular diseases, inflammatory diseases, cancer, and viral infections. The cardiovascular benefits of Spirulina are primarily resulted from its hypolipidemic, antioxidant, and anti-inflammatory activities. There is a significant body of research on the benefits of Phycocyanin, the blue pigment found only in Spirulina and cyanobacteria. Dr. Paula Bickford, a Professor at the University of South Florida Center for Aging and Brain Repair did a study that proved that Spirulina reduces ischemic brain damage in rats, and that these rats had improved post-stroke locomotor activity. This study compared Spirulina to blueberries, spinach and a control group. Both blueberries and spinach reduced brain damage caused by ischemia by roughly 30%; Spirulina reduced it by 70%! And what is even more amazing is that blueberries and spinach were given to the rats at a level of 2% of their total diet, while Spirulina was given at only 0.33% of their total diet (Wang et al, 2005). Spirulina is generally considered safe for human consumption supported by its long history of use as food source and its favorable safety profile in animal studies. However, rare cases of side-effects in humans have been reported. <http://www.ncbi.nlm.nih.gov/pubmed/20633020>

Sweet potato is also a good source of complex carbohydrate, beta-carotene, manganese, vitamin B6 and C as well as dietary fiber. Working in concert, these nutrients are powerful antioxidants that help to heal inflammation in the body.

Theramin Clay (Calcium Montmorillonite) - The most common degenerative diseases today are heart disease, cancer, diabetes, and osteoporosis, and many others can be linked to mineral and trace mineral deficiencies. Even with a healthy diet, without trace minerals the body is defenseless. Studies show that mineral micronutrients are a necessity to every single cell and its corresponding enzyme systems. Not only are most people mineral deficient, but we are bombarded with man-made toxins from chemicals, pesticides, and food additives. Minerals are needed to help the body detoxify, but commercially available colloidal minerals and oral supplements cannot directly remove toxins from your body. TerraMin can. Containing nature's most powerful, internal organic cleansing clay, TerraMin sweeps away pathogens, heavy metals, and mycotoxins from your colon. The answer is TerraMin Mineral Supplements that are specifically made to preserve its natural ionic state, this incredible supplement is both a detoxifying agent and a high nutrient source. ION-MIN contains 57 micro, macro, and trace minerals that are needed to support metabolic functions. These positively charged colloids are sandwiched inside tiny negatively charged platelets, so they are plentiful and bio-available in a buffered form. They are freely available as your body needs them. The FDA only considers 17 minerals to be "essential." Find out about the others that you may be missing. One of these minerals is silica, an amazing and vital mineral that many people simply don't get enough of. Silica strengthens your hair, teeth, bones and all your connective tissue. Without enough silica, your skin ages prematurely. Most people still don't get enough of it from their diet. While these extremely fine particles are in your body, they simultaneously act to detoxify and absorb heavy metals. As a powerful antibacterial agent, this compound will help keep your body clean and strong. This "living" clay will help detoxify your body and will reduce **inflammation** and acid reflux. **Mix the clay with colloidal silver to heal virtually all wounds and skin problems. It is a wonderful pain reliever when hydrated and applied to stings.**

Vitamin B - If your current diet is heavy in sugar, refined flour, coffee, and alcohol, you may have reduced stores of B vitamins in your body. The University of Maryland Medical Center lists vitamins B6, B9 and B12 among its list of anti-inflammatory vitamins and minerals. B6, also known as pyridoxine, has been prescribed to arthritis sufferers because of its ability to shrink inflamed membranes surrounding weight-bearing joints, according to "The H* Factor Solution" by James Braly, M.D. and Patrick Holford. Braly and Holford also cite a study conducted by the American College of Nutrition that found B12 supplements to be more effective on average for reliving tenderness among 26 patients who had been suffering from arthritis for at least five years. According to "Brain Protection in Schizophrenia, Mood and Cognitive Disorders" by Michael S. Ritsner, clinical studies found a correlation between B12 deficiency and advanced cognitive impairment in patients with Alzheimer's disease, leading researchers to hypothesize that B12 possesses anti-inflammatory properties that

protect the brain.

Other research points to B vitamins in complex carbohydrates as being important in ending pain, particularly nociceptive pain, which comes when you have a sprain, fracture, bump, bruise, inflammation from infection or arthritic disorder, and myofascial pain (abnormal muscle stresses). Still other studies explored the possibility that the effects of vitamin B1 (thiamin), B6 (pyridoxine), and B12 (cyanocobalamin) might reduce inflammation. Findings presented at the American Physiological Society Conference in San Diego, California, concluded that some B vitamins may be clinically effective in treating painful conditions such as lumbago, sciatica, and other types of pain by acting as an analgesic (pain reliever). Findings from the National Institutes of Health link vitamin B3 (niacin or niacinamide) with improved range of motion and reduced pain and inflammation. It is thought that vitamin B3 may be helpful in preventing osteoarthritis by enhancing glucocorticoid secretion (natural steroid), which would decrease inflammation in the body. Low vitamin B-6 concentrations are associated with inflammation, higher oxidative stress, and metabolic conditions in older people. **A new study shows that individuals with the highest vitamin B6 intake had the lowest levels of inflammation.** B vitamins are so important to energy production, nerves health, and stress tolerance that a shortage of them can cause fatigue and a poor mood all of which can be linked to increased inflammation. **So, if your stress level rises or the feeling of wear and tear increases, then so should your B vitamin intake.**

