**Abscess**

Painful inflammatory swelling of a hair follicle that forms an abscess; typically appears as a small rounded or conical nodule surrounded by redness, progressing to a localized pus pocket with a white center.

There is tenderness and pain and, if severe, mild fever. Staphylococcus aureus is cultured from the abscess.

**QUICK REVIEW**

- Recurrent attacks of boils can indicate a depressed immune system.
- Tea tree oil is an effective topical treatment of boils.
- If the boil is severe or does not resolve within two to three days, a physician should be consulted immediately.

**TREATMENT SUMMARY**
Eliminate from the diet any foods that may suppress immune function (sugar, refined simple carbohydrates, and food allergens). If the boil is severe or does not resolve within two to three days, a physician should be consulted immediately since the infection can spread through the subcutaneous (under the skin) tissues (causing cellulitis-inflammation of the connective tissue) or into the bloodstream (causing bacteremia—bacteria in the blood). Cleanliness should be rigorously maintained.

**Nutritional Supplements**
- Vitamin C: 500-1,000 mg three times per day
- Vitamin A: 50,000 IU per day for up to two days in infants and up to one week in adults (NOTE: Do not use vitamin A in sexually active women of childbearing age without effective birth control due to the link to birth defects at high dosages.)
- Zinc: 30 mg per day

**Botanical Medicines**
- Tea tree oil (*Melaleuca alternifolia*): apply undiluted oil to affected area two to three times daily
- Goldenseal (*Hydrastis canadensis*) poultice: 1 tablespoon of the root powder mixed with water or egg white to form a paste; apply to abscess and cover with an absorbent bandage twice daily.

**Other Recommendations**
The infected area should be immobilized and not handled, except when necessary to change the poultice. If tea tree oil or goldenseal poultices are not available or if localization, rupture, and drainage are preferred, hot Epsom salts packs will bring an abscess to a head (soak a washcloth in 2 tablespoons of Epsom salts per cup of hot water).

**Acne;**
Blackheads: dilated skin follicles with central dark, horny plugs
Whiteheads: red, swollen follicles with or without white pustules
Nodules: tender collections of pus deep in the skin that discharge to the surface of the skin
Cysts: deep nodules that fail to discharge contents to surface
Large deep pustules: cysts that contain inflammatory compounds that break down adjacent skin tissue, leading to scar formation

**QUICK REVIEW**
- Acne is the most common skin problem.
- Acne is most common among males during puberty, due to hormonal changes.
- Acne is dependent upon male hormones, such as testosterone, that stimulate the manufacture of sebum.
- Long-term use of antibiotics may result in an overgrowth of the yeast Candida albicans.

**TREATMENT SUMMARY**
The natural approach to acne is designed to address the underlying hormonal and local processes.

**General Recommendations**
- Avoid medications that may cause acne:
  - Anabolic steroids, such as testosterone
  - Corticosteroids
  - Oral contraceptives
  - Progesterone
  - Drugs that contain bromides or iodides
Avoid exposure to oils and greases. Avoid the use of greasy creams or cosmetics. Wash the pillowcase regularly in chemical-free (no added colors or fragrances) detergents. Remove excess sebum and oil from the face by washing thoroughly twice daily (more if necessary).

**Diet**
- Eliminate all refined and/or concentrated sugars from the diet.
- Do not eat foods that contain trans-fatty acids, such as milk, milk products, margarine, shortening, and other synthetically hydrogenated vegetable oils and fried foods.

**Nutritional Supplements**
- Chromium: 200–400 mcg per day
- Vitamin A: a dosage of 25,000 IU per day appears reasonable (higher dosages may be useful but should be monitored closely by a physician; sexually active women of childbearing age should not take vitamin A in daily dosages greater than 5,000 IU due to the link between excessive vitamin A and birth defects)
- Vitamin E: 400 IU per day
- Selenium: 200 mcg per day
- Zinc: 45-60 mg per day
- Vitamin B6: 25 mg three times per day
- Pantothenic acid: 2.5 g four times per day for up to two weeks

**Physical Medicine**
Acne tends to decrease with exposure to sun or ultraviolet light.

**Topical Treatment**
Choose one of the following:
- Tea tree oil (5-15% preparations)
- Azelaic acid (20% preparations)
- Sulfur (3-10% preparations)

**ADHD**
Vitamin C 4-8 gm/d
B-Complex
MVI/d
Niacinamide 500 mg tid (B3)
Avoid sugar/dye/additives

*Dr. Hoffer's ABC of Natural Nutrition for Children, by Abram Hoffer, M.D., PhD (Quarry Press, Kingston, Ontario 1999)*

Hyperactivity (attention deficit disorder with hyperactivity): Signs of inattention, impulsiveness, and hyperactivity inappropriate for the child's age

Learning disability (attention deficit disorder without hyperactivity): Developmentally inappropriate brief attention span and poor concentration for the child's age

**QUICK REVIEW**
- Over two million American school-aged boys take the drug methylphenidate (Ritalin).
- Food additives and food allergies are the major factors in ADD with hyperactivity.
- Three factors appear to be particularly relevant to learning disabilities:
  1. Otitis media
  2. Nutrient deficiency
  3. Heavy metals
Several clinical studies have shown that nutritional supplementation can improve mental function in school-aged children.

**ADD with Hyperactivity**

Despite the controversy about the significance of food additives in hyperactivity, careful reading of the published studies yields some clear conclusions:

- Virtually every study, both negative and positive, demonstrated that some hyperactive children consistently react with behavioral problems when challenged by specific food additives
- Virtually every study, whether supportive or critical of the Feingold hypothesis, is marred by significant experimental design defects
- Critics of the Feingold hypothesis are misusing the apparently inconsistent statistical group results to ignore the significance of the clear individual results, which are reproducible under double-blind conditions.

Although the best approach would be to eliminate all food additives, practical realities make this difficult. Ultimately, the sensible and economical approach is to follow the oligoantigenic diet for a period of four weeks, then reintroduce suspected foods (full servings at least once a day, one food introduced per week). If symptoms recur or worsen upon reintroduction/challenge, the food should be withdrawn. If there is no improvement when on the oligoantigenic diet, it is possible that the child is reacting to something else in the diet or environment. Further testing may be indicated in these cases.

All refined sugars should be eliminated from the diet, and a general multivitamin and mineral supplement should be used (with special care to ensure that the child is not allergic to the product used).

Also, the factors discussed in LEARNING DISABILITIES, should be considered. For example, hyperactive children have been shown to have increased lead levels in their blood.

**AIDS**

**Diagnosis;**

Positive test for the human immunodeficiency virus

Onset may be sudden or insidious or may present first as an opportunistic infection such as thrush (oral candidiasis) or Pneumocystis carinii pneumonia

Sudden onset (duration of up to fourteen days) of fevers, sweats, malaise, fatigability, joint and muscle pain, headaches, sore throat, diarrhea, generalized swelling of lymph glands, and/or rash on the trunk

Insidious onset may present as unexplained progressive fatigue, weight loss, fever, diarrhea, and/or generalized swelling of the lymph glands

Advanced stages will show neurological changes, including dementia and loss of nerve function (e.g., partial paralysis, vertigo, visual disturbances, etc.)

**QUICK REVIEW**

- Primary risk factors: sexual contact with an HIV infected person, intravenous drug use involving needle sharing, or being born to a mother who has HIV
- HIV itself does not kill; what it does is cripple the human system to such an extent that a person dies from severe infection or cancer.
HIV (human immunodeficiency virus) infection plays a major role in the progression to AIDS (acquired immunodeficiency syndrome), but other factors, particularly nutritional status, lifestyle, and mental/emotional state, also play a significant role.

• At this time, we recommend that conventional therapies be used in all individuals with CD4 counts below 500. Malnutrition and/or nutrient deficiency is too common in HIV/AIDS patients, given the very strong association between nutritional status, immune function, and the progression from HIV to AIDS.

In general, since the immune system is dependent on many nutrients, it is vitally important to supply optimum levels of all nutrients to patients with HIV/AIDS.

• Numerous studies have shown that individuals infected with HIV have a compromised antioxidant defense system.

Of all the antioxidants that show promise in slowing the progression of HIV to AIDS, vitamin E shows the greatest and most consistent effects. In a few clinical studies, supplemental beta-carotene has produced positive effects on immune function, both in HIV positive and AIDS patients. Several studies have shown that selenium status is a major determinant of how fast HIV will progress to AIDS. Vitamin B12 deficiency is seen in ten to thirty-five percent of all HIV-positive patients, presumably as a result of either decreased intake, reduced absorption, or antagonism by the drug AZT.

Lipoic acid is demonstrating extremely encouraging results in treating HIV patients.

• Preliminary studies indicate that carnitine supplementation can improve immune function and reduce the level of HIV-induced immune suppression.

• Curcumin exhibits potent anti-HIV activity and is showing promise in clinical trials. Bromelain has been shown to have better activity than known anti-HIV drugs in test tube studies.

• In clinical studies in Japan, licorice components have shown tremendous benefits in treating HIV.

TREATMENT SUMMARY
The goal of treatment for HIV-positive individuals is to slow the progression of HIV to AIDS. This is accomplished by optimizing nutritional status, following a health-promoting lifestyle, and employing measures to enhance immune function. Particularly important are antioxidants such as vitamin E, beta-carotene, zinc, selenium, vitamin C, lipoic acid, and curcumin. In addition, vitamin B12, carnitine, licorice, and bromelain appear to offer some benefit.

In cases of AIDS the treatment goal shifts to supporting conventional therapies. It is particularly important to strive to maintain high nutritional and antioxidant status.

General Recommendations for Prevention

• Do not have sexual intercourse with persons known to have or suspected of having HIV or who use intravenous drugs

• Practice safe sex—use a condom and avoid exchange of bodily fluids

• Do not share a toothbrush, razor, or other implement that could become contaminated with blood from someone with an HIV infection

Lifestyle

• Perform a relaxation exercise (deep breathing, meditation, prayer, visualization, etc.) for ten to fifteen minutes each day

• Get regular exercise (non-strenuous walking, Tai Chi, stretching, etc.)

Diet

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• Consume a diet that focuses on whole, unprocessed foods (whole grains, legumes, vegetables, fruits, nuts, and seeds)
• Consume adequate protein (consider supplementation with a high-quality whey protein at a dosage of 1 gram per 2 pounds of body weight)
• Eliminate the intake of alcohol, caffeine, and sugar
• Identify and control food allergies
• Drink at least 48 ounces of water per day

Nutritional Supplements
Vitamin C  50-200 grams/d  (Beware Herxheimer Rxn), caution if G6PD deficiency/Sickle Cell, Tooth enamel may be damaged- use a straw if solutions used
Vitamin C Paste for HSV Lesions
• High-potency multiple-vitamin-and mineral
• Flaxseed oil: 1 tbsp per day
• Vitamin C: 500-1,000 mg three times per day
• Vitamin E: 400-800 IU per day
• Carotene complex: 50,000-100,000 per day
• Methylcobalamin (active vitamin B12): 2 mg twice per day
• Lipoic acid: 150 mg three times per day
• Thymus extract: 750 mg of the crude polypeptide fraction per day

Selenium
Zinc

Botanical Medicines
• Curcumin (from Curcuma Tonga): 2,000 mg per day in divided doses (e.g., 400 mg five times per day) with an equal amount of bromelain (1,200-1,800 mcu [milk-clotting units]), preferably on an empty stomach
Glycyrrhiza glabra (licorice):
Powdered root: 1-2 g three times per day
Fluid extract (1:1): 2-4 ml three times per day
Solid (dry powdered) extract (5% glycyrrhetinic acid content): 250-500 mg three times per day
(Note: If licorice is to be used over a long period of time, it is necessary to increase intake of potassium-rich foods.)

Alcoholism
Psychological/social signs of excess alcohol consumption: depression, loss of friends, arrest for driving while intoxicated, excessive drinking, drinking before breakfast, frequent accidents, unexplained work absences
Alcohol dependence as manifested when alcohol is withdrawn: tremulousness, convulsions, hallucinations, and delirium
Alcoholic binges, benders (forty-eight hours or more of drinking associated with failure to meet usual obligations), or blackouts
Physical signs of excess alcohol consumption: alcohol odor on breath, flushed face, tremor, and unexplained bruises

QUICK REVIEW
• Genetic factors play a big role in the cause of alcoholism.
• All active alcoholics display signs of injury to the liver.
• Hypoglycemia aggravates the mental and emotional problems of the alcoholic.
• Zinc is one of the key nutrients involved in the breakdown of alcohol. Vitamin A deficiency is also common in alcoholics and appears to work together with the zinc deficiency to produce the major complications of alcoholism.
• Antioxidants taken either prior to or along with alcohol inhibit free-radical damage and the development of a fatty liver.
• Carnitine inhibits alcohol-induced fatty liver.
• There is a direct link between the level of vitamin C in white blood cells and the rate of clearance of alcohol from the blood.
• A thiamin (vitamin B1) deficiency is both the most common and the most serious of the B-vitamin deficiencies in the alcoholic.
Low magnesium levels are present in as many as sixty percent of alcoholics and is strongly linked to delirium tremens—a state of confusion and trembling during alcohol withdrawal. Glutamine supplementation (1 gram per day) has been shown to reduce voluntary alcohol consumption in uncontrolled human studies.

TREATMENT SUMMARY
Alcoholism is a difficult disease to treat. Although many different strategies are promoted, there has been little documented long-term success, except for that of Alcoholics Anonymous (and even the overall success rate of this program is highly controversial). The approach presented here is unique in that we have attempted to develop an integrated, whole-person, stage-oriented program.
The treatment of the alcoholic patient must be optimized for the four stages of alcoholism:
active alcohol consumption,
withdrawal,
recovering, and
recovered.
The “recovering” stage is defined here as the period between withdrawal and full reestabishment of normal metabolic function. All alcoholics, at whatever stage, need a number of counseling, lifestyle, and metabolic-balancing therapies. Following are the recommended therapies, with additional recommendations for each stage.

Diet
Stabilization of blood sugar levels is critical to successful treatment. Although a strict hypoglycemic diet may not be necessary, most of the dietary guidelines for hypoglycemia must be followed. These include
Elimination of all simple sugars (foods that contain added sucrose, fructose, or glucose), fruit juice, dried fruit, and low-fiber fruits (such as grapes and citrus fruits)
Limitation of processed carbohydrates (white flour, instant potatoes, white rice, etc.)
Increased consumption of complex carbohydrates (whole grains, vegetables, beans, etc.)

Nutritional Supplements
Vitamin A: 25,000 IU per day (only if the person is not drinking and has normal liver function; vitamin A supplementation should not be used if there is evidence of liver damage)
Vitamin C: 1,000 mg three times per day
Vitamin E: 400–800 IU per day
Magnesium: 200-300 mg three times per day
Vitamin B1 2-4 mg 6 doses/d
B Complex 100 mg of each tid
Niacinamide 500 mg tid (has a calming effect)
Vitamin C Several grams/d
Carotene
Chromium 200-400 ug/d
Folate 1 mg/d
Lecithin 2-4 tbsp/d
L-Glutamine 1 gm tid
Mg 400 mg/d
Selenium 50 mg/d
Zinc: 100 mg per day
Carnitine: 300 mg three times per day
• Glutamine: 1 g per day
Lactobacillus acidophilus: one to two billion live bacteria per day
Milk thistle extract (70-80% silymarin): 70-210 mg three times per day is a typical dosage (the dosage is based on the level of silymarin); higher dosages should be used if there is significant liver involvement
Exercise
Establish a regular exercise program as detailed in the chapter A HEALTHY LIFESTYLE.
Counseling
Establish a good working relationship with AA and/or an experienced counselor who has particular expertise in working with alcoholics.
Additional Recommendations for the Four Stages
Active Alcohol Consumption
Seek immediate professional help or contact AA.
Withdrawal
Severity of withdrawal symptoms varies widely, although it is usually proportional to the degree of alcohol dependence and the duration of the disease. Milder cases usually start within a few hours after cessation of drinking and typically resolve within forty-eight hours. More severe cases usually occur only in patients over thirty years of age and usually develop after about forty-eight hours of abstinence. These people should be admitted to an inpatient facility.
Additional Supplement
• 5-HTP: 50-100 mg three times per day
Recovering
Establish a strong network of caring family, friends, and peers for regular support. Recognize that alcohol is no answer to the stresses of life; it is important to develop more effective ways of handling the challenges of life.
Recovered
The support group must be maintained. Continued total abstinence is the best policy.

Allergies;
Vitamin C; highest tolerated doses that don't cause diarrhea
Stop eating meat/sugar/junk food or reduce as much as possible
Eat more whole grains/fruit/beans/sprouts/lightly cooked or raw vegetables
Clean out body wastes by occasional juice fasts and an everyday natural diet that is high in fiber and free of artificially colored or preserved foods.