Neurotransmitters, chiefly dopamine and serotonin are affected (as is the brain itself) by chronic inflammation. Inflammation also causes other Vitamin B deficiencies that have an important role in healthy biochemistry such as in the formation of serotonin and dopamine. Folate, or vitamin B9, is critical for the synthesis of neurotransmitters like serotonin and dopamine both of which help soothe chronic inflammation and help heal depression. In a study conducted by Harvard University, up to 38% of adults diagnosed with depression had low or borderline levels of folate. The same study found that folate deficiency is also connected to a reduced response to antidepressants, especially selective serotonin reuptake inhibitors (SSRIs). Almonds, pumpkin seeds and sunflower seeds are all good sources of folate. A quarter-cup of sunflower seeds scores highest at over 20% of your Daily Value (DV) for folate. People with depression also need to eat more foods containing tryptophan. This calming amino acid is converted in the brain to serotonin, the mood-calming neurotransmitter, which is used by your pineal gland to make melatonin, the sleep-regulating hormone triggered by darkness. **If you supplement with Methyl Folate always take that supplement with Methyl B12.**

Other vitamins - A study published in 1967 in the scientific magazine "Nature" concluded that vitamin E is also an effective anti-inflammatory agent, and another study published in August of 2008 in the "Journal of the American College of Nutrition" found that in conjunction with vitamin C, vitamin E lowered inflammation and improved insulin action in older patients with glucose disorders. Integrated medicine physician and author Dr. Andrew Weil recommends 400 IU of vitamin E daily as part of a vitamin and mineral cocktail designed to reduce inflammation

Vitamin D - If you have cancer, starting a vitamin D regimen is very important. It can save your life. Taking less than 4,000 IU of vitamin D daily is too weak, leaving cancer untouched. Taking more than 40,000 IU of vitamin D daily is too dangerous, leading to vitamin D toxicity. Therefore, a strong and safe cancer-cure dose could range from 10,000 IU to 20,000 IU of vitamin D daily. There are additional cancer-cure regimens involving tomatoes and broccoli, and cayenne pepper that you can use with your vitamin D regimen. **Before you start a vitamin D protocol, know this one fact: Some drugs interact with vitamin D. You need to talk to your health advisor!**

White Willow Bark - has been used since 400 BCE to reduce inflammation and pain. It works well for bursitis and tendonitis. The bark contains salicin, which is very similar to aspirin. The anti-inflammatory properties may be slower, but they typically last longer. Do not take with Bismuth subsalicylates (Pepto-Bismol, Maalox, etc.)

The real process of building great health comes when you put all these anti-inflammatory tools together. In practical terms this means both eating more of the suggested organic foods and avoiding all of the inflammatory/polluted products on a daily basis and taking the necessary supplements.

FOOD CAUTION - If you've allergic to any foods/supplements found in this Chapter or Book, you must avoid them, no matter how nutrient-packed they may be. Consuming food that you're sensitive to will only cause more — not reduce — inflammation.

Dangerous Over-the-counter anti-inflammatories (NSAID's)

Aspirin was the first of the non-steroidal anti-inflammatories (NSAID's), the others were not available until 1955 when Tylenol was first marketed. Aspirin is a "grandfathered" drug. It was already on the market when the FDA started doing drug trials. It is possible aspirin would not have been approved. Over 100,000 people are hospitalized for GI bleeding caused by aspirin and similar drugs every year. NSAID's are the most commonly used drug on the market, sold over the

counter and by prescription.

Ibuprofen, acetametaphen and naproxen - are used primarily to treat inflammation, mild to moderate pain, and fever. But these over-the-counter (OTC) drugs are also a significant sources of morbidity and mortality in the United States. They currently are used by millions of people millions of times every day—but, very few people are aware of the dangers posed by common OTC medications, especially acetaminophen and nonsteroidal anti-inflammatory drugs (NSAIDs) such as ibuprofen and naproxen. Acetaminophen and NSAIDs commonly cause serious liver and gastrointestinal side effects, yet most people have no idea how dangerous they can be. Part of this ignorance is because these strong medications are available without prescriptions, and heavy television and magazine advertising has perhaps given the impression that cold medicines, pain killers, antihistamines, and other ubiquitous drugs are safe. In fact, OTC medications as a category are responsible for more than 150,000 hospitalizations every year, according to the Food and Drug Administration, and almost 1000 OTC medications have been linked to liver toxicity, which causes about 2000 deaths annually in the United States (Ford MD et al 2001).

Acetaminophen is especially dangerous because of its effect on the liver, which is responsible for metabolizing drugs. If toxic levels of acetaminophen occur in the liver, the natural antioxidant defenses of the body are overwhelmed, and the liver is damaged by the buildup of dangerous free radicals. It is therefore imperative that people who are taking acetaminophen also take sufficient quantities of antioxidants to help try to support healthy liver function. **Acetometaphen depletes glutathione (the main detoxifying enzyme) and the patient dies. Acetaminophen toxicity is the most common cause of hepatic failure requiring liver transplantation in Great Britain. In the United States, APAP toxicity has replaced viral hepatitis as the most common cause of acute hepatic failure and is the second most common cause of liver failure requiring transplantation. Mixed with even modest quantities of alcohol you can end up needing a liver transplant.**

A few final thoughts on inflammation and cancer

Cancerous cells are always being created in the body. It's an ongoing process that has gone on since the beginning of time and your immune system was specifically designed to seek out and destroy cancer cells. Your body was designed to heal itself - if you do not abuse it!