**Alzheimer's Disease;**
Lecithin granules, 4-8 tbsp twice weekly
Vitamin B12 1 mg daily
Vitamin C as tolerated
Vitamin E 400 units twice daily
Folic acid 1 mg daily
Niacinamide 500 mg 2-4 times daily
Calcium and Magnesium slow down absorption of Aluminum, which has been linked to Alzheimer's disease
Progressive mental deterioration, loss of memory and cognitive functions, inability to carry out activities of daily life
Characteristic symmetrical, usually diffuse, EEG pattern
Diagnosis usually made by exclusion
Definitive diagnosis can be made only by postmortem biopsy of brain, demonstrating atrophy, senile plaques, and neurofibrillary tangles

**QUICK REVIEW**
Aluminum accumulation in the brain greatly contributes to the development of Alzheimer's disease.
Abnormal fingerprint patterns are associated with both Alzheimer's Disease and Down's syndrome.
From the perspective of natural medicine, the primary goals of intervention involve prevention by addressing suspected disease processes (e.g., aluminum and free-radical damage) and using natural measures to improve mental function in the early stages of the disease.
• There is evidence to suggest that antioxidant nutrients offer significant protection against Alzheimer's disease as well as therapeutic benefits.
• Aluminum absorption can be decreased by magnesium, as magnesium competes with aluminum for absorption, not only in the intestines but also at the blood/brain barrier.
A significant percentage of the geriatric populations are deficient in one or more of the B-vitamins where low levels are linked to Alzheimer's disease.
Zinc supplementation is demonstrating good results in the treatment of Alzheimer's disease.
The results of using L-acetyl-carnitine to delay the progression of Alzheimer's disease have been outstanding.
• DHEA shows promise in enhancing memory and improving mental function in the elderly.
Although preliminary studies involving established Alzheimer's patients are quite promising, at this time it appears that Ginkgo biloba extract only helps reverse or delay mental deterioration during the early stages of Alzheimer's disease.

**TREATMENT SUMMARY**
The primary therapeutic goal is either prevention or to begin therapy as soon as any dementia is noted.
Diet and Lifestyle
• Avoid aluminum (found in many antiperspirants, antacids, and cookware).
• Follow a general healthful dietary and lifestyle plan
Nutritional Supplements
• High-potency multiple vitamin and mineral supplement, according to guidelines given in the chapter
SUPPLEMENTARY MEASURES.
Vitamin C: 500-1,000 mg three times per day
Vitamin E: 400-800 IU per day
Flaxseed oil: One tbsp per day
Thiamin: 3-8 mg per day
Phosphatidylserine: 100 mg three times per day
L-acetyl-carnitine: 500 mg three times per day
Methylcobalamin: 1,000 mcg twice per day
Botanical Medicine
Ginkgo biloba extract (24% ginkgo flavonglycosides): 80 mg three times per day

Anemia;
Pallor, weakness, and a tendency to become fatigued easily
Low volume of blood, low level of total red blood cells, or abnormal size or shape of red blood cells
QUICK REVIEW
Identifying the cause of anemia through a complete diagnostic workup by a qualified health care professional is essential.
Anemia caused by deficient red blood cell (RBC) production is almost always due to nutrient deficiency. The three most common are due to deficiencies of either iron, vitamin B12, or folic acid.
• Iron deficiency is the most common cause of anemia.
• Perhaps the best food for an individual with any kind of anemia is calf liver.
• Although it is popular to inject vitamin B12 in the treatment of vitamin B12 deficiency, injection is not necessary as the oral administration of an appropriate dosage has been shown to produce excellent results.
TREATMENT SUMMARY
Effective therapy for anemia is dependent on proper classification as to its cause. The following recommendations are given with this in mind. Blood tests should be performed monthly to determine when the blood count returns too normal.
Diet
The ingestion of 4 to 6 oz of calf liver per day is recommended, along with the liberal consumption of green leafy vegetables.
Nutritional Supplements
Iron-Deficiency Anemia
• Iron: 30 mg, bound to either succinate or fumarate, twice per day between meals (if this recommendation results in abdominal discomfort, take 30 mg with meals three times per day)
• An alternative recommendation is to take a high-quality aqueous (hydrolyzed) liver extract at a level that provides a daily intake of 4 to 6 mg of heme iron
• Vitamin C: 1 gram three times per day with meals

**B12-Deficiency Anemia**
• Oral vitamin B12: 2,000 mcg per day for at least one month, followed by 1,000 mcg per day (Methylcobalamin, the active form of vitamin B12, supplied in sublingual tablets, is preferred over cyanocobalamin)
• Folic acid: 800-1,200 mcg three times per day

**Folic Acid--Deficiency Anemia**
• Folic acid: 800-1,200 mcg three times per day
• Vitamin B12: 1,000 mcg per day (it is always necessary to supplement vitamin B12 with folic acid to prevent the folic acid supplement from masking a vitamin B12 deficiency)

**Anti-Oxidants;**
Vitamin A
Vitamin E
Vitamin C
Bioflavenoids
Carotenoids/beta carotene
Selenium
Zinc
Can be useful in treating:
  - Cancer
  - Cardiovascular disease
  - Colorectal Adenonmas
  - Macular Degeneration
  - Rheumatoid arthritis

**Anxiety;**
Avoid Sugar
Exercise
Sugar Deficiency of the B-vitamins niacin,

**QUICK REVIEW**
• Perhaps the most significant biochemical disturbance noted in people wit anxiety and panic attacks are an elevated blood lactate level.
• There are at least six nutritional factors that may be responsible for elevated lactic acid to pyruvic acid ratio:
  1. Alcohol
  2. Caffeine
  3. Sugar
  4. Deficiency of the B-vitamins niacin, pyridoxine, and thiamine
  5. Deficiency of calcium or magnesium
  6. Food allergens
Kava extract has produced relief from anxiety comparable to drugs like Valium but without the side effects.
• Get regular exercise

**Nutritional Supplements**
Take a high-potency multiple-vitamin and-mineral formula
Flaxseed oil: 1 tablespoon daily
Niacin/B3
B-Complex vitamins
Vitamin C
Lecithin
Chromium
GABA (gamma amino butyric acid)
Inositol 2-4 gm/d
L-Tryptophan 2-4 gm/d

Botanical Medicines
• Kava (*Piper methysticum*): 45 to 70 mg of kavalactones three times daily (the dosage of kava preparations is based on the level of kava lactones. The primary treatment methods are to Reduce or eliminate the use of stimulants. Use kava when appropriate but beware of liver toxicity
NOTE: If you are currently taking a tranquilizer or c depressant, you will need to work with a physician to get the drug. Stopping the drug on your own can be dangerous you absolutely must have proper medical supervision.

Diet
• Eliminate or restrict your intake of caffeine
• Eliminate or restrict your intake of alcohol
• Eliminate refined carbohydrates from your diet
• Design a healthful diet
• Increase the potassium-to-sodium ratio in your diet
• Eat regular planned meals in a relaxed environment
• Control food allergies

Lifestyle
Identify stressors
Eliminate or reduce sources of stress
Identify negative coping patterns and replace them with positive patterns
Perform a relaxation/breathing exercise for a minimum of five minutes twice daily
Manage your time effectively
Enhance your relationships through better communication

**Aphthous Ulcers;**

**QUICK REVIEW**
• Recurrent canker sores can be caused by trauma, food sensitivities (especially milk and gluten sensitivities), stress, and/or nutrient deficiency.
• Eliminating food allergens, sources of gluten, and nutritional deficiencies results in complete cure in most cases.

**TREATMENT SUMMARY**
The data presented suggest that numerous factors can lead to recurrent canker sores. Considerable evidence suggests that the underlying problem may be a gluten sensitivity and/or food allergy. In addition, nutrient deficiencies need to be corrected. DGL can be used to help heal the ulcers.

**Diet**
The diet should be free of known allergens and all gluten sources (i.e., grains).

**Nutritional Supplements**
- Vitamin C: 1,000 mg per day
- High-potency multiple-vitamin-and mineral supplement.
- DGL: One to two 380-mg chewable tablets twenty minutes before meals.

**ASCVD/Angina**
Angina: Squeezing or pressure-like pain in the chest occurring immediately after exertion. Other precipitating factors include emotional tension, cold weather, or large meals. Pain may radiate to the left shoulder blade, left arm, or jaw. The pain typically lasts for only one to twenty minutes.
Stress, anxiety, and high blood pressure typically present.
An abnormal electrocardiographic reading (transient ST segment depression) in response to light exercise (stress test).

**QUICK REVIEW**
Angina is a serious condition that requires careful treatment and monitoring. As many as ninety percent of all bypass procedures may be unnecessary. The two primary therapeutic goals in the natural treatment of angina are:
1. Improving energy metabolism within the heart
2. Improving the blood supply to the heart
Carnitine and coenzyme Q10 (CoQ10) have been shown to improve angina in well-designed double blind clinical trials.

**TREATMENT SUMMARY**
The primary therapy is prevention, since angina is usually the result of hardening of the arteries (atherosclerosis). Follow the general guidelines given in HEART AND CARDIOVASCULAR HEALTH and, if cholesterol levels are elevated, CHOLESTEROL.
Once angina has developed, restoring proper blood supply to the heart and enhancing energy production within the heart are the primary goals. In mild to moderate cases, the natural approach is usually sufficient. But in more serious cases, the natural approach should be used in conjunction with the use of conventional prescription drugs. Patients with unstable angina pectoris (characterized by progressive increase in the frequency and severity of pain, increased sensitivity to precipitating factors, progression of symptoms over several days, and prolonged coronary pain) should be hospitalized.

**Diet**
Increase dietary fiber especially the gel-forming or mucilaginous fibers (flaxseed, Oat bran, pectin etc.) Onions and garlic
Magnesium deficiency plays a major role in angina.
Hawthorn extracts improve the supply of blood and oxygen to the heart.
- Since the late 1940s, there have been numerous scientific studies that demonstrate the clinical effectiveness of khella (Ammi visnaga) extracts in the treatment of angina.
EDTA chelation therapy is an alternative to coronary artery bypass surgery and angioplasty; it may prove to be more effective, and it is definitely safer and less expensive.
Eat regular meals and avoid all simple carbohydrates (sugar, honey, dried fruit, fruit juice, etc.).
Lifestyle
Stop smoking and drinking alcohol and coffee. Use stress-management techniques such as progressive relaxation, meditation, or guided imagery. A carefully graded, progressive aerobic exercise program (thirty minutes three times per week) is a necessity. Walking is a good exercise with which to start.

Nutritional Supplements
Coenzyme Q\textsubscript{10}: 150-300 mg per day
L-carnitine: 500 mg three times per day
Pantethine: 300 mg three times per day
Magnesium (preferably bound to aspartate, citrate, or other Kreb's cycle intermediate): 200-400 mg three times per day
Ascorbic acid Highest tolerated dose, start with 5,000 mg twice daily, if bowels loosen, back off to the lowest dose tolerated without loose bowels
Vitamin E 450-2,000 iu/d
Vitamin D3 1000-4000 iu/d
Niacin (B3) 1 gm tid (Adequate Vitamin C helps prevent flush). Inositol hexanicotinate prevents flush/metabolized to B3

Botanical Medicines
• Hawthorn (Crataegus sp.) three times per day
Berries or flowers (dried): 3-5 grams or as a tea
Tincture (1:5): 4-6 ml (1-1.5 tsp) Fluid extract (1:1): 1-2 ml (0.25-0.5 tsp) Solid extract

Asthma/Allergy:
Vitamin C
\textit{Aconitum napthalus} (“aconite”), Monkshood herb
Gerson therapy
Asthma and Hay Fever
Asthma:
Recurrent attacks of shortness of breath, cough, and expectoration of tenacious mucoid sputum
Prolonged expiration phase with generalized wheezing and abnormal breath sounds laboratory signs of allergy (increased levels of eosinophils in blood, increased serum 19E levels, positive food and/or inhalant allergy tests)
Hay Fever:
Watery nasal discharge, sneezing, itchy eyes and nose Usually associated with a particular season
• Asthma occurrence is growing in number and severity.
• Hay fever (seasonal allergic rhinitis) is an allergic reaction of the nasal passages and airways to wind-borne pollens that shares many common features with asthma.
• The first step in the natural approach to asthma is to reduce the allergic threshold by avoiding airborne and food allergens.
• Elimination diets have been successful in identifying allergens and treating asthma.
A vegan diet can be very effective in reducing asthma symptoms. Omega-3 fatty acids relieve asthma. Food additives can trigger allergic reactions and asthma.
Vitamin B6 supplementation is recommended for the treatment of asthma, especially if the asthmatic has to take the drug theophylline.
Antioxidants, especially high doses of vitamin C, are highly recommended for the treatment of asthma. Magnesium can help open the airways and relieve asthma. Asthmatics should avoid salt. DHEA levels are typically low in asthmatics. Described in FOOD ALLERGY. Consider trying a vegan diet for a minimum of months to judge if it will help. If you not allergic to garlic and onions, consume them liberally.

Nutritional Supplements

The following doses are for adults; children, divide the dosage in half they weigh between 50 and 100 lbs For children under 50 pounds, use a third the adult dosage. Be sure to determine the contents and source of supplements to assure avoidance of allergens.

Supplements

Vitamin B6: 25-50 mg twice per day
Vitamin B12: 1,000 mcg/day (oral) or weekly injection; evaluate for efficacy after six weeks
Vitamin C: 10-30 mg per day for each 2 pounds of body weight, in divided doses
Vitamin E: 200-400 IU per day
Magnesium: 200-400 mg three time per day

Flavonoids (choose one):
- Quercetin: 400 mg twenty minutes before each meal
- Grape seed extract (95% PCO content): 50--100 mg three times per day
- Green tea extract (50% polyphenol content): 200-300 mg three times per day (or drink green tea liberal

Gingko biloba extract: 80 mg three times per day
- Carotenes: 25,000-50,000 IU per day
- Selenium: 200-400 mcg per day
- DHEA: follow recommendations given in LONGEVITY AND LIFE EXTENSION

Botanical Medicines

Use ephedra or tylophora preparations. In either case, licorice can be used in conjunction.
- Ephedra sinica: The optimum dosage of ephedra depends on the alkaloid content of the form used. Each dose should have an ephedrine content of 12.5 to 25.0 mg and be taken two to three times per day. For the crude herb, this dosage would most likely be 500 to 1,000 mg three times per day. Standardized preparations are often preferred, as they have more dependable therapeutic activity. Ephedra can be combined with herbal expectorants as described in this chapter.
- Tylophora asthmatica: 200 mg of tylophora leaves or 40 mg of the dry alcoholic extract twice per day
- Licorice (Glycyrrhiza glabra): (all dosages three times per day) Powdered root: 1-2 g
  Fluid extract (1:1): 2-4 ml
  Solid (dry powdered) extract (4:1): 250-500 mg

Atopy & Eczema;

Chronic itchy, inflamed skin
Skin is very dry, red, and scaly
Scratching and rubbing lead to darkened and hardened areas of thickened skin with accentuated furrows, most commonly seen on the front of the wrist and elbows and the back of the knees
Personal or family history of allergy

QUICK REVIEW
• Food allergy is the major cause of eczema.
• Allergies to milk, eggs, and peanuts account for roughly eighty-one percent of all cases of childhood eczema.
• Omega-3 oils (fish oils and flaxseed oil) appear to offer greater treatment benefits than evening primrose oil.
• Effective treatment involves simultaneously reducing the load on the immune system by identifying and eliminating food allergies, while inhibiting the tendency to release histamine and other allergic factors in the skin.

In most cases, effective treatment involves simultaneously reducing the load on the immune system and inhibiting the tendency to release histamine and other allergic factors in the skin.

### Diet
Start by eliminating all major allergens (remember, milk, eggs, and peanuts account for approximately eighty-one percent of cases). Limit animal products and add fatty fish such as salmon, mackerel, herring, and halibut to the diet.

### Nutritional Supplements
- **Vitamin A**: 5,000 IU per day
- **Vitamin E (mixed tocopherols)**: 400 IU per day
- **Zinc**: 45-60 mg per day (decrease to 30 mg when condition clears)
- **Flavonoids** (choose one):
  - Quercetin: 400 mg 20 minutes before meals
  - Grape seed extract (95% procyanidolic oligomers content): 50-100 mg three times per day
  - Green tea extract (50% polyphenol content): 200-300 mg three times per day (NOTE: Liberal drinking of green tea can be used instead.)
  - *Ginkgo biloba* extract: 80 mg three times per day
  - EPA and DHA: 540 and 360 mg per day (or flaxseed oil: 1 tablespoon per day). If there is no response after three months, try evening primrose oil: 3,000 mg per day

### Botanical Medicines
Choose one of the following (take dosage three times per day).
- **Glycyrrhiza glabra**
  - Powdered root: 1-2 g
  - Fluid extract (1:1): 2-4 ml
  - Solid (dry powdered) extract (4:1): 250-500 mg
- **Arctium lappa or Taraxacum officinale**
  - Dried root: 2-8 g by infusion or decoction
  - Fluid extract (1:1): 4-8 ml (1-2 tsp)
  - Tincture: alcohol-based tinctures of dandelion are not recommended because of the extremely high dosage required
  - Juice of fresh root: 4-8 ml (1-2 tsp)
  - Powdered solid extract (4:1): 250--500 mg
- **Coleus forskolli**
  - Extract standardized to contain 18% forskolin: 50 mg (9 mg of forskolin) two to three times per day

### Topical Treatment
Choose commercial preparations that contain glycyrrhetinic acid, chamomile, or witch hazel. In addition, avoid rough-textured clothing; wash clothing with mild soaps only and rinse thoroughly; and avoid exposure to chemical irritants and any other agents that might cause skin irritation. Local application of soothing lotions ameliorates itching (zinc oxide...
works well), but greasy preparations should not be used for extended periods since they block the sweat ducts.

**Benign Prostatic Hyperplasia (BPH):**
Symptoms of bladder outlet obstruction (progressive urinary frequency, urgency and nocturia hesitancy and intermittency with reduced force and caliber of urine)
Enlarged, nontender prostate gland
Uremia if prolonged obstruction

**QUICK REVIEW**
• Over fifty percent of men will develop an enlarged prostate in their lifetime.
• BPH is largely the result of hormonal changes associated with aging.
• The PSA test can help distinguish BPH from prostate cancer.
• Paramount to an effective BPH treatment plan is adequate zinc intake and absorption.
• Cholesterol damaged by free radicals is particularly toxic and carcinogenic to the prostate.
• Increased consumption of soy and soy foods is associated with a decrease in the risk of getting prostate cancer and may help in treating BPH.
• In Europe, plant-based medicines are the most popular prescriptions for BPH.

Saw palmetto extract and other herbal approaches to BPH are most effective in mild to moderate cases.
Roughly ninety percent of men with mild-to-moderate BPH experience some improvement in symptoms during the first four to six weeks after beginning to take saw palmetto extract. Severe BPH, resulting in significant acute urinary retention, may require catheterization for relief, a sufficiently advanced case may not respond to therapy rapidly enough and may require the short-term use of an alpha-1 antagonist drug (e.g., Hytrin or Cardura) or surgical intervention.

**TREATMENT SUMMARY**
Therapeutic goals for BPH are to normalize prostate nutrient levels, inhibit excessive conversion of testosterone to DHT, inhibit DHT receptor binding, and limit prolactin, which promotes prostate cell growth.
Severe BPH, resulting in significant acute urinary retention, may require catheterization for relief, a sufficiently advanced case may not respond rapidly enough to therapy and may require the short-term use of an alpha-1 antagonist drug (e.g., Hytrin or Cardura) or surgical intervention.

**Diet**
Since there have been no clinical trials on the use of diet in the treatment of BPH, the following recommendations are somewhat speculative. The diet should be high in protein, low in carbohydrates, low in animal fats, and high in essential fatty acids. Focus on whole, unprocessed foods (whole grains, legumes, vegetables; fruits, nuts, and seeds).
Eat a quarter-cup of raw sunflower seeds or pumpkin seeds each day.
Eliminate intake of alcohol (especially beer), caffeine, and sugar. Consume soy foods regularly.

**Nutritional Supplements**
• Zinc: 45-60 mg per day
• Flaxseed oil: 1 tbsp per day
• Amino acid mixture:
  - Glycine: 200 mg per day
  - Glutamic acid: 200 mg per day
  - Alanine: 200 mg per day

Botanical Medicines
• Saw palmetto (*Serenoa repens*) extract (standardized to contain 85-95% fatty acids and sterols): 160 mg twice per day (NOTE: A similar dose using crude berries, fluid extracts, and tinctures would require extremely large quantities and is not reliable. Use the standardized extract for maximum benefit).
• Flower pollen extract (e.g., Cernilton): 63-126 mg two to three times per day
• *Pygeum Africanum* extract (standardized to contain 14% triterpenes including beta-sitosterol and 0.5% n-docosanol): 50-100 mg twice per day
• Stinging nettle (*Urtica dioica*) extract 300-600 mg per day

**Biliary Disease;**
May be without symptoms or may be associated with periods of intense pain in the abdomen that radiates to the upper back
Ultrasound provides definitive diagnosis

**QUICK REVIEW**
• Gallstones can be prevented through diet and lifestyle measures.
• Fasting or severe calorie restriction can lead to gallstone formation.
• A 1968 study revealed that 100 percent of a group of patients were free from symptoms while they were on a basic elimination diet.
• Coffee can aggravate symptoms of gallstones by causing the gallbladder to contract.
A low lecithin concentration in the bile may be a causative factor for many individuals with gallstones.
• Vitamin C supplementation (2,000 mg per day) has been shown to produce positive effects on bile composition and reduces cholesterol stone formation.
Milk thistle extract may help dissolve gallstones via its ability to increase the solubility of the bile.
A complex of plant terpenes alone or, preferably, in combination with oral bile acids can help dissolve gallstones.

**TREATMENT SUMMARY**
As is typical of most diseases, gallstones are much easier to prevent than to reverse. The risk factors and causes of gallstones are well known and, in most cases, a healthy diet rich in dietary fiber will be adequate prevention.
Once gallstones have developed, measures to avoid gallbladder attacks and increase the solubility of the bile are necessary. To limit the incidence of symptoms, allergenic foods must be determined (see FOOD ALLERGIES) and, along with fatty foods, avoided.
Following the dietary guidelines and utilizing the nutritional and herbal supplements recommended below can increase the solubility of the bile.

**Diet**
Increase intake of vegetables, fruits, and dietary fiber, especially the gel-forming or mucilaginous fibers (flaxseed, oat bran, guar gum, pectin, etc.). Reduce consumption of saturated fats, cholesterol, sugar, and animal proteins. Avoid all fried foods.

**Water**
Drink six to eight glasses of water each day to maintain the water content of bile.

**Nutritional Supplements**

- Vitamin C: 500 to 1,000 mg three times daily
- Vitamin E: **200-400 IU** per day
- Phosphatidylcholine (lecithin): 100 mg three times per day
- Choline: 1,000 mg per day
- L-Methionine: 1,000 mg per day
- Fiber supplement (guar gum, pectin, psyllium, or oat bran): minimum of 5 g per day
- Bile acids (combination of ursodeoxycholic and chenodeoxycholic acid): 1,000-1,500 mg per day

**Botanical Medicines**

Dosages are three times per day. Choose one. They are listed in order of effectiveness.

- Gallstone-dissolving formula (dosage: one to three times per day, best if used in combination with ursodeoxycholic acid)
  - Menthol 30 mg
  - Menthone 5 mg
  - Pinene 15 mg
  - Borneol 5 mg
  - Camphene 5 mg
  - Cineole: 2 mg
  - Citral: 5 mg

  *Note: Peppermint oil in an enteric-coated capsule can be used instead of the gallstone-dissolving formula, at a dosage of 1-2 capsules (0.2 ml/capsule) three times per day between meals.*

- *Silybum marianum*
  - The dosage is based upon the level of silymarin: **70-210 mg** of silymarin

- *Cynara scolymus*
  - Extract (15% cynarin): **500 mg**

- *Peumus boldo*
  - Dried leaves (or by infusion): **250-500 mg**
  - Tincture (1:10): **2-4 ml**
  - Fluid extract (1:1): **0.5-1.0 ml** • *Curcuma longa*
    - Curcumin: **100-200 mg** three times per day
  - Dandelion (*Taraxicum officinale*) Dried root: **4 g**
    - Fluid extract (1:1): **4-8 ml**
    - Solid extract (4:1) **250-500 mg**

**Bipolar Disorder:**

To be diagnosed as a bipolar depressive, an individual would be expected to have at least three of the following symptoms:

- Excessive self-esteem or grandiosity
- Reduced need for sleep
- Extreme talkativeness, excessive telephoning
- Extremely rapid flight of thoughts, along with the feeling that the mind is racing
- Inability to concentrate, easily distracted
Increase in social or work-oriented activities, often with a sixty- to eighty-hour work week. Poor judgment, as indicated by sprees of uncontrolled spending, increased sexual indiscretions, and misguided financial decisions.

**QUICK REVIEW**

- Patients experiencing a manic syndrome usually require hospitalization to prevent impulsive and aggressive behavior from ruining their careers or injuring themselves or others.
- There is a link between high vanadium levels and mania.

Vitamin C (3 grams per day) has been shown in a double-blind crossover study to result in significant clinical improvement.

The use of phosphatidylcholine to increase brain acetylcholine activity has been shown to produce significant improvement in symptoms in some patients. In general, the same dietary and lifestyle guidelines given in the DEPRESSION are appropriate here.

**Diet**

A low-vanadium diet is recommended. This involves eliminating all refined and processed foods and promoting the consumption of fresh fruits and vegetables.

**Nutritional Supplements**

- High-potency multiple-vitamin-and mineral formula
- Phosphatidylcholine: 10-25 g/day

**NOTE:** Phosphatidylcholine may induce depression in some patients. If this occurs, discontinue immediately.

---

**Bronchitis & Pneumonia:**

Usually preceded by upper respiratory tract infection

Sudden onset of shaking, chills, fever, and chest pain

Pneumonia shows classic signs of lung involvement (shallow breathing, cough, abnormal breath sounds, etc.)

In pneumonia, an X-ray shows infiltration of fluid and lymph into the lungs.

**QUICK REVIEW**

- Most cases of bronchitis and/or pneumonia do not require antibiotics.
- The natural approach to bronchitis and pneumonia involves two primary goals:
  1. Stimulation of normal processes that promote the expectoration (removal) of mucus and
  2. Enhancement of immune function.
- Vitamin C supplementation is warranted in all elderly patients with acute respiratory infection, especially those who are severely ill.
- The application of local heat followed by postural draining can help get rid of excessive mucus.
- Bromelain (the protein-digesting enzyme complex from pineapple) has shown good results in the treatment of upper respiratory tract infections.
- Botanical expectorants act to increase the quantity, decrease the viscosity, and promote the expulsion of the secretions of the respiratory tract.

The general approach to all infectious bronchial conditions and pneumonias includes stimulation of the immune system and support of respiratory tract drainage (for a full discussion of immune system stimulation see IMMUNE SUPPORT). Drainage is
encouraged by the use of postural drainage, local heat, bromelain, and herbal expectorants.
Persistent cough may indicate a serious condition. Consult your physician if your cough persists for more than one week, if it recurs, or if it is accompanied by high fever, rash, or persistent headache.

General Measures

• Rest (bed rest is preferred)
• Drink large amount of fluids (preferably diluted vegetable juices, soups, and herb teas)
• Limit simple sugar consumption (including fruit sugars) to less than 50 grams per day

Nutritional Supplements

In general, those supplements see recommendations in IMMUNE SUPPORT. Especially important are
• Vitamin C: 500 mg every two hours
• Bioflavonoids: 1,000 mg per day
• Vitamin A: 25,000 IU per day
• Beta-carotene: 200,000 IU per day
• Zinc lozenges: One lozenge containing 23 mg elemental zinc every two waking hours for one week

NOTE: Prolonged supplementation at this dose is not recommended, as it may suppress immune function.

Herbal Expectorants

Herbal expectorants are available over the counter, or you can make your own. Follow the dosage on the product label. For glycerol guaiacolate, the dosage is 200 to 400 mg three times per day for adults and 200 mg three times per day for children ages six to twelve.
Here is an expectorant mixture you can make yourself.
2 oz licorice root
1 oz wild cherry bark
1 oz coltsfoot
1 oz lobelia.
1 oz horehound
Mix the ingredients together. Boil the mixture slowly in 4 cups of water for 2 minutes; let it steep for 10 minutes more. Strain the mixture, and take 1 cup every 2 hours if an adult (1/2 cup for children). Sweeten with honey if necessary.

Cancer;
Carotene (Vitamin A Precursor) 500,000 iu/d
Niacin (B3) 1 gm tid (Adequate Vitamin C helps prevent flush). Inosotol hexanicotinate prevents flush/metabolized to B3, Niacinamide also works at this dose
Vitamin C Highest tolerated dose
http://www.doctoryourself.com/cameron.html
Vitamin E 800-1200 iu/d
B Complex 100 mg/d
Selenium 200-1,000 ug/d
Ca++ 500 mg tid
Mg++ 250 mg tid
http://www.doctoryourself.com/gersonspeech.html
high potassium, low sodium diet, with no fats or oils, and minimal animal proteins. Juices of raw fruits and vegetables and of raw liver provide active oxidizing enzymes, which facilitate rehabilitation of the liver. Iodine and niacin supplementation is used. Caffeine enemas cause dilation of bile ducts, which facilitates excretion of toxic cancer breakdown products by the liver and dialysis of toxic products from blood across the colonic wall.

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>Dosage</th>
<th>Notes</th>
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<tbody>
<tr>
<td>Folic acid</td>
<td>1-30 mg/d</td>
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<tr>
<td>CoQ10</td>
<td>300-600 mg/d</td>
<td>(esp. breast CA)</td>
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<tr>
<td>Chlorophyll</td>
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<tr>
<td>Bladder Cancer</td>
<td>B6</td>
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<tr>
<td>Lung Cancer</td>
<td>Folate</td>
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<tr>
<td>Zn</td>
<td>Prostate CA (40-150 mg/d)</td>
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<tr>
<td>Cu</td>
<td>Inverse relationship with Zn</td>
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</tbody>
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**Candidiasis/Chronic:**

**QUICK REVIEW**

• Prolonged antibiotic use is believed to be the most important factor in the development of chronic Candidiasis.

A physician knowledgeable about yeast-related illness can help in diagnosing, treating, and monitoring chronic Candidiasis.

• A comprehensive approach is more effective in treating chronic Candidiasis than simply trying to kill the Candida with a drug or a natural anti-Candida agent.

• Recurrent or chronic infections, including chronic Candidiasis, are characterized by a depressed immune system.

• Restoring proper immune function is one of the key goals in the treatment of chronic Candidiasis.

• The most effective natural anti-Candida compounds are enteric-coated volatile oil preparations.

**TREATMENT SUMMARY**

Following is a comprehensive step approach to the successful elimination of chronic Candidiasis.

**Step 1: Identify and Address Predisposing Factors**

• Eliminate the use of antibiotics, steroids, immune-suppressing drug and birth control pills (unless there is an absolute medical necessity)

• Identify any lack of digestive secret

• Follow the specific recommendation if the identifiable predisposing factor is dietary factors, impaired immunity, impaired liver function, or an undiagnosed disease state

**Step 2: Follow the Candida-Control Diet**

• Eliminate refined and simple sugar

• Eliminate milk and other dairy products, yeast or mold, including alcoholic beverages, cheeses, dried fruits, melons, and peanuts

• Eliminate all known or suspected food allergens

**Step 3: Provide Nutritional Support**

• Take a high-potency multiple vitamin and mineral formula

• Take additional antioxidants

• Take 1 tablespoon of flaxseed oil daily
Step 4: Support Immune Function
- Promote a positive mental attitude
- Deal with stress by using positive coping techniques (see the chapter STRESS MANAGEMENT)
- Avoid alcohol, sugar, smoking, and elevated cholesterol levels, which can impair immune function
- Get plenty of rest and good sleep
- Support thymus gland function (take thymus extract: 750 mg of crude polypeptide fractions daily)

Step 5: Promote Detoxification and Elimination
- Take 3-5 grams of water-soluble fiber such as guar gum, psyllium seed, or pectin, at night
- If necessary, take lipotropic factor and silymarin to enhance liver function

Step 6: Take Probiotics
- Dosage- 1-10 billion viable Lactobacillus acidophilus and Bactobacillus bifidus cells per day

Step 7: Use Appropriate Anti-yeast Therapy
- Ideally, use the recommended nutritional and/or herbal supplements to help control against yeast overgrowth and promote a healthy bacterial flora
- If necessary, use a prescription anti-yeast drug appropriately

These simple steps should take care chronic Candidiasis in most cases. If you follow these guidelines and don't have significant improvement or complete resolution, further evaluation is necessary determine if chronic Candidiasis is an underlying factor. Repeat stool cultures and antigen level tests are often help in this goal. If the organism has not be eradicated, stronger prescription antibiotics can be used along with the other general recommendations.

Carpal Tunnel;
QUICK REVIEW
- Vitamin B6 supplementation appears to be quite helpful in many cases.
- Alternating hot and cold-water treatment ("contrast hydrotherapy") provides a simple, efficient way to increase circulation to the area and reduce swelling.
- Additional natural measures that may be helpful include acupuncture, bromelain, and physical therapy.

TREATMENT SUMMARY
Whenever possible, prevention is obviously best. Avoid activities that cause trauma to the median nerve through repeated flexing and extending of the wrist.

Diet
Avoid foods containing yellow dyes, limit daily protein intake to a maximum 1.65 g/lb of body weight.

Nutritional Supplements
- Pyridoxine: 25 mg three to four times per day
- Riboflavin: 10 mg daily

Botanical Medicine
Bromelain (1,200-1,800 mcu/gdu [milk-clotting units or gelatin-digesting units]): 250-750 mg twice daily between meals

Physical Medicine
Hot and cold therapy: immersion for three minutes in hot water followed by a thirty-second immersion in cold water. Repeat this three to five times; perform daily.

Regular wrist exercises

**Cataracts;**

**QUICK REVIEW**
- In cataract formation, the normal protective mechanisms are unable to prevent free-radical damage.
- Individuals with higher dietary intakes of antioxidants have a much lower risk for developing cataracts.

Several clinical studies have demonstrated that vitamin C supplementation can halt cataract progression and, in some cases, significantly improve vision.
- Bilberry extract plus vitamin E stopped progression of cataract formation in forty-eight of fifty patients.
- An ancient Chinese formula, *Hachimijiogan*, has been shown to increase the antioxidant level of the lens of the eye.

**Nutritional Supplements**
- Vitamin C: 1 g three times per day
- Vitamin E: 400-800 IU per day
- Selenium: 400 mcg per day
- Beta-carotene: 200,000 IU per day
- Quercetin: 500 mg three times per day • L-cysteine: 400 mg per day
- L-glutamine: 200 mg per day • L-glycine: 200 mg per day

**Botanical Medicines**
- Bilberry extract (25% anthocyanidin content): 40 to 80 mg three times per day
- *Hachimijiogan* formula: 150 mg three times per day

**TREATMENT SUMMARY**

Progression of cataract formation can be stopped, and early cataracts can be reversed. However, significant reversal of well-developed cataracts does not appear possible at this time. In cases of marked vision impairment, cataract removal and lens implant may be the only alternative. As with most diseases, prevention or treatment at an early stage is most effective.

Since free-radical damage appears to be the primary factor in the induction of senile cataracts, avoidance of oxidizing agents and promotion of free radical scavenging are critically important to successful treatment. The individual with cataracts should:
- avoid direct sunlight and bright light in general;
- wear sunglasses with UV protection when outdoors;
- and greatly increase intake of antioxidant nutrients.

**Diet**

Avoid fried foods, rancid foods, and other sources of free radicals. Increase consumption of legumes (high in sulfur containing amino acids), yellow-orange vegetables (high in carotenes), and fresh fruits and vegetables (high in vitamins E and C).