Cancer has been around as long as mankind, but only in the second half of the 20th century did the number of cancer cases explode. Contributing to this explosion are the excessive amounts of toxins and pollutants we all are now exposed to, high stress lifestyles that zap the immune system, poor quality junk food that's full of pesticides, irradiated and now genetically modified, pathogens, electromagnetic stress, lights, and just about everything that wasn't here 200 years ago. All these weaken your immune system, and alter the internal environment in your body to an environment that promotes the growth of cancer.

Dr. Hamer, a German oncologist, developed cancer in the late 70s, shortly after his son's untimely death. Theorizing there was a connection between the stress of his son's death and his development of cancer, he began to investigate his cancer patients' histories, and found that they too had experienced an unexpected shock or trauma shortly before their onset of cancer. The word dis-ease tells us the cause of disease is when we are not at ease.

Cancer tumors begin when *more* cancerous cells are being created than your now overworked, depleted immune system can destroy. Constant exposure to tens of thousands of man-made chemicals from birth onward, chlorinated and fluoridated water, electromagnetic radiation, pesticides and other toxins, leads to the creation of too many **free radicals** and excessive numbers of cancerous cells. Alone this contamination would be enough to raise cancer levels, but combined with an immune system that has been weakened by a diet of refined and over processed food, mineral depleted soils, and too much exposure to artificial light at night, the immune system at some point is no longer is able to keep cancer in check, and it starts to grow in your body. Research shows that the immune system needs 9 1/2 hours of sleep in total darkness to recharge completely - are you resting enough?

Because of all this stress and the constant bombardment of toxins, you end up with a malfunctioning immune system, and a body that is not capable of destroying the excessive numbers of cancerous cells that develop, survive and multiply. And then you have cancer. Of course, your diet loaded with sugar and refined carbohydrates doesn't help. Refined carbohydrates digest so fast they act like sugar, and cancer cells love sugar. They have about 15 times more receptor cells for capturing sugar than healthy cells. Overcoming cancer is a process of **reversing** the conditions that first allowed the cancer to develop, and then going after and killing cancerous cells.

Fifty years from now, the current conventional chemo cancer treatments used by doctors will on the whole be viewed in the same light that we view the old medical practice of using leeches or blood letting to cure illnesses.

Chemotherapy and other treatments damage cells and tear down and weaken the immune system. But the problem in the first place is that your immune system is already weak, and that your cells are already damaged. Even if tumors do go into remission, these toxic treatments will have damaged other cells, which are then more likely to turn cancerous. Your immune system, unless it is supported by supplements and diet to help it recover, will be in worse shape than ever. While it may have taken decades for cancer to develop in your body the first time around, the second time usually only takes a year or two. In a survey of 79 oncologists from McGill University Cancer Center in Canada, 64 said they would not consent to treatment with Cisplatin, a common chemotherapy drug, while 58 oncologists said they would reject all the current trials being carried out by their establishment. Why? "The ineffectiveness of chemotherapy and its unacceptable degree of toxicity." Philip Day, *Cancer: Why We're Still Dying to Know the Truth*.....

Allopathic Doctors continue to use and only recommend prescription drugs that are FDA "registered" in a process that costs hundreds of millions of dollars. The drug companies only make synthetic drugs that can be patented. That way they can sell them for huge mark-ups and have no competition. Unfortunately, anything that has been altered from nature, which it must be to be patented, becomes a toxic substance in your body. Your body can handle natural foods and herbs, the altered ones have toxic side-effects and just don't work well in your body. It's why the biggest cause of deaths in the US is from properly prescribed medical drugs. No company would ever take an unpatentable natural product through the drug approval process, so the healthy natural supplements aren't FDA registered to be used for cancer or whatever other health condition they may help. As they are not approved, doctors, or at least most doctors, can't/won't use them, and most don't even know about them.

Low Levels Of Cellular Oxygen Breed Cancer - Increasing Oxygen Levels Kills Cancerous Cells

This is why the flax oil in cottage cheese treatment popular in Europe has become a well known cancer treatment. It provides Omega 3 essential fatty acids needed by cell walls so that oxygen can enter the cells and it works quite well. It is great for diabetes and heart or cardiovascular disease also. To vigorously fight cancer with this approach, use a lot of flax oil or daily ground up flax seeds mixed in as much cottage cheese (organic preferably) as you need to get it down. Use up to 8 tablespoons of flax oil daily, or 16 tablespoons (1 cup) of ground up flax seeds daily with cottage cheese to enhance absorption. Make sure the flax oil or flax meal if you buy it, has been refrigerated at the store, and keep it refrigerated at home. If you grind up flax seeds, use them immediately or store the extra in the refrigerator or freezer. A coffee grinder or blender works for this. Flax oil goes rancid very easily. And stay away from vegetable oils as they hinder its effects.

Acidic pH Levels Lead to Cancer - Normalizing pH Levels Can Stop Cancer in Its Tracks

There is a long history of reversing cancer simply by alkalinizing the body. It is one of the basic strategies in the battle against cancer and for improving your health in general. So, eat properly and take baking soda on a daily basis.