**Celiac Disease;**
Bulky, pale, frothy, foul smelling, greasy stools with increased fecal fat. Weight loss and signs of multiple vitamin and mineral deficiencies. Increased blood levels of antibodies for gliadin. Diagnosis confirmed by biopsy of the small intestine.

**QUICK REVIEW**

- Celiac disease is characterized by diarrhea and an abnormal small intestine structure caused by the immune system's response to a protein known as gluten.
- A gluten-free diet is curative.
- Pancreatic enzyme supplementation enhances the benefit of a gluten-free diet during the first thirty days after the initial diagnosis.

**TREATMENT SUMMARY**

The treatment of celiac disease is clear: eliminate all sources of gliadin, eliminate dairy products initially, correct underlying nutritional deficiencies by taking a high-potency multiple-vitamin-and-mineral formula, and identify and eliminate all food allergens. In the first two months after diagnosis, pancreatic enzymes at dosages described should be used to speed up the healing process. If you do not respond within two months, consult with your doctor again to reconsider the diagnosis.

Maintenance of a strict gluten-free diet is difficult in the United States. We encourage you to read labels carefully in order to avoid hidden sources of gliadin, such as are found in some brands of soy sauce, modified food starch, ice cream, soup, beer, wine, vodka, whisky, malt, and other foods. We also encourage you to consult resources for education and information on gluten-free recipes, such as:

- American Celiac Society 45 Gifford Avenue Jersey City, NJ 07304
- American Digestive Disease Society 7720 Wisconsin Avenue Bethesda, MD 20014
- Gluten Tolerance Group of North America P.O. Box 23053 Seattle, WA 98102
- National Digestive Disease Education and Information Clearing House 1555 Wilson Boulevard, Suite 600 Rosslyn, VA 22209

**Cellulite;**

"Mattress phenomenon" (pinning, bulging, and deformation of the skin)

Possible feelings of tightness and heaviness in affected areas (particularly the legs)

Tenderness of the skin when pinched, pressed upon, or vigorously massaged.

**QUICK REVIEW**

- Cellulite is a "cosmetic" condition that results from weakened connective tissue structures just below the surface of the skin.
- Women are affected by cellulite at least nine times more often than men due to structural differences just below the surface of the skin.
- Slim women and female athletes usually have little or no cellulite.
- An extract of gotu kola (*Centella asiatica*) has demonstrated impressive clinical results in the treatment of cellulite when given orally.

**TREATMENT SUMMARY**

It must be kept in mind that cellulite is not a "disease" per se. Instead, it is primarily a cosmetic disorder. Excessive accumulation of subcutaneous fat or degeneration of subcutaneous connective tissue leads to fat-chamber enlargement and greater visibility of...
the "mattress phenomenon." The basic therapeutic approach is straightforward: reduce subcutaneous fat and enhance connective tissue integrity.

Varicose veins are often found in conjunction with cellulite, and the two conditions have much in common. In particular, both appear to result largely from a loss of integrity of supporting connective tissue. (See VARICOSE VEINS for further discussion.)

**Diet**

A diet high in complex carbohydrates and low in refined carbohydrates and fats is very important. Weight loss should be promoted in obese individuals.

**Physical Measures**

- **Exercise:** twenty to thirty minutes of aerobic exercise a minimum of five days per week
- **Massage:** regular self-massage of the affected area with hand or brush

**Botanical Medicines**

**Oral Administration**

- *Centella asiatica* extract: 30 mg of triterpenes three times per day
- *Aesculus hippocastanum* extract: 10-20 mg of escin three times per day

**Topical Application**

Salve, ointment, etc., twice per day:

- Escin: 0.5-1.5%
- Cola vera extract (14% caffeine): 0.5-1.5%
- Fucus vesiculosus: 0.25-75%

**CVA/CerbroVascular Insufficiency;**

Presence of one or more of the following symptoms: Short-term memory loss
Dizziness (vertigo) Headache
Ringing in the ears Depression Blurred vision Reduced blood flow to the brain based on ultrasound exam

**QUICK REVIEW**

Symptoms of cerebral vascular insufficiency are associated with a reduced blood flow and oxygen supply to the brain.
Anyone who experiences signs and symptoms of cerebral vascular insufficiency should consult a physician immediately.
The modern evaluation of blood flow to the brain involves the use of ultrasound techniques.

Carotid endarterectomy is a highly controversial surgical procedure, the patients can either die or suffer severe neurological damage as a result of a stroke during the surgery.
Aortic glycosaminoglycan preparations have been effective in improving both cerebral (brain) and peripheral (hands and feet) vascular insufficiency.
In well-designed studies, *Ginkgo' biloba* extract (GBE) has produced a statistically significant regression of the major symptoms of cerebral vascular insufficiency and impaired mental performance.

**TREATMENT SUMMARY**

In most cases, cerebral vascular insufficiency is a consequence of atherosclerosis. That being the case, appropriate treatment involves following the recommendations given in the chapter HEART AND CARDIOVASCULAR HEALTH. It may also be appropriate to consult the chapters on CHOLESTEROL and HIGH BLOOD PRESSURE. The therapeutic goal in the treatment of cerebral vascular insufficiency is to enhance the...
blood and oxygen supply to the brain. Aortic GAGs and *Ginkgo biloba* extract (alone or in combination) have shown excellent results in treating cerebral vascular insufficiency, as well as in promoting a speedier and more complete recovery from a stroke. Both aortic GAGs and GBE can be used with the blood-thinning agent Coumadin without side effect. Dosages are as follows

- Aortic GAGs: 50-100 mg per day
- *Ginkgo biloba* extract (24% ginkgo flavoglucosides): 80 mg three times per day

**Cervical Dysplasia/Abnormal Pap Smear;**

**QUICK REVIEW**

Cervical dysplasia reflects abnormal cell growth on the cervix and is usually a pre-cancerous condition.

- Severe surgical dysplasia (Class IV Pap smear) requires cone biopsy or a similar procedure.

Risk factors for cervical dysplasia include: early age at first intercourse; smoking; multiple sexual partners; exposure to viruses; low income; oral contraceptive use; and many nutritional factors.

Women who have low vitamin C levels are 6.7 times more likely to develop cervical cancer than women with sufficient vitamin C levels.

The higher the intake of dietary sources of beta-carotene, the lower the rate of cervical dysplasia.

Many abnormal Pap smears reflect folic acid deficiency rather than true dysplasia.

In placebo-controlled studies, folic acid supplementation (10 mg per day) has resulted in improvement or normalization of Pap smears in patients with cervical dysplasia.

Selenium levels are significantly lower in patients with cervical dysplasia.

**TREATMENT SUMMARY**

For the treatment of a Class II or III Pap smear, the program outlined in this chapter can be used if there are regular repeat Pap smears (every one to three months). For Class IV or Class V Pap smears or unresponsive cases, please consult a physician immediately for proper medical treatment.

**Diet**

Consumption of animal products should be decreased, particularly animal fats. Follow the recommendations given in PREMENSTRUAL SYNDROME for reducing estrogen levels.

**Nutritional Supplements**

- Folic acid: 10 mg per day for three months, then 2.5 mg per day until normalization of the Pap smear occurs
- Vitamin B6: 25 mg three times per day
- Vitamin B 12: 1 mg per day
- Beta-carotene: 25,000-50,000 IU per day
- Vitamin C: 500-1,000 mg three times per day
- Vitamin E: 200-400 IU per day
- Selenium: 200-400 mg per day

**Cholesterol/Lipid Mgmt;**

Total blood cholesterol level above 200 mg/ LDL cholesterol level above 130 mg/dl HDL cholesterol level below 35 mg/dl Lipoprotein (a) level greater than 30 mg/dl

**QUICK REVIEW**
• Elevated cholesterol levels in the blood are linked to heart attacks and strokes.
• Although, in most cases, elevations of blood cholesterol levels are due to dietary and lifestyle factors, elevations can also result from genetic factors.
• Elevations in cholesterol levels may be the result of low thyroid function (hypothyroidism).
• The most important approach to lowering a high cholesterol level is a healthful diet and lifestyle.
• Several of the cholesterol lowering drugs are actually associated with an increase in noncardiovascular mortality.

Cholesterol-lowering drugs are toxic to the liver and extremely carcinogenic (cancer-causing).

Niacin has demonstrated better overall results than cholesterol lowering agents in reducing the risk of coronary heart disease.

Niacin was the only cholesterol-lowering agent found to reduce the death rate in The Coronary Drug Project. Because of its low cost and proven efficacy, niacin should be considered the first cholesterol-lowering agent to try. The problems with niacin (e.g., skin flushing, other side effects, and patient compliance) can be avoided by using inositol hexaniacinate and high doses of Vitamin C.

• Sustained-release niacin should not be used due to greater toxicity in the liver.
• The majority of studies that showed a positive effect of garlic and garlic preparations used

TREATMENT SUMMARY
In addition to diet and lifestyle measures, there are a number of natural compounds that can effectively improve cholesterol and triglyceride levels. Of the four described above (niacin, garlic, gugulipid, and pantethine), niacin in the form of inositol hexaniacinate produces the best overall effect.

In addition to the recommendations given in the chapter HEART DISEASE AND CARDIOVASCULAR HEALTH, we recommend beginning therapy with the following:
• Flaxseed oil: 1 tablespoon daily
• Niacin (as inositol hexaniacinate): 500 mg three times per day with meals for two weeks, then increase dosage to 1,000 mg three times per day with meals
• Garlic: minimum of 4,000 mcg of allicin per day

Within the first two months, this program will typically produce reductions in total cholesterol level of 50 to 75 mg/dl in patients with initial total cholesterol levels above 250 mg/dl. In cases in which the initial cholesterol level is above 300 mg/dl, it may take four to six months before cholesterol levels begin to reach recommended levels. Once the cholesterol level is reduced below 200 mg/dl, reduce the dosage of niacin to 500 mg three times per day for two months. If the cholesterol levels creep up above 200 mg/dl, then raise the dosage of niacin back to 1,000 mg three times per day. If the cholesterol level remains below 200 mg/dl, then withdraw the niacin completely and check the cholesterol levels in two months. Re-institute niacin therapy if levels creep up over 200 mg/dl. Garlic and flaxseed oil supplementation can be continued indefinitely, if desired. Gugulipid can be added to the above protocol if, after four months, the total cholesterol level remains above 250 mg/dl. Gugulipid is also suitable for the rare patient who cannot tolerate inositol hexaniacinate.
Pantethine is recommended primarily to diabetics and patients who have elevated triglyceride levels. Although there are no data showing that inositol hexaniacinate affects blood sugar levels, niacin is known to adversely affect blood sugar control in some diabetics. As stated above, pantethine has demonstrated excellent effects in diabetics. It not only improves cholesterol and triglyceride levels; it also normalizes platelet lipid composition and function and blood viscosity.\(^{15}\)

In regard to elevations in Lp(a), both niacin and vitamin C have shown an ability to drop Lp(a) levels dramatically (thirty-five- and twenty-seven-percent reductions, respectively). In addition, it is important to rule out low thyroid function (hypothyroidism) in all cases of elevated blood lipids, especially Lp(a).

<table>
<thead>
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<th>TABLE 3</th>
<th>Comparative Effects of Natural Compounds on Cholesterol and Triglyceride Lipids</th>
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<tr>
<td></td>
<td>NIAIN</td>
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<td>Total cholesterol (% decrease)</td>
<td>18</td>
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<tr>
<td>LDL cholesterol (% decrease)</td>
<td>23</td>
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<tr>
<td>HDL cholesterol (% increase)</td>
<td>32</td>
</tr>
<tr>
<td>Triglycerides (% decrease)</td>
<td>26</td>
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**CHF/Cardiomyopathy**

- Vitamin D3  1,000-4,000 iu/d
- Vitamin E  800-3,000 iu/d
- Vitamin C  To bowel tolerance
- Lecithin  3-5 tbsp/d (contains Linoleic acid)
- Ca++  500 mg tid
- Mg++  250 mg tid
- CoQ10  100-400 mg/d

**Chronic Fatigue Syndrome**

- Mild fever
- Recurrent sore throat
- Painful lymph nodes
- Muscle weakness
- Muscle pain
- Prolonged fatigue after exercise
- Recurrent headache
- Migratory joint pain
- Depression
- Sleep disturbance (excessive sleep requirements or insomnia)

**QUICK REVIEW**

- A disturbed immune system plays a central role in chronic fatigue syndrome (CFS).
- Fibromyalgia and multiple chemical sensitivity disorder have symptoms similar to those of CFS.
- Chronic fatigue can be caused by a variety of physical and psychological factors other than the chronic fatigue syndrome.
- A person's energy level and emotional state are determined by interplay between two primary factors: internal focus and physiology.
- One of the most common findings in individuals with impaired immune function is gastrointestinal overgrowth of *Candida albicans*.
- As far back as 1930, chronic fatigue was recognized as a key feature of food allergies.
• The mind and attitude play a critical role in determining the status of the immune system and energy levels.
A deficiency of virtually any nutrient can produce the symptoms of fatigue and render the body more susceptible to infection.
Breathing with the diaphragm, good posture, and bodywork (massage, spinal manipulation, etc.) are all important in helping to relieve the stress.

TREATMENT SUMMARY
Successful treatment of CFS requires a sensitive approach. Especially important is identifying underlying factors, which may be impacting energy levels or the immune system. Special attention should be given the advice on immune support in the chapter IMMUNE SUPPORT.

Diet
Identify and control food allergies. Increase your consumption of water while eliminating consumption of caffeine containing drinks and alcohol. Adopt a diet of whole, organically grown foods. Control hypoglycemia through the elimination of sugar and other refined foods and the regular consumption of small meals and snacks. To speed the detoxification process, consider using several-week course of a medical food replacement product (e.g., UltraClear, a popular powdered meal-replacement formula).

Lifestyle
Follow the recommendations given in the chapter A HEALTHY LIFESTYLE. Especially important is a regular exercise program, with low-intensity activities producing the greatest benefits.

Nutritional Supplements
• High-potency multiple vitamin and mineral formula, according to guidelines given in the chapter SUPPLEMENTARY MEASURES
• Vitamin C Frequently (qid) daily to bowel tolerance
• Vitamin E: 200-400 IU per day Thymus extract 750 mg of the crude

Carotene/Vitamin A Carotene 180 mg/d (10KiuA ~ 6 mg Carotene)

Vitamin B Complex
Ca++  500 mg tid
Mg++  250 mg tid
Cr   200-400 ug/d
Zn   40-150 mg/d

Botanical Medicines
Dosages are three times per day. Siberian ginseng (Eleutherococcus senticosus):
Dried root:
2-4 g Tincture (1:5): 10-20 ml
Fluid extract (1:1): 2.0-4.0 ml
Solid (dry powdered) extract (20:1 or standardized to contain greater than 1% eleutheroside

Licorice (Glycyrrhiza glabra):
Powdered root: 1-2 g
Fluid extract (1:1): 2-4 ml
Solid (dry powdered) extract (4:1): 250-500 mg

Counseling
Seek guidance from your physician or a professional counselor, to establish a regular pattern of mental, emotional, and spiritual affirmations.
Common Cold;
Nasal discomfort with watery discharge and sneezing Dry, sore throat
Red, swollen nasal passages, swollen lymph nodes on the neck
QUICK REVIEW
• Many of the symptoms of the cold are a result of our body's defense mechanisms.
• The value of sleep and rest during a cold cannot be overemphasized.
• Consuming plenty of liquids and/or using a vaporizer maintains a moist respiratory tract that repels viral infection.
• Vitamin C at a dosage of 1 to 6 grams per day decreases the duration of the cold episodes by nearly one full day.
• The argument in the medical literature that vitamin C has no effect on the common cold seems to be based in large part on a faulty review written two decades ago.
• If they are properly prepared, zinc lozenges can be effective in reducing the duration of symptoms.
• In 1994, German physicians and pharmacists prescribed Echinacea for the common cold more than 2.5 million times.
Nutritional Supplements
• Vitamin C: 500-1,000 mg every two hours (decrease if it produces excessive gas or diarrhea), along with 1,000 g of mixed bioflavonoids per day
• Vitamin A: 15,000-25,000 IU per day for up to four days
WARNING: Do NOT FOLLOW THIS REDCOMMENDATION FOR VITAMIN A IF YOU ARE PREGNANT OR A SEXUALLY A(TIVE WOMAN NOT EMPLOYING EFFE(IVE BIRTH CONTROL.
• Beta-carotene* 50,000-100,000 IU per day
• Zinc lozenges
SUMMARY
Although the focus of this chapter was on the use of natural methods to assist the body in recovering from the common cold, prevention is by far the best medicine. The old adage "an ounce of prevention is worth a pound of cure" is true for the common cold as well as the majority of other conditions afflicting human health. Prevention involves strengthening the immune system, as detailed in the chapter IMMUNE FUNCTION. The following are recommendations as to what to do if a cold develops.
• Rest (bed rest is best)
• Drink large amounts of fluids (preferably diluted vegetable juices, soups, and herb teas)
• Limit simple sugar consumption (including fruit sugars) to less than 50 grams a day
• Juice of aerial portion of E. purpurea stabilized in 22% ethanol: 2-3 ml Tincture (1:5): 2-4 ml
• Fluid extract (1:1): 2-4 ml
• Solid (dry powdered) extract (6.5:1 or 3.5% echinacoside): 150-300 mg
• Zinc lozenges: Use lozenges that supply 15 to 25 mg of elemental zinc with glycine as the sweetener; dissolve in the mouth every two waking hours after an initial double dose; continue for up to seven days. Prolonged supplementation (fa, more than one week) at this dose is not recommended, as it may lead to suppression of the immune system.
Botanical Medicines
• Echinacea sp.
All dosages are three times per day. Dried root (or as tea): 0.5-1 g Freeze-dried plant: 325--650 mg

**Cystitis/UTI:**
Burning pain on urination increased urinary frequency, especially at night (nocturia)
Cloudy, foul-smelling, or dark urine
Lower abdominal pain
Urinalysis shows significant number of bacteria and white blood cells

Powdered solid extract (10% arbutin): 250-500 mg

• Goldenseal (*Hydrastis canadensis*)
  Dried root (or as tea): 1-2 g Freeze-dried root: 500-1,000 mg
  Tincture (1:5): 4-6 ml (1-1/2 tsp)
  Fluid extract (1:1): 0.5-2.0 ml (1/4-1/2 tsp)

Powdered solid extract (8% alkaloid): 250-500 mg

**QUICK REVIEW**
• If you have symptoms suggestive of a bladder infection, consult a physician.
• There is a growing concern that antibiotic therapy actually promotes recurrent bladder infections.
• The primary goal in the natural approach to treating bladder infections is to enhance the immune system and other protective factors against infection.