A Weakened Immune System Leads to Cancer - A Strong Immune System Seeks Out and Destroys Cancer Cells

Many natural supplements like blue green algae support the immune system. The trick is to find and use the ones that work the best for you, as it is easy to squander resources on products that won't get the job done. The other concern is to make sure you take enough. Taking 5 to 10 times the normal supplemental amount often seems to work best when using natural supplements.

Toxins (Genetically-Modified Foods & Chlorine) Cause Cancer - Reducing Toxic Overload Vital for Eliminating Cancer

Cancer is mainly caused by environmental toxins and pollution. While there are obviously other issues, fungus, viruses, genetics, etc., but the major change in the world that led to the explosion of cancer over the last 100 years has been the introduction of literally tons of toxic synthetic pesticides and chemicals into our environment. Chemicals that we as people had never been exposed to before. Ones that your body doesn't know how to handle - you are daily exposed to 70,000 chemicals -- 20,000 of which are known cancer-causing agents. These all cause free radical damage. These man-made toxins overwhelm the defenses of your body and cancer develops. Unfortunately, if industry and "our" government they seem to control have their way, it will even become worse. **So, eat organically and take supplements.**

The Chlorinated Water and Cancer Connection

The French, with their lower cancer rates from consuming OPC's and resveratrol in red wine, have made red wine famous for its health benefits. There is another side to their lower cancer rates that most people don't know...The French do not drink chlorinated water. They ozonate their drinking water to purify it. We don't use chlorine because it's safe, we use it because it is cheap. We essentially still pour bleach in our water before we drink it. The long-term effects of chlorinated drinking water

are disastrous. According to the U. S. Council of Environmental Quality, "Cancer risk among people drinking chlorinated water is 93% higher than among those whose water does not contain chlorine." Dr. Joseph Price wrote a highly controversial book in the late sixties entitled: Coronaries/Cholesterol/Chlorine, and concluded that nothing can negate the incontrovertible fact that the basic cause of arteriosclerosis, heart attacks and stroke, is chlorine. So, drink filtered water.



Low Levels of Enzymes are Always Found in Cancer - Use the Right Enzymes to Kill Cancer Cells

Researchers have noted for years a correspondence between low enzyme levels and cancer. In fact enzyme therapy has been used with good results against cancers in Europe, and by some doctors in the United States. To literally digest cancerous cells. The major reason enzymes levels become depleted is that we eat mostly processed, irradiated and cooked food. The digestive system was designed to process raw food. Raw food, when it is picked ripe, has enzymes in it that help break down that food in the upper stomach where it sits for 30 to 45 minutes. The enzymes in the food predigest that food. Then in the lower stomach the pancreas excretes more enzymes. When you eat cooked, irradiated and processed foods, the enzymes have been killed; the food does not predigest in the upper stomach. So when it reaches the lower stomach two things happen. The pancreas must make extra enzymes to try and break down the food and often the food is only partially digested. The pancreas, after decades of overworking, eventually is no longer able to produce an adequate supply of enzymes. So you develop low enzyme levels of all types of enzymes, and your body cannot naturally kill cancerous cells using enzymes. In addition, food that is not completely digested all too often makes its way into the bloodstream. Especially if you have leaky gut syndrome from Candida overgrowth. This partially digested food is treated as a toxin, and the immune system has to get rid of it. This puts an additional strain on the already overworked immune system.

Taking a good quality enzyme supplement with meals, one that has high levels of protease to digest protein, lipase to digest fat, and amylase to digest carbohydrates helps break down food in the upper stomach. So that the pancreas doesn't have to produce extra enzymes. Food is better digested. You also need to take Betaine HCL and the HCL Activator to help break down protein. It is important to take enzymes on an empty stomach. A stack of research shows that enzymes, when taken in this manner, will go into the bloodstream and clean it up. And in the process digest and kill cancer cells. Take both a plant-based digestive enzyme along with pancreatic enzymes high in Trypsin and Chymotrypsin for the best results. Take both with meals for improved digestion, and on an empty stomach to get into the body. This will also unstick clumpy red blood cells. Sticky, clumped-up red blood cell clusters clog up capillaries and reduce circulation. So that cells cannot oxygenate properly. Which as you have gathered by now, contributes to cancer. Cancer tumors produce a thick fibrin protein to help protect them from the immune system. This also helps to stick the cancer tumor to wherever it is. Enzymes in the bloodstream can digest and dissolve the fibrin coating. Large amounts of enzymes would need to be taken, and they would need to be enzymes high in protease. <file:///C:/Users/Steve/AppData/Local/Microsoft/Windows/Temporary%20Internet%20Files/Content.IE5/DB8SQU1U/Strategies%20to%20Kill%20Cancer.htm>

Note: It is important to take pancreatic enzymes or protolytic enzymes on an empty stomach or in a enteric coated supplement to reduce inflammation. Pancreatin is naturally programmed to digest only foods, viruses, bacteria and such. It does not harm properly-functioning cells. HCL digestive aids should be taken after you have started eating to maintain proper acidity and provide better protein and calcium adsorption. Taking HCL and enzymes at meals will allow less stress on your pancreas by reducing the amount of enzymes used for digestion. This will enable the body to use more of the pancreatin it produces as a police force digesting the bad guys doing damage to your cells.