Drinking at least 64 ounces of water daily increases urine flow to combat cystitis.
Alkalinizing the urine with citrate salts relieves cystitis.
Cranberry juice has been shown to be quite effective in several clinical studies.
Uva ursi is effective in the treatment of acute bladder infections and is also a preventive measure.

**TREATMENT SUMMARY**
While the occasional acute bladder infection is easily treated, treating chronic bladder infections requires determining the underlying cause. Structural abnormalities, excessive sugar consumption, food allergies, nutritional deficiencies, chronic vaginitis, local foci of infection (e.g., prostate, kidneys), and current or childhood sexual abuse are all potential causes that must be evaluated and resolved.

**General Measures**
• Drink large quantities of fluids (at least 2 quarts per day), including at least 16 ounces of unsweetened cranberry or 8 ounces of blueberry juice per day.
• Urinate after intercourse. Women who develop bladder infections after intercourse should wash their labia and urethra with a strong tea of *Hydrastis canadensis* (2 tsp per cup) both before and after. If this is inadequate, a dilute solution of povidone-iodine will usually prove effective.

**Diet**
Avoid all simple sugars, refined carbohydrates, and full-strength fruit juice (diluted fruit juice is acceptable), and food allergens.

**Nutritional Supplements**
• Citrate: dosage can be based on the level of elemental mineral such as potassium, magnesium, or calcium. The dosage recommendation is 125 to 250 mg three to four times daily.
• Vitamin C: 500 mg every two hours
• Bioflavonoids: 1,000 mg per day
• Vitamin A: 50,000 IU per day for up to two days in infants and up to one week in adults 200,000 iu/d
WARNING: Do not use vitamin A in sexually active women of childbearing age without effective birth control due to the link with birth defects at high dosages.
• Zinc: 30 mg per day

Botanical Medicines
Choose one; dosages can be taken three times daily with a large glass of water.
NOTE: Neither uva ursi nor goldenseal is recommended during pregnancy.
Uvaursi (Arctostaphylos uva ursi) Dried leaves or as a tea: 1.5-4.0 g (1-2 tsp)
Freeze-dried leaves: 500-1,000 mg Tincture (1:5): 4-6 ml (1-1.5 tsp) Fluid extract (1:1): 0.5-2.0 ml (1/4-1/2 tsp)

Depression;
The official definition of clinical depression, according to the American Psychiatric Association in its Diagnostic and Statistical Manual of Mental Disorders (DSM4V), is based on the following eight primary criteria:
1. Poor appetite accompanied by weight loss, or increased appetite accompanied by weight gain
2. Insomnia or excessive sleep habits (hypersomnia)
3. Physical hyperactivity or inactivity
4. Loss of interest or pleasure in usual activities, or decrease in sexual drive
5. Loss of energy; feelings of fatigue
   6. Feelings of worthlessness, self-reproach, or inappropriate guilt
   7. Diminished ability to think or concentrate
   8. Recurrent thoughts of death or suicide
The presence of five of these eight symptoms definitely indicates clinical depression; an individual with four is probably depressed. According to the DSM4V the symptoms must be present for at least one month to be called depression. Clinical depression is also referred to as major depression or unipolar depression.

QUICK REVIEW
Approximately seventeen million Americans suffer from true clinical depression each year, and over twenty eight million Americans take antidepressant drugs or anxiety medications. One of the most powerful techniques for producing the necessary biochemical changes in the brains of depressed individuals is to teach them to be more optimistic.
• Low levels of serotonin contribute to depression.
• It is important to rule out the simple organic factors that are known to contribute to depression, i.e., nutrient deficiency or excess, drugs (prescription, illicit, alcohol, caffeine, nicotine, etc.), hypoglycemia, consumption, hormonal derangement, allergy, environmental factors, and microbial factors.
• Cognitive therapy has been shown to be as effective as antidepressant drugs in treating moderate depression.
• Depression is often a first or early manifestation of thyroid disease.
• Increased cortisol levels are common in depression.
Elimination of sugar and caffeine has been shown to produce significant benefits in clinical trials.
Increased participation in exercise, sports, and physical activities is strongly associated with decreased symptoms of anxiety, depression, and malaise.

A deficiency of any single nutrient can alter brain function and lead to depression, anxiety, and other mental disorders.

Hypoglycemia can cause depression.

• An insufficiency of omega-3 oils in the diet has been linked to depression.

Numerous double-blind studies have shown 5-hydroxytryptophan (5-HTP) to be as effective as antidepressant drugs, but it is better tolerated and is associated with fewer and much milder side effects.

Extracts of St. John's wort standardized for hypericin (usually 0.3 percent) are the most thoroughly researched natural antidepressants.

Over twenty-five double-blind studies have shown St. John's wort to produce as good or better results compared to standard antidepressant drugs, but with significantly fewer side effects.

**TREATMENT SUMMARY**

Treatment is largely dependent on a few central elements: accurate determination of which factors are contributing to the depression; balancing of errant neurotransmitter levels; and optimizing nutrition, lifestyle, and psychological health.

**Diet**

Increase the consumption of fiber-rich plant foods (fruits, vegetables, grains, legumes, and raw nuts and seeds). Avoid the intake of caffeine, nicotine, other stimulants, and alcohol. Identify and control food allergies.

**Lifestyle**

Follow the recommendations given in the chapter A POSITIVE MENTAL ATTITUDE. In addition, consult with a counselor to learn skills and tools that will help you attain a positive, optimistic mental attitude. Get regular exercise—at least thirty minutes at least three times per week—and practice a relaxation/stress reduction technique for ten to fifteen minutes each day.

**Nutritional Supplements**

• High-potency multiple vitamin and mineral
• Vitamin C: 500-1,000 mg three times per day
• Vitamin E: 200-400 IU per day
• Flaxseed oil: 1 tablespoon per day
• 5-HTP: 100-200 mg three times per day

Folic acid and vitamin B12: 800 mcg of each per day

GABA (Gamma Amino Butyric Acid)

Inositol 2-4 gm/d

L-Tryptophan 2-4 gm/d

**Botanical Medicines**

If under the age of fifty, St. John's wort (~, extract (0.3% hypericin): 300 mg three times per day.

In severe cases, St. John's wort extract can be used in combination with 5-HTP

If over the age of fifty, *Ginkgo biloba* extract (24% ginkgo flavonglycosides): 80 mg three times per day.

In severe cases, can be used in combination with St. John's wort and/or 5-HTP
If anxiety is a significant factor, kava extract standardized for kavalactone content: 45-70 mg kavalactones three times per day.

**Diabetes:**
The National Diabetes Data Group of the National Institutes of Health recommends the following criteria for diagnosing diabetes:
- Fasting (overnight): serum glucose (blood sugar) concentration greater than or equal to 140 mg/dl on at least two separate occasions
- Following ingestion of 75 g of glucose: serum glucose concentration greater than or equal to 200 mg/dl at two hours post-ingestion and at least one other sample during the two-hour test
- Classic symptoms of increased thirst, increased hunger, and increased urination

**QUICK REVIEW**
- Diabetes is divided into two major categories: Type I and II.
- Ninety percent of diabetics are Type II and are not dependent upon insulin.
- Although genetic factors appear important in susceptibility to diabetes, environmental factors are required to trigger diabetes.
- Obesity is another significant environmental factor, as ninety percent of diabetics are obese.
- Exposure to a protein in cow's milk (bovine albumin peptide) in infancy may trigger the autoimmune process and subsequent Type I diabetes.
- The trace mineral chromium plays a major role in the sensitivity of cells to insulin.
- To reduce the risk of developing the complications of diabetes, it is important to control against elevations in blood sugar by careful monitoring.
- Dietary modification and treatment is fundamental to the successful treatment of diabetes, whether it is Type I or II.

The treatment of diabetes requires nutritional supplementation, as diabetics have a greatly increased need for many nutrients.
- Since the transport of vitamin C into cells is facilitated by insulin, many diabetics do not have enough intracellular vitamin C.
- Some newly diagnosed Type I diabetics have experienced complete reversal of their diabetes with niacinamide supplementation.
- Vitamin B6 supplementation appears to offer significant protection against the development of diabetic nerve disease.
- Diabetics appear to have an increased requirement for vitamin E, and benefit from high-dose supplementation.
- Onions and garlic have demonstrated blood-sugar-lowering action in several studies and help reduce the risk of cardiovascular disease.
- The oral administration of bitter melon preparations has shown good results in clinical trials in patients with both Type I and Type II diabetes.
- Recent scientific investigation has upheld the effectiveness of *Gymnema sylvestre* in treating both Type I and Type II diabetes.

**TREATMENT SUMMARY**
Effective treatment of diabetes usually requires the careful integration of a wide range of therapies and a willingness on the part of patients to substantially improve their diet lifestyles. NIDDM usually results from many years of chronic metabolic insult; although it can be treated with the natural metabolic approach presented here, its
ultimate resolution will take persistence. Although much of the information presented
in this chapter has focused on NIDDM, it is equally appropriate for the IDDM patient,
with the exception that, according to current information, the Type I diabetic will
always require insulin.
Blood sugar levels must be monitored carefully, particularly if the diabetic is on insulin
or has poorly controlled diabetes. Home glucose monitoring and the HgbA1c, tests are,
at this time, the best way to monitor progress. It is important to recognize that, as these
natural therapies take effect, insulin requirements and drug dosages will have to be
altered. It is helpful to develop a good working relationship with one's doctor.
WARNING: Under no circumstances should a patient be suddenly taken off
diabetic drugs, especially insulin. According to current information, an IDDM
patient will never be able to stop taking insulin.
Diet
All simple, processed, and concentrated carbohydrates must be avoided. Complex-
carbohydrate, high-fiber foods should be stressed, and fats should be kept to a minimum.
Legumes, onions, and garlic are particularly useful.
Nutritional Supplements
Take a high-potency multiple vitamin and mineral supplement, according to the guidelines
given in SUPPLEMENTARY MEASURES.
- Vitamin C: 500-1,000 mg three times per day
- Mixed flavonoids: 1,000-2,000 mg per day
- Vitamin E: 800-1,200 IU per day
- Flaxseed oil: 1 tablespoon per day
- GLA source: 240-480 mg of GLA per day
- Magnesium: 250 mg two to three times per day
- Methylcobalamin (active vitamin B12): 1,000 mcg per day
- Fiber (guar, pectin, or oat bran): 20-30 g per day
Botanical Medicines
If diabetic retinopathy is present: Bilberry (or grape seed) extract: 40-80 mg three times per
day
If diabetic neuropathy is present: Ginkgo biloba extract (24% ginkgo flavoglycosides): 40--
80 mg three times per day
Other botanicals, listed in order of presumed effectiveness:
- Gymnema sylvestre extract: 200 mg twice per day
- Bitter melon (Momordica charantia): 1-2 oz fresh juice three times per day • Defatted
fenugreek powder: 50 g per day
- Salt bush (Atriplex halimus): 3 g per day
Exercise
Regular exercise is vitally important. Exercise at an intensity that elevates heart rate at least
50% for one half hour at least three times per week

Diarrhea;
QUICK REVIEW
Severe bloody diarrhea, diarrhea in a child under six years of age, or diarrhea that lasts
more than three days should not be taken lightly; its cause must be determined and treated
appropriately.
The therapy of any chronic diarrhea requires identification of the underlying cause and then
directing therapy designed to restore normal bowel function. Replace lost water and electrolytes by drinking herbal teas, vegetable broths, fruit juices, or electrolyte-replacement drinks.
Avoid dairy products (with the possible exception of live-cultured yogurt) while
experiencing diarrhea.
Carob powder is particularly helpful in treating diarrhea in young children.
Supplementation with *Lactobacillus acidophilus* is crucial in the treatment of diarrhea of
any kind, but particularly in antibiotic-associated diarrhea. Chronic diarrhea is one of the
most common symptoms of food allergy. It has been estimated that seventy to ninety
percent of Asian, Black, Native American, and Mediterranean adults lack the enzyme
required to digest milk sugar (lactose).
• Diarrheal diseases caused by parasites still constitute the single greatest worldwide cause
of illness and death.
Popular natural treatments of parasitic infections include high dosages of pancreatic
enzymes and berberine-containing plants, such as goldenseal. Berberine has shown
significant success in the treatment of acute diarrhea in several clinical studies.
**TREATMENT SUMMARY**
Since most acute cases of diarrhea are self-limiting, the general recommendations given
are often all that is needed. If any of the following apply, a physician should be
consulted:
• Diarrhea in a child under six years of age
• Severe or bloody diarrhea
• Diarrhea that lasts more than three days
• Significant signs of dehydration (sunken eyes, severe dry mouth, strong body odor, etc.)
After identification of the cause of chronic diarrhea, appropriate treatment can be
determined with the help of a physician.
**General Support**
There are several measures that can be used as general support during any case of
diarrhea:
• Don't eat solid foods
• Replace water and electrolytes
• Avoid dairy products
• Use carob or pectin (alone or in combination with kaolin)

**Erectile Dysfunction (ED);**
Stress
Performance anxiety
Depression
Unknown
Nighttime Penile Monitoring
Neurological examination
**QUICK REVIEW**
An estimated ten to twenty million American men suffer from impotence. Men are capable
of retaining their sexual virility well into their eighties. Atherosclerosis of the penile artery
is the primary cause of impotence in nearly half the men over the age of fifty who have
erectile dysfunction.
Alcohol and/or tobacco use decrease sexual function.
• Nutrition plays a major role in determining virility.
If you use yohimbine, use products marketed by reputable companies that clearly state the level of yohimbine per dosage.
*Ginkgo biloba* extract is quite helpful in cases that result from a lack of blood flow.

**TREATMENT SUMMARY**

Restoring potency requires addressing the underlying cause. In the majority of cases, organic factors are the cause. The chief cause is decreased blood flow (vascular insufficiency) due to atherosclerosis.

There are a variety of medical treatments for erectile dysfunction, but each treatment has its drawbacks. The natural approach to erectile dysfunction involves the use of diet, exercise, nutritional supplements, and herbs. This combined approach is designed to restore potency by restoring normal physiology.

**Diet**

A diet rich in whole foods—particularly vegetables, fruits, whole grains, and legumes—is extremely important. Adequate protein is also a must; it is better to get high-quality protein from fish, chicken, turkey, and lean cuts of beef (preferably hormone-free) than from fat-filled sources such as hamburgers, roasts, and pork. Special foods often recommended to enhance virility include liver, oysters, nuts, seeds, and legumes. All of these foods are good sources of zinc.

**Lifestyle**

Avoid health-destroying practices, such as smoking or excessive consumption of alcohol. Develop a regular exercise program according to the guidelines in the chapter *A HEALTHY LIFESTYLE*.

**Nutritional Supplements**

• Multiple-vitamin-and-mineral formula according to the guidelines given in the chapter *SUPPLEMENTARY MEASURES* Vitamin C: 500-1,000 mg three times per day.
  Vitamin E: 400-800IU per day. Flaxseed oil: one tablespoon daily. I • DHEA: please see *LONGEVITY AND LIFE EXTENSION* for dosage information

**Botanical Medicines**

*For Impotence with Decreased Libido* Choose one of the following or combine them:

• Panax ginseng
  The dosage of ginseng is related to the ginsenoside content. The typical dose (taken one to three times daily) should contain a saponin content of at least 5 mg of ginsenosides with a ratio of Rbl to Rgl of 2:1. For example, for a high-quality ginseng root powder or extract containing 5% ginsenosides, the dose would be 100 mg. As each individual's response to ginseng is unique, care must be taken to observe possible ginseng toxicity. It is best to begin at lower doses and increase gradually. The Russian approach for long-term administration of either Panax or Siberian ginseng is to use ginseng cyclically for a period of fifteen to twenty days followed by a two-week interval without any ginseng. This recommendation appears prudent.

• Muira puama (*Ptychopetalum olacoides*) extract (6:1): 250 mg three times per day

*For Arterial Insufficiency*

• *Ginkgo biloba* extract (24% ginkgo flavonglycosides): 80 mg three times per day

*For Elevated Prolactin Levels*

• Chaste berry (*Vitex agnus castus*) extract (0.5% agnuside content): 350-500 mg daily
• **Panax ginseng**  
The dosage of ginseng is related to the ginsenoside content. The typical dose (taken one to three times daily) should contain a saponin content of at least 5 mg of ginsenosides with a ratio of Rbl to Rgl of 2:1. For example, for a high-quality ginseng root powder or extract containing 5% ginsenosides, the dose would be 100 mg. As each individual's response to ginseng is unique, care must be taken to observe possible ginseng toxicity. It is best to begin at lower doses and increase gradually. The Russian approach for long term administration of either Panax or Siberian ginseng is to use ginseng cyclically for a period of fifteen to twenty days followed by a two-week interval without any ginseng. This recommendation appears prudent.

• **Muira puama (Ptychopetalum olacoides) extract (6:1):** 250 mg three times per day  

For Supportive Therapy  
Herbs described in the chapter PROSTATE ENLARGEMENT, especially *Pygeum africanum*, may be helpful. Also, damiana tea may be helpful, as described in

**Fibrocystic breast disorder;**  
Characteristically cyclic and bilateral, with multiple cysts of varying sizes giving the breast a nodular consistency  
Pain or pre-menstrual breast pain and tenderness common, although condition often without symptoms  
Occurs in twenty to forty percent of premenopausal women

**QUICK REVIEW**  
• Fibrocystic breast disease is most often a component of premenstrual syndrome.  
• Elevated estrogen-to-progesterone ratio and/or increased prolactin levels are common.  
• Eliminating caffeine and similar compounds has produced improvements in as high as ninety-seven percent of women in clinical trials.  
• Hypothyroidism and/or iodine deficiency may be a causative factor in fibrocystic breast disease.  
• Women *who* have fewer than three bowel movements per week have a 4.5 times greater rate of fibrocystic breast disease than women *who* have at least one bowel movement a day.

**TREATMENT SUMMARY**  
Unless a woman has pure FBD (no other PMS symptom), the therapeutic approach outlined in PREMENSTRUAL SYNDROME will more definitively meet her individual needs, as FBD is often a component of the more encompassing PMS. The therapy recommended here includes key factors discussed in that chapter.

**Diet**  
The diet should be primarily vegetarian, with large amounts of dietary fiber. All methylxanthines should be eliminated until symptoms are alleviated; they then can be reintroduced in small amounts. External (exogenous) estrogens should be avoided (oral contraceptives, animal products with high estrogen content such as meats raised with the help of growth stimulators, etc.). The diet should emphasize whole, unprocessed foods: whole grains, legumes, vegetables, fruits, nuts, and seeds. Drink at least 48 ounces of water daily.

**Nutritional Supplements**
High potency multiple vitamin and mineral formula as described in the chapter
SUPPLEMENTARY MEASURES Lipotropic factors
Choline: 500-1,000 mg per day
Methionine: 500-1,000 mg per day
Vitamin B6: 25-50 mg three times per day
• Vitamin C: 500 mg three times per day
Vitamin E: 400-800 IU per day of d-alpha tocopherol
Beta-carotene: 50,000 IU per day Iodine (caseinate or liquid iodine): 70-90 mcg of iodine per kilogram of body weight per day (other forms of iodine 500 mcg daily)
Zinc: 15-30 mg per day
Flaxseed oil: 1 tablespoon per day Lactobacillus acidophilus: 1-2 billion live organisms per day

Fibromyalgia (FMR);
Diagnosis requires fulfillment of all three major criteria and four or more minor criteria
MAJOR CRITERIA:
1. Generalized aches or stiffness of at least three anatomical sites for at least three months
2. Six or more typical, reproducible tender points
3. Exclusion of other disorders that can cause similar symptoms
MINOR CRITERIA:
1. Generalized fatigue
2. Chronic headache
3. Sleep disturbance
4. Neurological and psychological complaints
5. Joint swelling
6. Numbing or tingling sensations
7. Irritable bowel syndrome
8. Variation of symptoms in relation to activity, stress, and weather changes

QUICK REVIEW
• Fibromyalgia and chronic fatigue syndrome share many features.
• Although fibromyalgia is a disorder that has many facets, the central cause of the pain of fibromyalgia is a low level of serotonin.
The primary treatment goals in fibromyalgia are to raise serotonin levels, improve sleep quality, and assure adequate magnesium levels. Individuals with fibromyalgia have altered sleep patterns: reduced REM sleep and increased non-REM sleep.
• The severity of the pain of fibromyalgia correlates with the rating of poor sleep quality.
• 5-HTP has shown considerable benefit in treating fibromyalgia in double-blind studies
• Although 5-HTP can be effective on its own, we recommend the combination of 5-HTP (100 mg), St. John's wort extract (300 mg, 0.3-percent hypericin content), and magnesium (150 to 250 mg) three times per day.
• Magnesium supplementation has produced very good results in treating fibromyalgia.

TREATMENT SUMMARY
The primary treatment goals in fibromyalgia are to raise serotonin levels, improve sleep quality, and assure adequate magnesium levels. In addition, there may be recommendations
given in the CHRONIC FATIGUE SYNDROME chapter that are appropriate in any given case. Please follow the relevant recommendations given there.

Diet
Follow the recommendations given in A HEALTH-PROMOTING DIET.

Lifestyle
Follow the recommendations given in A HEALTHY LIFESTYLE.

Nutritional Supplements
High potency multiple vitamin and mineral formula, according to guidelines given in SUPPLEMENTARY MEASURES
5-HTP: 50-100 mg three times per day Magnesium bound to citrate or Krebs cycle intermediates (citrate, malate, fumarate, succinate, aspartate): 150-250 mg three times per day

Botanical Medicines
• St. John's wort extract (0.3% hypericin): 300 mg three times per day

Food Allergies;
Significant improvement in symptoms and signs of a disease linked to food allergy while on an allergy-elimination diet
Positive test result from an acceptable food allergy test

Typical signs of allergy:
• Dark circles under the eyes ("allergic shiners")
• Puffiness under the eyes
• Horizontal creases in the lower eyelid
• Chronic (non-cyclic) fluid retention
• Chronic swollen glands

QUICK REVIEW
Food allergies have been linked to many common symptoms and health conditions. Some physicians believe that at least sixty percent of the American population suffers from symptoms associated with food reactions.
• When both parents have allergies, there is a sixty-seven-percent chance that the children will also have allergies.
• It is often necessary to support the individual who has food allergies with supplemental levels of hydrochloric acid and/or pancreatic enzymes.

TREATMENT SUMMARY
While there is no known simple "cure" for food allergies, there are a number of measures that will help avoid and lessen symptoms and correct the underlying causes. First, all allergenic foods should be identified using one of the methods discussed in this chapter. After identifying allergenic foods, the best approach is clearly avoidance of all major allergens, and rotation of all other foods for at least the first few months. As one improves, the dietary restrictions can be relaxed, although some individuals may require a rotation diet indefinitely. For strongly allergenic foods, all members of the food family should be avoided.
• There are now effective blood tests to identify food allergies.
• The simplest and most effective method of treating food allergies is through avoidance of allergenic foods.
• Many experts believe that the key to the dietary control of food allergies is the "Rotary Diversified Diet."
• During stressful times, food allergies tend to develop or become worse.
• Many physicians believe that oral food challenge is the best way to diagnose food sensitivities.
• The skin-prick test or skin-scratch test commonly employed by many allergists is of little value in diagnosing most food allergies.

GERD;
1. Make your midday meal your largest meal, and do not eat after 5 PM. It is amazing how many indigestion symptoms go away when you do so.
2. Eat easy to digest food. This includes fruits; rice; steamed vegetables; sprouted seeds and grains; well-cooked beans; aged cheeses, yogurt, and cottage cheese; and especially vegetable juices. Make a point to avoid fried food. Stop eating meat. (And if you can't manage that 100%, at least avoid the worst of them: cold cuts, ham, pastrami, pepperoni, and deli meats.)
3. Multiple digestive enzyme tablets may help, particularly if you did not follow the advice in step 2, above.
4. Eat more dried figs, fresh pineapple, and dried or fresh papaya. These foods are loaded with digestive enzymes. Good quality yogurt contains beneficial digestive bacteria. [http://www.doctoryourself.com/digestion.html](http://www.doctoryourself.com/digestion.html)
5. Raise your head at night. Sleep on a thicker pillow, or stack up two thin ones. Some people prefer a foam rubber, wedge-shaped bolster pillow.
6. Osteopathic adjustments can help. Try three visits and see.
7. The homeopathic remedy (and Schuessler Cell Salt) Natrum Phos, 6X, may help.
8. Reduce stress. Yeah, right! Easier said than done, isn't it. Meditation, relaxation, music, reading, or just some plain old time alone can really make a difference.
9. If your symptoms are really troublesome, see your doctor. While you are waiting for the appointment, you could go on a juice-only diet for a three to seven days. [http://www.doctoryourself.com/juicefast.html](http://www.doctoryourself.com/juicefast.html)
10. I have met some people who have had acid reflux for so long that there was damage to and scarring of the esophagus. I acquainted them with the four-glasses-of-cabbage-juice-a-day hospital-tested protocol of Garnett Cheney, M.D. While originally used primarily on stomach and lower gastrointestinal conditions, cabbage juice proved has proven effective above the tummy as well. [http://www.doctoryourself.com/colitis.html](http://www.doctoryourself.com/colitis.html)

Glaucoma;
**ACUTE GLAUCOMA**
Increased pressure within the eye (intraocular), usually on one side only Severe throbbing pain in eye with markedly blurred vision
Pupil moderately dilated and fixed Nausea and vomiting is common

**CHRONIC GLAUCOMA**
Persistent elevation of the pressure within the eye (increased intraocular pressure) Usually no symptoms are apparent in the early stages
Gradual loss of peripheral vision resulting in tunnel vision
QUICK REVIEW
Glaucoma is a major cause of blindness in adults. Treatment and prevention of both acute and chronic glaucoma is dependent upon:

1. reduction of intraocular pressure, and
2. improvement of collagen metabolism within the eye. Magnesium supplementation lowers intraocular pressure.

TREATMENT SUMMARY
Acute glaucoma is a medical emergency. If you are showing any signs of glaucoma, consult an ophthalmologist immediately. Typical signs and symptoms include extreme pain, blurring of vision, reddened eyes, and a fixed and dilated pupil. Unless adequately treated within twelve to forty-eight hours, an individual with acute glaucoma will become permanently blind within two to five days.

Diet
A generally healthful diet is recommended, with a focus on foods high in vitamin C and flavonoids, such as fresh fruits and vegetables. In addition, regular consumption of cold-water fish (e.g. salmon, mackerel, herring, and halibut) is also encouraged due to their high content of omega-3 fatty acids.

Nutritional Supplements
- Vitamin C: minimum of 2,000 mg per day in divided doses (effective dosage may be as high as 35 g per day)
- Bioflavonoids (mixed): 1,000 mg per day
- Magnesium: 200 to 600 mg per day
- Chromium: 200 to 400 mcg per day
- Flaxseed oil: One tablespoon daily

Botanical Medicines
- Bilberry (Vaccinium myrtillus) extract (25% anthocyanidin content): 80 mg three times per day
- Gingko biloba extract (24% ginkgo flavonglycosides): 40 to 80 mg three times daily

Gout;
Acute onset of intense joint pain, typically involving the first joint of the big toe (about fifty percent of cases)
Elevated serum uric acid level
Periods without symptoms between acute attacks Identification of urate crystals in joint fluid Aggregated deposits of urate crystals in and around the joints of the extremities, but also in subcutaneous tissue, bone, cartilage, and other tissues Uric acid kidney stones

QUICK REVIEW
- uric acid crystals deposited in joints cause Gout.
- Several dietary factors are known to be causes of gout: consumption of alcohol, high-purine-content foods, fats, and refined carbohydrates.
- Elimination of alcohol consumption reduces uric acid levels and prevents gouty arthritis in many individuals.
- Liberal fluid intake dilutes the urine and promotes the excretion of uric acid.
- Consuming one-half pound of fresh or canned cherries per day has been found effective in lowering uric acid levels and preventing attacks of gout.

TREATMENT SUMMARY
The basic treatment goals involve: dietary and herbal measures that maintain uric acid levels within the normal range, controlled weight loss in obese individuals, avoidance of known precipitating factors (such as heavy alcohol consumption and a high-purine diet), the use of nutritional substances to prevent further acute attacks, and the use of herbal and nutritional substances to inhibit the inflammatory process.

**Diet**
Eliminate alcohol intake, maintain a low-purine diet, increase consumption of complex carbohydrates and decrease consumption of simple carbohydrates, maintain a low fat intake, keep protein intake moderate (0.8 g/kg body weight), and consume liberal quantities of fluid. Urinary twenty-four-hour uric acid levels can be used to monitor effectiveness with diet therapy (maintain below 0.8 g/day).
In addition, liberal amounts of cherries, blueberries, and other anthocyanosiderich (red-blue) berries or extracts should be consumed (0.5 to 1.0 pound per day).

**Nutritional Supplements**
- Flaxseed oil: one tablespoon per day or EPA: 1.8 g per day
- Vitamin E: 400-800 IU per day
- Folic acid: 10-40 mg per day
- Bromelain: 200-400 mg two to three times per day between meals
- Quercetin: 200-400 mg two to three times per day between meals

**Botanical Medicine**
- *Harpagophytum procumbens*
  Dried powdered root: 1-2 grams three times per day
  Tincture (1:5): 4-5 ml three times per day
  Dry solid extract (3:1): 400 mg three times per day
- Flavonoid-rich extracts such as those from bilberry, grape seed, or pine bark: 150-300 mg daily

**Headache**
Gradual onset of a mild, steady, or dull aching in the head
Pain often described as viselike squeezing or heavy pressure around head Constant headache (does not throb)

**QUICK REVIEW**
- A tension headache is usually caused by tightening in the muscles of the face, neck, or scalp as a result of stress or poor posture.
- The first therapeutic goal in treating the chronic tension headache sufferer is to address any structural problem that may trigger a tension headache. Learning how to relax and defuse tension goes a long way in the treatment and prevention of tension headache.
- Migraine and tension headaches share many features.

**TREATMENT SUMMARY**
The primary therapy should be addressing the factors that trigger tension in the neck muscles. Since the neck is an area of the body that often holds tension produced by psychological stress, it is especially important to learn to relax neck muscles through techniques such as progressive relaxation. In addition, it is important to address any structural factor that may be triggering tension headaches. Bodywork is an important
consideration. Since tension headaches and migraine headaches share several features, the therapeutic recommendations given in MIGRAINE are appropriate here as well.

**Nutritional Supplements**
- Magnesium: 250-400 mg three times per day
- Vitamin B6: 25 mg three times per day
- 5-HTP: 100 mg three times per day

**Heart Disease;**
Shortness of breath, especially with exertion Fatigue
Chronic, unproductive cough
Signs of reduced blood flow (blue extremities, swelling of the ankles) Abnormal finding with electrocardiograph and/or echocardiograph evaluation

**QUICK REVIEW**
Individuals suspected of having any heart disease should have an extensive cardiovascular evaluation.
The therapeutic goals in the treatment of heart disease are to improve energy metabolism within the heart and to improve the blood supply to the heart.
The popular diuretic Lasix (furosemide) can cause a thiamin deficiency. Thiamin supplementation improves heart function in patients who are taking Lasix.
- The level of magnesium in the blood correlates with the ability of the heart muscle to manufacture enough energy to beat properly.
- Many disorders of heart rhythm are related to an insufficient level of magnesium in the heart muscle.
- CoQ10 is an important natural prescription for all types of heart disease.
- Carnitine improves cardiac function in patients with congestive heart failure.
- Hawthorn (Crataegus sp.) preparations are very effective in the early stages of congestive heart failure and minor arrhythmias.

**TREATMENT SUMMARY**
The primary goals of therapy for CHF, arrhythmias, mitral valve prolapse, and cardiomyopathies are to improve the blood supply to the heart and to improve energy production within the heart muscle. Please consult other chapters in this book as appropriate. For example, if CHF is the result of long-term high blood pressure, please see HIGH BLOOD PRESSURE. Also, please follow the general guidelines on diet and lifestyle given in HEART AND CARDIOVASCULAR HEALTH.

**Nutritional Supplements**
- High-potency multiple vitamin and mineral supplement
- Vitamin C: 500 mg three times per day
- Vitamin E: 800 IU per day
- Flaxseed oil: 1 tbsp per day
- Magnesium: 200-400 mg three times per day
- Coenzyme Q10 150-300 mg per day
- L-Carnitine: 300 mg three times per day
- If taking Lasix (furosemide) or other diuretic, thiamin: 200-250 mg per day

**Botanical Medicines**
- Hawthorn (Crataegus sp.) extract (1.8% vitexin-4'-rhamnoside or 10% procyanidin content): 100-250 mg three times daily
**Hemorrhoids;**
Abnormally large or painful conglomerates of vessels, supporting tissues, and overlying mucous membrane or skin of the anorectal area
Bright red bleeding on the surface of the stool, on the toilet tissue, and/or in the toilet bowl

**QUICK REVIEW**
- The veins in the rectal area contain no valves, so factors that increase congestion of blood flow in the region can lead to hemorrhoid formation.
- The common causes of anal itching include: tissue trauma from excessive use of harsh toilet paper, *Candida albicans*, parasitic infections, and food allergies.
- A high-fiber diet is perhaps the most important component in the prevention of hemorrhoids.
- Flavonoid preparations have been helpful in relieving hemorrhoids by strengthening the veins.
- Studies suggest that aortic glycosaminoglycan preparations should be used as the "drug of first choice" in the treatment of hemorrhoids.

**TREATMENT SUMMARY**
As with all diseases, the primary treatment for hemorrhoids is prevention. This goal involves reducing the factors that may be responsible for increasing pelvic congestion: straining during defecation sitting or standing for prolonged periods of time, or underlying liver disease. A high-fiber diet is crucial for the maintenance of proper bowel activity. Fiber supplements, flavonoids, aortic GAGs, and various botanical medicines such as butcher's broom are appropriate supplementary measures.
Warm sitz baths and topical preparations are useful to ameliorate the discomfort, but have only temporary effects.