FAT is The Missing Factor - Fat, Not Glucose, is the Preferred Fuel for Your Body

Asthma, cancer, diabetes, Alzheimer's disease, and even depression have all been linked to chronic inflammation. Chronic inflammation is not an easy condition to treat, either, because its causes include stress, pollution, bacteria, viruses, parasites, environmental poisons, certain foods (including sugar), smoking, high blood-insulin levels and obesity are just a few of the factors that promote chronic inflammation. The fact that we are living a lot longer than our ancestors did may also be contributing to inflammation; as we age, our ability to shut off the inflammatory process often weakens. As a result, Wendy Demark-Wahnefried, Ph.D., the Webb Endowed Chair of Nutrition Sciences, and many other UAB researchers are investigating ways to control inflammation on an individual basis. Several high-profile celebrities have been touting anti-inflammatory diets as a cure. These diets call for eating lots of fruits and vegetables, decreasing consumption of processed carbohydrates, replacing fats and proteins containing omega-6 with their omega-3 counterparts such as fish, grassfed animals, and using olive oil instead of other oils.

Originally all cattle were grass fed, which is what they were meant to eat; grasses, plants and shrubs. Grazing animals such as cows, sheep, goats and bison possess a rumen, or a second stomach, which is like a fermentation tank. In this rumen, normal bacteria convert grasses, shrubs and plants into protein and fats. When you feed these ruminants grains, all sorts of problems occur. In particular, it makes their digestive tracts acidic and they develop sub acute acidosis. This

results in the animals experiencing diarrhea and excessive salivation. The animals may also kick at their bellies, eat dirt and go off their feed. We also know that this acidic environment encourages the development of E. coli bacteria. This is why feedlot animals need to be given constant antibiotics and is one of the reasons why humans experience problematic bacteria resistant to antibiotics. Switching ruminants from their natural diet of grasses to grains also lowers their nutritional value - **when you choose to eat grass-fed beef, lamb, bison or poultry, you are eating nutritious and healthy meats, as nature intended.**

The foods you choose can either promote or prevent inflammation. Foods containing arachidonic acid, such as eggs, organ meats (including liver, heart and giblets), grain-fed beef and dairy products promote inflammation. Through a complicated process the body breaks down arachidonic acid into inflammatory compounds, including the hormones, prostaglandins and leukotrienes that control the mechanisms of inflammation, constrict blood vessels and promote blood clotting. Overcooked food or foods cooked at high temperatures (including French fries, blackened and/or barbecued foods, fried chicken - high-heat frying or deep-fried foods) incite the inflammatory response because they create advanced glycation end products (AGES), something the body treats as an invader. AGES are produced when a protein is bound to a glucose molecule, resulting in damaged, cross-linked proteins. As the body tries to break these AGES apart, immune cells secrete large amounts of inflammatory cytokines. Many of the diseases that we think of as part of aging are actually caused by this process. Depending on where the AGES occur, the result can be arthritis, heart disease, cataracts, memory loss, wrinkled skin or diabetes complications, to name only a few dis-eases.

It is not only simple, it is logical: If inflammation causes certain diseases, then eating foods that combat inflammation should prevent those diseases. But according to Demark-Wahnefried, these popular anti-inflammatory diets are missing one critical factor: weight control. We know adipose tissue (body fat) has a great deal to do with inflammation, she says. It produces all kinds of cytokines and adipokines, which are signaling molecules that can drive inflammation.

We know that overeating promotes the inflammatory response and suppresses the immune system. Tests performed by the National Institute on Aging revealed that when animals were fed 50 percent fewer calories per day, their immune responses improved, the amount of inflammatory cytokines in circulation were reduced, thymus size were maintained and inflammation-fighting T-cell function improved. This study looked at higher and lower calorie consumption; it did not distinguish among the types of calories consumed. Heavy, red-meat-based diets or lots of sugar-laden foods would definitely have a negative impact on immune function and promote inflammation, whereas calories in the form of fruits, vegetables, legumes, nuts and seeds would improve immunity. **No matter what the food choices, moderation is the key in terms of both total daily quantity and amounts consumed at one time. Generally, five or six small meals (of the right foods) throughout the day are considered to be healthier than gorging on fewer large ones.**

It is known that even an extra 20 pounds can create an abundance of inflammation in the human body and lower overall immunity. Weight management is an important aspect of maintaining a balanced immune system and controlling inflammation. With over 50 percent of North Americans overweight, and an additional 15 percent or more classed as obese, public health care planners expect to see a tremendous increase in chronic inflammatory diseases. Fat cells act like immune cells and secrete inflammatory factors (histamines and cytokines), especially during weight gain. The more fat cells you have, the more potential there is for chronic inflammation. Weight gain also puts tremendous pressure on your joints. For every ten pounds of weight gained, 40 pounds or more of additional pressure is put on your hips and knees, compressing cartilage and collagen, grinding down bones, promoting damage and the chronic inflammatory response.

Inflammatory cytokines are also secreted at a higher rate by those who have insomnia, compared to those who do not. During sleep, the body regenerates and the immune system calms down. Lack of restorative sleep is a major promoter of inflammation. People with rheumatoid arthritis or other autoimmune disorders know this because lack of sleep due to pain associated with their condition promotes further flare-ups and more pain. Up to 33 percent of North Americans are in chronic pain, which disables more people than cancer and heart disease combined. Lost workdays, workers' compensation claims and medical expenses associated with chronic pain are estimated to cost both Canada and the U.S. over US\$100 billion annually. **Adequate rest is essential when battling chronic inflammation. Melatonin, 5-HTP and valerian, among other natural sleep aids, should be used to improve sleep and calm the inflammatory response.**

For many thousands of years humans only ate vegetables, fruit, nuts, roots and grass-fed meat - or a diet that was high in fats and protein, and low in grains and sugar-derived carbohydrates. Today our "normal" diet is the complete opposite, and the average person today suffers more chronic and debilitating diseases than ever before. We were not designed to eat large amounts of refined sugar, high fructose corn syrup, cereal, bread, potatoes, grain-fed beef and pasteurized milk products. Try to eat more like your ancestors did. **FAT is actually the preferred fuel of human metabolism,** and this can be traced back to our evolutionary roots. Because our thin ancestors ate few carbohydrates - the diseases we now know are associated with insulin resistance which is primarily caused by excess consumption of

refined carbs were quite rare. The simple reason for this is that grains and sugars raise insulin levels, which causes insulin resistance and, ultimately, weight gain, diabetes, and heart disease. **And avoiding insulin and leptin resistance are perhaps the single most important factors if you seek optimal health and longevity.**

Mark Sisson has written: The evidence is both clear and overwhelming: Carbohydrate intake is the primary factor that determines your body's fat ratio, and processed grains and sugars (particularly fructose) are the primary culprits behind our skyrocketing obesity and diabetes rates. *It follows logically that if you can limit carb intake to a range of which is absolutely necessary (and even up to 50 grams a day over) and make the difference up with tasty fats and protein, you can literally reprogram your genes back to the evolutionary-based factory setting you had at birth, the setting that offered you the opportunity to start life as a truly efficient fat-burning organism and to continue to do so for the rest of your life as long as you send the right signals to your genes.*

Switching from a carb-based diet to a fat- and protein-based diet will help rebalance your body's chemistry, and a natural side effect of this is weight loss, and/or improved weight management once you are at an ideal weight. One explanation for this is that you don't really get fat from eating too much and exercising too little. Nor do you get fat from eating fat. The Author fondly remembers his thin relatives and their thin friends often eating lard sandwiches whenever they felt hungry. One researcher, Dr. Richard Johnson, whose latest book, [The Fat Switch](#), dispels many of the most pervasive myths relating to diet and obesity. Dr. Johnson discovered the method that animals use to gain fat prior to times of food scarcity, which turned out to be a powerful adaptive benefit. His research showed that fructose activates a key enzyme, fructokinase, which in turn activates another enzyme that *causes cells to accumulate fat*. When this enzyme is blocked, fat cannot be stored in the cell. Interestingly, this is the exact same switch animals use to fatten up in the fall and to burn fat during the winter. **Fructose is the dietary ingredient that turns on this switch, causing cells to accumulate fat, both in animals and in humans.**

In essence, overeating and excess weight could be viewed as a symptom of an improper diet. It is not necessarily the result of eating too many calories, per se, but rather getting your calories from the wrong sources. In simple terms, when you consume too many sugars and carbs, you set off a cascade of chemical reactions in your body that makes you hungrier and increases your craving for sweets: First, fructose is metabolized differently from glucose, with the majority being turned *directly into fat* because fructose stimulates a powerful fat switch. This rapidly leads to weight gain and abdominal obesity ("beer belly"), decreased HDL, increased LDL, elevated triglycerides, elevated blood sugar, and high blood pressure, i.e., classic metabolic syndrome. Dietary carbohydrates, especially fructose, are also the primary source of a substance called glycerol-3-phosphate (g-3-p), which causes fat to become *fixed* in fat tissue.

Fructose further tricks your body into gaining weight by turning off your body's appetite-control system. Fructose does not suppress ghrelin (the "hunger hormone") and doesn't stimulate leptin (the "satiety hormone"), which together result in feeling hungry all the time, even though you've eaten. As a result, you overeat and develop insulin resistance, which is not only an underlying factor of type 2 diabetes, heart disease, and a long list of other chronic diseases. **Researchers at the University of California, San Diego (UCSD) School of Medicine have discovered that inflammation provoked by immune cells called macrophages leads to insulin resistance and Type 2 diabetes. The resulting equation is simple: fructose and dietary carbohydrates (grains, which break down into sugar) lead to excess body fat, obesity, inflammation and related health issues. Obesity helps create chronic inflammation, as fat cells churn out inflammatory proteins called cytokines which in turn create an endless trickle of immune cells that interfere with the body's healthy tissues, triggering genetic mutations that can lead to cancer or the bursting of plaque in an artery wall. Furthermore, no amount of exercise can compensate for this damage because if you eat excessive fructose and grains, the primary ingredients NOT found in our ancestral diet it will activate programming to cause your body to become, and always remain, fat.**

Caution: When you cut grain/sugar carbs you actually need to radically increase the amount of vegetables you eat since, by volume, the grains you need to trade out are denser than vegetables. You also need to dramatically increase healthful fats such as avocados, coconut oil, egg yolks, grass fed organic butter and beef, olives and nuts. You would not want to use highly processed and genetically engineered omega-6 oils like corn, canola and soy as they will upset your omega 6/3 ratio. Of course you want to avoid all trans fats, but contrary to popular advice, saturated fats are a key component of a healthy diet that will promote weight loss. A reasonable goal will be to have as much as 50-70 percent of your diet as healthy fat, which will radically reduce your carbohydrate intake. It can be helpful to remember that fat is far more satiating than carbs, so if you have cut down on your carb intake and feel ravenous, this is a sign that you have not replaced them with sufficient amounts of healthy fat.