**Diet**
A high-complex-carbohydrate diet rich in dietary fiber is recommended. The diet should contain liberal amounts of flavonoid-rich foods, such as blackberries, citrus fruits, cherries, and blueberries to strengthen vein structures.

**Nutritional Supplements**
- Vitamin C: 500-1,000 mg three times per day
- Flavonoids:
  HER: 1,000-3,000 mg per day Citrus bioflavonoids, rutin, and/or hesperidin: 3,000-6,000 mg per day
- Aortic GAGs: 100 mg per day

**Botanical Medicines**
- Butcher's broom (Ruscus aculeatus) extract (9-11% ruscogenin content): 100 mg three times per day

**Physical Medicine**
- Hydrotherapy: warm sitz baths to relieve uncomplicated hemorrhoids

**Hepatitis;**
During the period before liver involvement a person with viral hepatitis may experience a loss of appetite, nausea, vomiting, fatigue, and flu-like symptoms that can occur two weeks to a month before liver involvement, depending on the incubation period of the virus
Either abrupt or insidious occurrence of symptoms
Tender enlarged liver, fever, jaundice (yellow appearance of the skin)
Dark urine (due to elevated bilirubin levels)
Normal-to-low white blood cell count, markedly elevated liver enzyme level (aminotransamases) in the blood, elevated bilirubin levels

QUICK REVIEW
Hepatitis is a serious disease, requiring the care of a physician. Several nutrients and herbs have been shown to inhibit viral reproduction, improve immune system function, and greatly stimulate regeneration of the damaged liver cells. In the case of acute exposure to the hepatitis B virus (HBV), hyperimmune globulin (HBIG)-a concentrated solution of immune globulins specific to HBV-is administered by injection.

• The therapeutic goals of natural hepatitis treatment are to protect the liver and to prevent further damage to the liver by supporting the immune system.
• During the acute phase, the focus should be on replacing fluids through consumption of vegetable broths, diluted vegetable juices (diluted fifty%)
In chronic cases, the diet should be low in saturated fats, simple carbohydrates (sugar, white flour, fruit juice, honey, etc.), oxidized fatty acids (fried oils), and animal products. High doses of vitamin C (40 to 100 grams orally or intravenously) can greatly relieve acute viral hepatitis in two to four days.
• There is good clinical data to support the effectiveness of orally administered bovine (beef) thymus extracts in treating acute and chronic viral hepatitis.
• Licorice exerts many actions that are beneficial in the treatment of acute and chronic hepatitis, including: protecting the liver; enhancing the immune system; and potentiating interferon.
• Silymarin, the flavonoid complex from milk thistle, is effective in treating both acute and chronic viral hepatitis.
• A growing body of scientific research indicates that silymarin phytosome is better absorbed and produces better clinical results than unbound silymarin.

TREATMENT SUMMARY
Hepatitis is a serious disease requiring the care of a physician. The therapeutic goals are to prevent further damage to the liver by supporting the immune system and to protect the liver. Bed rest is important during the acute phase of viral hepatitis, with slow resumption of activities as health improves. Strenuous exertion, alcohol, and other liver-toxic drugs and chemicals should be avoided. During the contagious phase (two to three weeks before symptoms appear to three weeks after), careful hygiene and avoiding close contact with others are important. In particular, once diagnosis is made, work in a day care center, restaurant, or similar environs is not recommended.

Diet
During the acute phase, the focus should be on replacing fluids through consumption of vegetable broths, diluted vegetable juices (diluted by half with water), and herbal teas. In the chronic phase, a natural foods diet, low in saturated fats, simple carbohydrates (sugar, white flour, fruit juice, honey, etc.), oxidized fatty acids (fried oils), and animal fat and high in fiber is recommended.

Nutritional Supplements
Follow the recommendations given in DETOXIFICATION.
• Vitamin C: 1,000 mg three times per day (in acute cases: intravenous vitamin C, 50-100 g per day)
• Liver extracts: 500-1,000 mg crude polypeptides per day
• Thymus extracts: equivalent to 120 mg pure polypeptides with molecular weights less than 10,000, or roughly 750 mg of the crude polypeptide fraction

**Botanical Medicines**

Glycyrrhiza glabra (licorice):
- Powdered root: 1-2 g three times per day
- Fluid extract (1:1): 2-4 ml three times per day
- Solid (dry powdered) extract (5% glycyrrhetinic acid content): 250-500 mg three times per day

NOTE: If licorice is to be used over a long period of time, it is necessary to increase the intake of potassium-rich foods.

• Silybum marianum (milk thistle):
  The dose of milk thistle is based on its silymarin content. For this reason, standardized extracts are preferred. The best results are achieved at higher dosages: 140 to 210 mg of silymarin three times per day. The dosage for silymarin phytosome is 120 mg two to three times per day between meals.

**Herpes:**

Recurrent viral infection of the skin or mucous membranes characterized by the appearance of single or multiple clusters of small blisters (vesicles) on a reddened base, frequently occurring about the mouth (herpes gingivostomatitis), lips (herpes labialis), genitals (herpes genitalis), and conjunctiva and cornea (herpes keratoconjunctivitis)

Incubation period two to twelve days, averaging six to seven

Regional lymph nodes may be tender and swollen

Outbreak recurrences may follow minor infections, trauma, stress (emotional, dietary, and environmental), and sun exposure

**QUICK REVIEW**

• Enhancement of the immune status is key to the prevention and control of herpes infection.
• A diet that avoids arginine-rich foods while promoting lysine-rich foods can be quite effective.
• Oral supplementation with zinc (50 mg/day) has been shown to be effective in reducing the frequency, duration, and severity of herpes in clinical studies.
• Both oral consumption and topical application of vitamin C increase the rate of healing of herpes ulcers.
• One of the most widely used topical preparations in the treatment and prevention of herpes outbreaks is a concentrated extract (70:1) of *Melissa officinalis* (lemon balm).
  The goal of treatment is to shorten the current attack and prevent recurrences. Support of the immune system is of primary importance. Inhibition of HSV replication through manipulation of the lysine/arginine ratio in the diet seems to be appropriate. This combined approach can be very effective at reducing the frequency, duration, and severity of recurrences.

**Diet**
Follow a diet that avoids arginine-rich foods while promoting lysine-rich foods. Foods high in arginine are chocolate, peanuts, seeds, and almonds and other nuts. Foods high in lysine include most vegetables, legumes, fish, turkey, and chicken.

Nutritional Supplements
- Vitamin C: 2,000 mg per day
- Bioflavonoids: 1,000 mg per day
- Zinc: 30-50 mg per day
- Lysine: 1,000 mg three times per day
- Thymus extract: The equivalent of 120 mg of pure polypeptides with molecular weights less than 10,000, or roughly 500 mg of the crude polypeptide fraction per day

Topical Treatment
- Ice: 10 minutes on, 5 minutes off for up to three cycles every 4 hours during initial symptoms
- Zinc sulfate solution: 0.025% solution three times per day
- Melissa cream: apply twice per day
- Glycyrrhetinic acid: apply twice per day

Vitamin C Paste for HSV Lesions

Hyperemesis Gravidarium (Nausea/Vomiting in Pregnancy)

QUICK REVIEW
- Vitamin B6 is very important in breaking down and eliminating the increased level of hormones during pregnancy.
- Vitamin B6 is very effective in most cases of nausea and vomiting of pregnancy.
- Ginger has a long tradition of being very useful in alleviating symptoms of gastrointestinal distress, including the nausea and vomiting typical of pregnancy.
- Clinical studies have shown ginger to be effective even in the most severe form of nausea and vomiting of pregnancy.
- Many experts consider mild symptoms of nausea and vomiting of pregnancy as a good sign of a healthy pregnancy.

TREATMENT SUMMARY

Diet
Eat dry toast immediately after rising, and small, frequent meals throughout the day.

Nutritional Supplements
- Vitamin B6: 25 mg two to three times per day
- Vitamin C: 250 mg two to three times per day
- Vitamin K: 5 mg per day

Botanical Medicines
There remain many questions concerning the best form of ginger and the proper dosage. Most research studies have utilized 1 gram of dry powdered ginger root-a relatively small dose. For example, ginger is commonly consumed in India at a daily dose of 8 to 10 grams. Furthermore, although most studies have used powdered ginger root, fresh (or possibly freeze-dried) ginger root or extracts at an equivalent dosage may yield even better results. In the treatment of nausea and vomiting of pregnancy, a dosage of 1 to 2 grams of dry powdered ginger, possibly taken as a tea, may be effective. For ginger extracts standardized to contain 20% gingerol and sbogaol, an equivalent dosage would be 100-200 mg.
Counseling
Women who are having an unplanned or undesired pregnancy, or who have a poor relationship with their own mother, should consult a qualified counselor for assistance in resolving these conflicts.

Hypertension;
Borderline high blood pressure: 120--160/90-94
Mild high blood pressure: 140--160/95-104
Moderate high blood pressure: 140-180/105-114
Severe high blood pressure: 160+/115+

QUICK REVIEW
• Elevated blood pressure is a major risk factor for a heart attack or stroke.
• Since over eighty percent of patients with high blood pressure are in the borderline-to-moderate range, most cases of high blood pressure can be brought under control through changes in diet and lifestyle.
• Virtually every medical authority (textbook, organization, journal, etc.), including the joint National Committee on Detection, Evaluation, and Treatment of High Blood Pressure, has recommended that non-drug therapies be used in the treatment of borderline-to-mild hypertension (high blood pressure).
Vegetarians generally have lower blood pressure levels and a lower incidence of high blood pressure and other cardiovascular diseases than non-vegetarians.
• A high potassium-to-sodium intake is associated with lower blood pressure.
Relaxation techniques, such as deep breathing exercises, biofeedback, transcendental meditation, yoga, progressive muscle relaxation, and hypnosis, have all been shown to have some value in lowering blood pressure. Population-based and clinical studies have shown that the higher the intake of vitamin C the lower the blood pressure.
• Chronic exposure to lead from environmental sources, including drinking water, is associated with high blood pressure and increased cardiovascular mortality. CoQ10 deficiency has been shown to be present in thirty-nine percent of patients with high blood pressure. Over sixty double blind studies have demonstrated that either fish oil supplements or flaxseed oil are very effective in lowering blood pressure. Hawthorn extracts exert mild blood pressure-lowering effects.

TREATMENT SUMMARY
High blood pressure should not be taken lightly. By keeping your blood pressure in the normal range, you will not only lengthen your life, but you will improve the quality of your life as well. This is especially true if natural measures, rather than drugs, are used to attain proper blood pressure; the drugs carry significant side effects such as fatigue, headaches, and impotence. Here are some concise guidelines for the various classifications of high blood pressure:
For Mild Hypertension (140-160/90-104)
• reduce excess weight
• eliminate salt (sodium chloride) intake follow a healthy lifestyle: avoid alcohol, caffeine, and smoking; exercise and use stress-reduction techniques.
Follow a high-potassium diet rich in fiber and complex carbohydrates increase dietary consumption of celery, garlic, and onions.
Reduce or eliminate the intake of animal fats while increasing the intake of vegetable oils. 
Supplement the diet with the following:
High-potency multiple vitamin and mineral formula
Vitamin C: 500-1,000 mg three times per day
Vitamin E: 400-800 IU per day
Magnesium: 800-1,200 mg per day
Garlic: the equivalent of 4,000 mg of fresh garlic per day
If, after following the above recommendations for a period of three to six months, blood pressure has not returned to normal, please consult a physician for further non-drug recommendations.

For Moderate Hypertension (140-180/105-114)
• employ all the measures listed for Mild Hypertension
• take Coenzyme Q10: 50 mg two to three times per day
• take hawthorn extract (10% procyanidins or 1.8% vitexin-4'-rhamnoside): 100-250 mg three times per day
Follow these guidelines for one to three months. If your blood pressure has not dropped below 140/105, you will need to work with a physician to select the most appropriate medication. If a prescription drug is necessary, calcium channel-blockers or ACE-inhibitors appear to be the safest.

For Severe Hypertension (160+/115+)
Consult a physician immediately. Employ all the measures listed for Mild and Moderate Hypertension. A drug may be necessary to achieve initial control. When satisfactory control over the high blood pressure has been achieved, work with your physician to taper off the medication.

Hypoglycemia;
Blood glucose level below 50 mg/dl
A normal response curve during the first two to three hours of a glucose tolerance test, followed by a decrease of 20 mg or more below the fasting glucose level during the final hours of the test, with symptoms developing during the decrease

QUICK REVIEW
• Hypoglycemia is a complex set of symptoms caused by faulty carbohydrate metabolism induced by a diet too high in refined sugars.
• When all is considered (especially cost), assessing symptoms remains the most useful way to diagnose hypoglycemia in many cases.
• There exists a substantial amount of information that hypoglycemia is caused by an excessive intake of refined carbohydrates.
• Syndrome X has been introduced to describe a cluster of abnormalities that owe their existence largely to a high intake of refined carbohydrates, leading to the development of hypoglycemia, excessive insulin secretion, and glucose intolerance, followed by diminished insulin sensitivity leading to high blood pressure, elevated cholesterol levels, obesity, and, ultimately, Type 11 diabetes.
• When glucose levels are low, as occurs during hypoglycemia, it can result in dizziness, headache, clouding of vision, blunted mental acuity, emotional instability, confusion, and abnormal behavior.
Several controlled studies of psychiatric patients and habitually violent and impulsive criminals have shown that hypoglycemia is a common finding. Hypoglycemia has been shown to be a common precipitating factor in migraine headaches since 1933. Dietary carbohydrates play a central role in the cause, prevention, and treatment of hypoglycemia. Problems with carbohydrates begin when they are refined, which strips them of associated nutrients and increases their rate of absorption. Chromium is vital to proper blood sugar control, as it functions in the body as a key constituent of the glucose tolerance factor. Alcohol consumption severely stresses blood sugar control and is often a contributing factor to hypoglycemia.

**TREATMENT SUMMARY**

The primary treatment of hypoglycemia is the use of dietary therapy to stabilize blood sugar levels. Reactive hypoglycemia is not a disease; it is simply a complex set of symptoms caused by faulty carbohydrate metabolism induced by a diet too high in refined carbohydrates.

**Diet**

All simple, processed, and concentrated carbohydrates must be avoided, while the consumption of complex-carbohydrate, high-fiber foods should be emphasized. Legumes should be consumed regularly. Frequent small meals may be more effective in stabilizing blood sugar levels. Alcohol consumption must be avoided, as it can cause hypoglycemia.

**Nutritional Supplements**

The recommendations for the daily intake levels of vitamins and minerals given in SUPPLEMENTARY MEASURES are especially important in treating hypoglycemia, as there are many essential nutrients critical to proper carbohydrate metabolism. Taking a multiple vitamin and mineral formula most easily attains the recommended levels. Chromium (200-400 mcg per day) is critically important.

**Exercise**

Follow an exercise program that elevates your heart rate to at least sixty percent of maximum for one-half hour three times per week. For a full discussion, see A HEALTHY LIFESTYLE.

**Hypothyroid:**

Depression
Difficulty in losing weight Dry skin
Headaches Lethargy or fatigue, menstrual problems, recurrent infections Sensitivity to cold

**QUICK REVIEW**

Since thyroid hormones affect every cell of the body, a deficiency will usually result in a large number of signs and symptoms. Depression, weakness, and fatigue are usually the first symptoms of hypothyroidism.

- The medical treatment of hypothyroidism, in all but its mildest forms, involves the use of desiccated thyroid or synthetic thyroid hormone.
- You can support the thyroid gland by avoiding goitrogens (foods that impair the use of iodine) and insuring adequate intake of key nutrients that are required for the manufacture of thyroid hormone.
In very mild cases, health-food-store thyroid products may provide some benefit.

TREATMENT SUMMARY
If you are suffering from symptoms that suggest hypothyroidism, take your basal body temperature and consult a physician for proper evaluation. Support the thyroid gland by insuring adequate intake of key nutrients required in the manufacture of thyroid hormone and by avoiding goitrogens. In very mild cases, health food store thyroid products may provide some benefit.

The dosage of health food store preparations really depends on the potency and level of supportive nutrients, especially iodine (no more than 500 mcg daily). A good rule of thumb is to follow the manufacturers recommendations as provided on the product’s label. Use your basal body temperature to determine effectiveness of the product and adjust dosage as necessary.

Insomnia;
Difficulty falling asleep (sleep-onset insomnia)
Frequent or early awakening (sleep-maintenance insomnia)

QUICK REVIEW
• Insomnia affects almost one out of every three people in the United States during the course of a year.
• Effective treatment involves identifying and addressing causative factors and eliminating factors that can disrupt sleep.

In addition to side effects, the major problem with sleeping pills is their interference with normal sleep.

The most common causes of insomnia are psychological: depression, anxiety, and tension. If psychological factors do not seem to be the cause, various foods, drinks, and medications may be responsible.
• There are numerous compounds in food and drink and well over three hundred drugs that can interfere with normal sleep.
• The two major classifications of insomnia are sleep-onset and sleep-maintenance.
• 5-HTP provides better results than those achieved with L-tryptophan.
• Melatonin is only effective as a sedative when body melatonin levels are low. Restless-legs syndrome and myoclonus may respond to folic acid therapy, iron supplementation, and other nutritional therapies.

Valerian and passionflower can promote improved sleep quality and relief of

TREATMENT SUMMARY
Effective treatment involves identifying and addressing causative factors. If depression is a possibility, please consult DEPRESSION. Once a normal sleep pattern has been established, the dosages of the recommended supplements and botanicals should be slowly decreased.

Lifestyle
Institute a regular exercise program that elevates heart rate by fifty to seventy-five percent for at least twenty minutes each day. Perform progressive relaxation exercises to help fall asleep.