The problem with most store-bought beef is that the majority of cattle are grain fed, which gives their meat a relatively high ratio of omega-6 to omega-3 fatty acids. That, in turn, contributes to inflammation. Cattle evolved to graze on grass; they are not adapted to digest grains, which wreak havoc with their digestive systems, even though they promote faster weight

gain. In fact, the need for antibiotics in raising cattle on feedlots results from the alterations in the natural flora of their gastrointestinal tracts from eating grain-based diets. Meat from grass-fed cattle is lower in saturated fat than meat from cattle fed on grain. **The fatty acids in grass fed beef also have more omega-3 fatty acids, vitamin E and conjugated linoleic acid (CLA) - all good for human health and to help reduce belly fat and build lean muscle.**

NaturalNews has reported: "For over 60 years red meat has been vilified for its heart clogging saturated fat & cholesterol content. Grain-fed poultry products have been marketed as the healthiest animal protein due to their low-fat content. New understandings of health and inflammation now reveal that grass-fed beef is significantly more nutrient dense than grain-fed poultry. Saturated fat and cholesterol have been blamed for heart disease and other cardiovascular diseases. Research indicates that saturated fats and cholesterol are necessary for overall cellular health. They play an extremely important role in regulating neurological, cognitive and hormone function. A diet low in these important fats causes lowered immunity, sex hormone function and accelerated aging and brain degeneration. **Red meat can be one of the best foods in an individual's diet or one of the worst. The key factor is what the animal was eating.** Naturally cows eat a near 100% green diet of grass, flowers, shrubs and other wild vegetation. Grain feeding is genetically incongruent for these animals and leads to excessive weight gain and fat accumulation. The typical grain-feed is made up of corn and soy due to the low cost associated with government subsidies. Grain-fed cows are extremely high in omega 6 fatty acids. The average ratio for a cow on a grain-fed diet is roughly 25:1 (omega 6:3). Humans should naturally have an omega 6:3 ratio around 4:1 or 2:1. **When these ratios become skewed, they trigger cellular inflammation and accelerated cellular degeneration.** This environment causes an individual to become highly inflamed and to build degenerative disease. The more grass an animal eats, the greater their omega 3 content and the lower their omega 6 levels. A 100% green-fed diet, which is genetically congruent for a cow, would provide an omega 6:3 ratio of 2:1. This is ideal for the animal's long-term health and is highly anti-inflammatory for human consumption. The omega 3 fatty acids present in this meat are primarily the all-important long-chain variety EPA and DHA." http://www.naturalnews.com/034445_grass-fed_beef_nutrients_poultry.html#ixzz23RiqFkNp

In 400 BCE, the Greek physician Hippocrates observed that sudden death is more common in those who are naturally fat than in the lean — now we finally know why.

One "Last Note" on DMSO - the Author debated even mentioning this treatment for pain and inflammation.....

Dimethyl sulfoxide (DMSO) is a chemical compound which is a by-product of wood processing - DMSO is derived from lignin, the binding substance of trees. . It is a somewhat oily liquid that looks like mineral oil and has a slightly garlicky odor. It has long been used as a chemical solvent. The use of DMSO in medicine dates from around 1963, when an Oregon Health & Science University Medical School team, headed by supposedly unbiased Stanley Jacob, MD, discovered it could penetrate the skin and other membranes without damaging them and could carry other compounds into a biological system. In medicine, DMSO is predominantly used as a topical analgesic, a vehicle for topical application of pharmaceuticals, as an anti-inflammatory, and an antioxidant. Because DMSO increases the rate of absorption of some compounds through organic tissues, including skin, it can be used as a drug delivery system. It is frequently compounded with antifungal medications, enabling them to penetrate not just skin but also toe and fingernails.

The Crown Zellerbach Corporation, a mammoth lumber company, holds a number of patents on DMSO for use as an industrial solvent or liniment for treating pain in horses. Topically-applied DMSO has the unusual ability to act as a "chemical hypodermic needle" which is to say that it is rapidly absorbed through the skin and can take with it other substances that ordinarily would not cross the skin's barrier. Topically-applied DMSO produces a garlic-like taste in the mouth and a breath odor. Topical use can cause a rash, blistering, itching, hives, and skin thickening. Intravenous use can cause kidney damage and other adverse side effects. Very often black market DMSO is industrial grade, not medical grade. A problem with industrial grade DMSO is that companies bottling the substance as an industrial solvent use the same equipment to bottle other substances. Residual toxic materials can contaminate industrial grade DMSO and may be taken into the body by DMSO's action as a "chemical hypodermic."



Cleveland Clinic

In a 1978 study at the Cleveland Clinic Foundation in Cleveland, Ohio, researchers concluded that DMSO brought significant relief to the majority of the 213 patients with inflammatory genitourinary disorders that were studied. They recommended DMSO for all inflammatory conditions not caused by infection or tumor in which symptoms were severe or patients failed to respond to conventional therapy. DMSO has been examined for the treatment of numerous conditions and ailments, but the U.S. Food and Drug Administration (FDA) has approved its use only for the symptomatic relief of patients with interstitial cystitis.

In medical research, DMSO is often used as a drug vehicle in In vivo and in vitro experiments. However, when a researcher is unaware of its pleiotrophic effects, or when the control groups are not carefully planned, a bias can occur; an effect of DMSO can be falsely attributed to the drug. For example, even a very low dose of DMSO has a powerful protective effect against acetaminophen-induced liver injury in mice. DMSO is metabolized to dimethyl sulfide and dimethyl sulfone. It is

subject to renal and pulmonary excretion. A possible side effect of DMSO is, therefore, dimethylsulfidemia, which may cause a related blood-borne halitosis symptom.

DMSO is commonly used in veterinary medicine as a liniment for horses, alone or in combination with other ingredients. In the latter case, often, the intended function of the DMSO is as a solvent, to carry the other ingredients across the skin. Also in horses, DMSO is used intravenously, again alone or in combination with other drugs. It is used alone for the treatment of increased intracranial pressure and/or cerebral edema in horses.

DMSO by itself has low toxicity. Because DMSO easily penetrates the skin, substances dissolved in DMSO may be quickly absorbed. Glove selection is important when working with DMSO. Thick rubber gloves are recommended. Nitrile gloves, which are very commonly used in chemical laboratories, have been found to dissolve rapidly with exposure to DMSO. That is why the Author prefers to only apply/use a 70% DMSO Roll On with 30% Aloe - The product is intended for use as a solvent only. The choice of the process used in the various applications is the sole responsibility of the user. Warnings: Avoid contact with eye, skin, clothing. Wash thoroughly after handling. In case of contact, immediately flush eyes with water. DMSO frequently causes a garlic-like body odor and taste in the mouth. Other reported side effects include stomach upset, sensitivity to light, visual disturbances and headache. Skin irritation can develop at the site where DMSO is applied topically. Only highly purified, properly diluted DMSO should be used and the skin site as well as the applying hand should be thoroughly cleaned before application, because the solvent properties of DMSO allow contaminants to be absorbed through the skin and transported into the bloodstream. Improperly diluted DMSO can also burn the skin. Severe consequences could result if the impure industrial or veterinary grades of DMSO are used on humans. Perhaps the biggest danger with DMSO is that some people who think it is useful for self-treatment of sprains, arthritis and other problems may be willing to apply industrial grade or veterinary grade DMSO to their bodies, drink it or even inject it directly into their bloodstreams. Because DMSO is such a good solvent and is able to carry a wide spectrum of dissolved impurities through cell walls, severe consequences could result if the impure industrial or veterinary grades of DMSO are used on humans.

Dr. James R. Crook, professor of medicine at the University of Alaska and a specialist in human diseases, expresses the fear that users of DMSO may be unaware of how fast the solvent and materials dissolved in it can penetrate the skin and other parts of the body. Because of the fast action, a substance which by itself might have limited or no effect could cause serious damage or death if accidentally or intentionally applied to the body in a DMSO solution.

<http://www.quackwatch.org/01QuackeryRelatedTopics/OTA/ota05.html>

The active ingredient in DMSO is Methylsulfonylmethane (MSM) which is an organosulfur compound with the formula $(\text{CH}_3)_2\text{SO}_2$. It is also known by several other names including DMSO₂, methyl sulfone, and dimethyl sulfone. This colorless solid features the sulfonyl functional group and is considered relatively inert chemically. It occurs naturally in some primitive plants, is present in small amounts in many foods and beverages, and is marketed as a dietary supplement and can be taken orally or applied as a lotion. One of the most significant uses of MSM as a supplement is its demonstrated ability to relieve pain and inflammation. When rigid fibrous tissue cells swell and become inflamed, pressure and pain result. Since MSM can restore flexibility and permeability to cell walls, fluids can pass through the tissues more easily. This helps equalize pressure and reduce or eliminate the cause of pain. Harmful substances such as lactic acid and toxins are allowed to flow out, while nutrients are permitted to flow in. This prevents the pressure buildup in cells that causes inflammation.

Please understand that there are many, many safe alternatives and treatments - never give up! Medical Doctors have often confided to the Author that "they" really do not want to heal their patients because then they will lose them. They prefer to try to make you "feel better" and to continue the profitable buSINess of treating your symptoms. This is easily done because the prescriptions they write continue to create even more "symptoms" for them to "treat". The Author prefers to let them "practice" on someone other than him. In a June 2010 report in the Journal of General Internal Medicine, study authors said that in looking over records that spanned from 1976 to 2006 (the most recent year available) they found that, of 62 million death certificates, almost a quarter-million deaths were coded as having occurred in a hospital setting due to medication errors. An estimated 450,000 preventable medication-related adverse events occur in the U.S. every year. Please see: <http://articles.mercola.com/sites/articles/archive/2011/10/26/prescription-drugs-number-one-cause-preventable-death-in-us.aspx>. Fake tuberculosis and malaria drugs alone are estimated to kill 700,000 people a year. That's equivalent to four fully-laden jumbo jets crashing every day.

Please see: <http://www.policynetwork.net/health/media/fake-drugs-kill-over-700000-people-every-year-new-report> . Think before "popping that pill"!

The choices are truly up to you - choose life or choose death; choose sickness or choose health. However, in order to choose properly you must do some research on your own to see what is truly safe/best for you. Over one and a half million Americans are allergic to even organic peanuts! **You must know yourself to heal yourself!**

The content of this Chapter/article is for informational purposes only and is not intended to take the place of professional, medical advice or to treat, prevent, diagnose or cure any disease. Always consult your doctor about any queries you may have regarding a specific medical condition and/or prior to undertaking any dietary, fitness or other health regime.

All the best, Steve