Nutritional Supplements
Take the following forty-five minutes before bedtime:
Niacin: 100 mg (decrease dose if uncomfortable flushing interferes with sleep induction)
Vitamin B6: 50 mg
Magnesium: 250 mg • 5-HTP: 100-300 mg
Melatonin: 5 mg

Botanical Medicines
Take the following forty-five minutes before bedtime:
• Valeriana officinalis
  Dried root (or as tea): 2-3 g Tincture (1:5): 4-6 ml (1-1.5 tsp) Fluid extract (1:1): 1-2 ml (0.5-1 tsp) Dry powdered extract (0.8% valerenic acid): 150-300 mg
• Passiflora incarnata (best when used with 5-HTP)
  Dried herb (or as tea): 4-8 g Tincture (1:5): 6-8 ml (1.5-2 tsp) Fluid extract (1:1): 2-4 ml (0.5-1 tsp) Dry powdered extract (2.6% flavonoids): 300-450 mg

Irritable Bowel Disease (Crohn’s/Ulcerative Colitis);
CROHN'S DISEASE
Intermittent bouts of diarrhea, low-grade fever, and pain in the lower right abdomen Loss of appetite, weight loss, flatulence, and malaise
Abdominal tenderness, especially in the lower right
X rays show abnormality of the terminal portion of the small intestine
ULCERATIVE COLITIS
Bloody diarrhea with cramps in the lower abdomen
Mild abdominal tenderness, weight loss, and fever
Rectal examination may show fissures, hemorrhoids, fistulas, and abscesses
Diagnosis confirmed by X ray and sigmoidoscopy (examination of the colon with a fiber-optic tube)

QUICK REVIEW
Antibiotic exposure is being linked to Crohn's disease.
Clinical studies that have utilized an elemental diet, intravenous nutrition, or an exclusion diet have produced great success in the treatment of Crohn's disease and ulcerative colitis. Prostaglandin levels are greatly increased in the colonic mucosa, serum, and stools of patients with inflammatory bowel disease (IBD).
Over 100 disorders, known as extra-intestinal lesions (EIL), constitute a diverse group of systemic complications of IBD.

TREATMENT SUMMARY
The key recommendation is to identify and control food allergies. Other recommendations are
• Consume a diet that focuses on whole, unprocessed foods (whole grains, legumes, vegetables, fruits, nuts, and seeds).
• Eliminate the intake of alcohol, caffeine, and sugar.
• Get regular exercise.
• Perform a relaxation exercise (deep breathing, meditation, prayer, visualization, etc.) for ten to fifteen minutes each day.
Drink at least 48 ounces of water daily.

Nutritional Supplements
• High-potency multiple vitamin and mineral formula (see the chapter SUPPLEMENTARY MEASURES)
• Vitamin C: 3,000-8,000 mg per day • Vitamin E: 200-400 IU per day
• Zinc: 30-45 mg per day
• Flaxseed oil: 1 tablespoon per day
• Pancreatin (8-IOX): 350-700 mg three times per day between meals
• Many nutritional complications occur during the course of IBD.
• Foremost in nutritional therapy is providing adequate caloric intake.
• Elemental and elimination diets have been shown to be an effective nontoxic primary treatment of acute and chronic IBD.
• Treatment with a high-fiber diet has been shown to have a favorable effect on the course of Crohn's disease.
• The majority of individuals with IBD suffer from nutritional deficiencies.

Irritable Bowel Syndrome:
Characterized by some combination of abdominal pain or distension
Altered bowel function, constipation, or diarrhea Hypersecretion of colonic mucus
Dyspeptic symptoms (flatulence, nausea, anorexia) Varying degrees of anxiety or depression
Outdated terms include: nervous indigestion, spastic colitis, mucous colitis, and intestinal neurosis.

QUICK REVIEW
Irritable bowel syndrome is a functional disorder of the large intestine with no evidence of accompanying structural defect.
The four major treatments from a natural perspective are:
   (1) increasing dietary fiber
   (2) eliminating allergenic foods
   (3) using enteric-coated volatile oil preparations
   (4) controlling psychological factors through stress reduction and exercise.
Meals high in refined sugar can contribute to irritable bowel syndrome. Enteric-coated peppermint oil is quite beneficial in relieving the symptoms of irritable bowel syndrome.
The splenic flexure syndrome is a variant of the irritable bowel syndrome in which gas in the bowel leads to pain in the lower chest or the left shoulder

TREATMENT SUMMARY
The four primary areas of focus are increasing dietary fiber, elimination of food allergens and sugar, enteric-coated volatile oils, and controlling psychological factors through stress reduction and regular exercise.

Diet
Increase intake of fiber-rich foods and eliminate allergenic foods, refined sugar, and highly processed foods.

Nutritional Supplements
• *Lactobacillus acidophilus*: 1 to 2 billion live organisms per day
• Fiber: 3 to 5 grams per day at bedtime

Botanical Medicines
• Enteric-coated volatile oil preparations (e.g., peppermint oil): 0.2-0.4 ml twice per day between meals

Physical Therapy
Daily, leisurely twenty-minute walks

Counseling
Develop an effective stress-reduction program. Biofeedback may be particularly helpful.

**Male Infertility:**
Inability to conceive a child after six months of unprotected sex in the absence of female causes
A total sperm count lower than 5 million/ml
The presence of greater than fifty percent abnormal sperm
Inability of sperm to impregnate egg, as determined by the post-coital or hamster-egg penetration tests

**QUICK REVIEW**
- The average sperm count has declined by forty percent since 1940.
- Reducing scrotal temperature in infertile men will often make them fertile.
- Infertile men should wear boxer-type underwear and periodically apply a cold shower or ice to the scrotum.
- If testosterone levels are low or marginal, or if estrogen levels are elevated, a diet rich in legumes (beans), especially soy foods, may be of benefit.
Free radical or oxidative damage to sperm is thought to be responsible for many cases of male infertility. Antioxidants such as vitamin C, beta-carotene, selenium, and vitamin E, have been shown to be very important in protecting the sperm against damage and improving male fertility. Zinc supplementation can be very helpful in achieving fertility, especially in men with low testosterone levels. Carnitine supplementation can lead to improvements in sperm counts and sperm motility.

**TREATMENT SUMMARY**
Male infertility is most often due to abnormal sperm count or semen quality. As elevated scrotal temperature is a common cause of infertility, scrotal cooling through the use of loose underwear made of cotton, avoidance of activities that elevate testicular temperature (e.g., hot tubs), and application of cold water to the testes should be utilized. Nutritional status should be optimized (especially antioxidants and zinc), environmental pollutants identified and eliminated, and fertility-enhancing botanicals such as one of the ginsengs consumed. We recommend consulting a urologist or fertility specialist for a complete evaluation.

**General Measures**
- Maintain scrotal temperatures between 94 and 96 degrees Fahrenheit. Avoid exposure to free radicals. Identify and eliminate environmental pollutants.
- Stop or reduce consumption of all drugs, especially anti-hypertensives, antineoplastics such as cyclophosphamide, and anti-inflammatory drugs such as sulfasalazine.

**Diet**
Avoid dietary sources of: free radicals; saturated fats; hydrogenated oils; trans-fatty acids; and cottonseed oil. Increase consumption of: legumes, especially soy (high in phytoestrogens and phytosterols); good dietary sources of antioxidant vitamins, carotenes, and flavonoids (dark-colored vegetables and fruits); and essential fatty acids and zinc (nuts and seeds).
Consume daily: 1-10 servings of vegetables; 2-4 servings of fresh fruits; and 1/2 cup of raw nuts or seeds.

**Nutritional Supplements**
High-potency multiple vitamin and mineral supplement
Vitamin C: 500-3,000 mg three times per day
Vitamin E: 600-800 IU per day
Beta-carotene: 100,000-200,000 IU per day
Folic acid: 400 mcg per day
Vitamin B12: 1,000 mcg per day
Zinc: 30-60 mg per day

Botanical Medicines
• Panax ginseng (three times per day dosages)
  High-quality crude ginseng root: 1.5-2 g three times per day
  Standardized extract (5% ginsenosides): 100-200 mg three times per day
• Eleutherococcus senticosus (three times per day dosages)
  Dried root: 2-4 g
  Tincture (1:5): 10-20 ml
  Fluid extract (1:1): 2.0-4.0 ml
  Solid (dry powdered) extract (20:1): 100-200 mg

Pygeum africanum
The dosage of the fat-soluble extract, standardized to contain fourteen percent triterpenes including beta-sitosterol and 0.5 percent n-docosanol, is 100 to 200 mg per day in divided doses.

Nephrolithiasis (Kidney Stones):
Usually without symptoms until stone becomes dislodged
Excruciating intermittent radiating pain originating in the flank or kidney Nausea, vomiting, and abdominal distension
Chills, fever, and urinary frequency if accompanied by infection Diagnosed by ultrasound

QUICK REVIEW
Ten percent of all American males will experience a kidney stone during their lifetime.
Kidney stones have been linked to the following dietary patterns: low intake of fiber; high intake of highly refined carbohydrates, alcohol, animal protein, fat, and high-calcium, low-magnesium, vitamin D-enriched milk products.
Magnesium and vitamin B6 supplementation can prevent kidney stones. Citrate supplementation stops stone formation in nearly ninety percent of cases.
Cranberry juice has been shown to reduce the amount of ionized calcium in the urine by over fifty percent in patients with recurrent kidney stones. It is important to avoid high-purine foods and salt.
Drink at least 48 ounces of water daily.

TREATMENT SUMMARY
Prevention of recurrence is the therapeutic goal in the treatment of kidney stones. Since dietary management is effective, inexpensive, and free from side effects, it is the treatment of choice. The specific treatment is determined by the type of stone and may include
Reducing urinary calcium levels Reducing purine intake
Avoiding high-oxalate-content foods Increasing intake of foods with a high magnesium to calcium ratio
Increasing intake of Vitamin K rich foods
For all types of stones, increasing urine flow to dilute the urine is vital. Enough fluids should be consumed to produce a daily urinary volume of at least 2,000 ml.
NOTE: In acute cases, surgical removal or breaking up the stone with sound waves (lithotripsy) may be necessary.
Calcium Stones

Diet
Increase intake of fiber, complex carbohydrates, and green leafy vegetables, and decrease intake of simple carbohydrates and purines (meat, fish, poultry, yeast). Increase intake of high-magnesium-to-calcium-ratio foods (barley, bran, corn, buckwheat, rye, soy, oats, brown rice, avocado, banana, cashew, coconut, peanuts, sesame seeds, lima beans, potato). If there are oxalate stones, reduce oxalate-containing foods (black tea, cocoa, spinach, beet leaves, rhubarb, parsley, cranberries, nuts). Limit intake of dairy products.

Nutritional Supplements
• Vitamin B6: 25 mg per day
• Vitamin K: 2 mg per day
• Magnesium: 600 mg per day
• Calcium: 300-1,000 mg per day

Botanical Medicines
Use Aloe vera or senna at a dosage just below a level that will produce a laxative effect (this will vary from one person to the next).

Miscellaneous
Avoid aluminum-containing antacids.

Uric Acid Stones

Diet
Decrease purine intake (see list under Uric Acid Metabolism in this chapter).

Nutritional Supplements
Folic acid: 5 mg per day

Miscellaneous
Alkalinate urine: citrate, bicarbonate

Magnesium Ammonium Phosphate Stones

Miscellaneous
• Eradicate infection (see BLADDER INFECTION)
• Acidify urine: ammonium chloride (100-200 mg three times per day)

Cystine Stones

Diet
Avoid methionine-rich foods (soy, wheat, dairy products [except whole milk], fish, meat, lima beans, garbanzo beans, mushrooms, and all nuts except coconut, hazelnut, and sunflower seeds).

Miscellaneous
Alkalinate urine: optimal pH is 7.5--8.0

Leukoplakia:
Adherent white patch or plaque appearing anywhere on the lips or mouth
May be without symptoms until there is ulceration, fissuring, or malignant transformation
Diagnosis confirmed by biopsy

QUICK REVIEW
• Leukoplakia is a pre-cancerous lesion.
• Staying away from tobacco and increasing one's intake of antioxidant nutrients are the primary preventive measures.
• There have been seven clinical trials showing that beta-carotene produces regression of leukoplakia.
TREATMENT SUMMARY
Since leukoplakia is due to a combination of excessive irritation in the context of marginal or low levels of vitamin A, carotenoids, and/or antioxidants, the approach is simple: eliminate all sources of irritation and establish optimal vitamin A, beta-carotene, and antioxidant levels. Particularly significant irritation results from tobacco smoking and chewing, betel nut chewing, and sunlight exposure.

Nutritional Supplements
• Vitamin A: 5,000IU per day
• Beta-carotene: 30-90 mg per day
• Vitamin C: 1,000-3,000 mg per day • Vitamin E: 400IU per day

Macular Degeneration;
Progressive visual loss due to degeneration of the macula
Eye exam may reveal spots of pigment near the macula and blurring of the macular borders

QUICK REVIEW
• Degeneration of the macula is the leading cause of severe visual loss in the United States.
The major risk factors for macular degeneration are smoking, aging, atherosclerosis (hardening of the arteries), and high blood pressure.
• The treatment of the wet form of age related macular degeneration is immediate laser photoagulation.
• The treatment goals in the dry form and prevention of the wet form involve the use of antioxidants and natural substances that protect against free radical damage and improve blood and oxygen supply to the macula. Measures designed to reduce the risk of atherosclerosis are of great significance in the prevention (and treatment) of macular degeneration.
• A diet rich in fruits and vegetables is associated with a lowered risk for macular degeneration.
Antioxidant formulas have been shown to halt and even reverse macular degeneration.

TREATMENT SUMMARY
As with most diseases, prevention and treatment at an early stage are the most effective approaches to ARMD. The treatment of the wet form of ARMD is clearly laser photocoagulation, applied as soon as possible. Since free-radical damage and lack of blood and oxygen supply to the macula appear to be the primary causes of macular degeneration, consumption of antioxidants and promotion of retinal blood flow are the keys to effective treatment.
Anyone with any vision loss should see a physician for complete evaluation, especially if the loss is progressing rapidly.

Diet
Avoid fried and grilled foods and other sources of free radicals. Increase consumption of legumes (high in sulfur containing amino acids), yellow vegetables (carotenes), flavonoid-rich berries (blueberries, blackberries, cherries, etc.), and foods rich in vitamin E and vitamin C (fresh fruits and vegetables).

Nutritional Supplements
• Vitamin C: 1 g three times per day
• Vitamin E: 600-800 IU per day
• Selenium: 400 mcg per day
• Beta-carotene (mixed carotenoids recommended): 50,000 IU per day
• Lutein: 5 mg per day

Botanical Medicines
Choose one of the following:
• Ginkgo biloba extract (24% ginkgo flavonglycosides): 40-80 mg three times per day
• Bilberry (Vaccinium myrtillus) extract (25% anthocyanidin content): 40-80 mg three times per day
• Grape seed extract (95% procyanidolic content): 150-300 mg per day

Menopause;
Defined as: cessation of menstruation in older women for six to twelve months
Average age of onset: fifty-one years
Common complaints of menopause: hot flashes, headaches, atrophic vaginitis, frequent urinary tract infections, cold hands and feet, forgetfulness, and an inability to concentrate

QUICK REVIEW
In many parts of the world, most women do not experience the symptoms associated with menopause in the United States.
Social and cultural factors contribute greatly to how women react to menopause.
• In the United States, sixty-five to eighty percent of menopausal women experience hot flashes to some degree.
Women with atrophic vaginitis (vaginal drying and irritation due to lack of estrogen) should avoid substances that tend to dry the mucous membranes, including antihistamines, alcohol, caffeine, and diuretics.
• Rather than use estrogens to artificially counteract the symptoms of menopause, the natural approach focuses on improving physiology through diet, exercise, nutritional supplementation, and the use of botanical medicines.
An especially important dietary recommendation in the relief of hot flashes and atrophic vaginitis, and the prevention of breast cancer, is to increase the consumption of soy foods.
Several nutrients have been shown to be effective in relieving hot flashes and atrophic vaginitis in clinical studies, including vitamin E, hesperidin (a flavonoid) in combination with vitamin C, and gammaoryzanol.
A special extract of black cohosh (Cimicifuga racemosa) is the most widely used and thoroughly studied natural alternative to hormone replacement therapy in menopause.

TREATMENT SUMMARY
Many natural measures can help alleviate the most common symptoms of menopause. In most cases, hormone replacement therapy is not necessary. However, in women at high risk for osteoporosis and women who have already experienced significant bone loss, hormone replacement therapy may be appropriate. For the immediate treatment of atrophic vaginitis, topical vitamin E preparations should be considered. If a woman is smoking, she should begin a smoking cessation program.

Diet
Increase the amount of phytoestrogens in the diet by consuming more soy foods, fennel, celery, parsley, high-lignan flaxseed oil, nuts, and seeds.
Nutritional Supplements
• Vitamin E: 800 IU per day until symptoms have improved, then 400 IU per day
• Hesperidin: 900 mg per day
• Vitamin C: 1,200 mg per day
• Gamma-oryzanol: 300 mg per day

Botanical Medicines
All dosages are three times per day.
• Dong quai (Angelica sinensis) Powdered root or as tea: 1-2 g Tincture (1:5): 4 ml (1 tsp) Fluid extract: 1 ml (1/4 tsp)
• Licorice (Glycyrrhiza glabra) Powdered root or as tea: 1-2 g Fluid
• Chaste berry (Vitex agnus-castus) Powdered berries or as tea: 1-2 g Fluid extract (1:1): 4 ml (1 tsp) Solid (dry powdered) extract (4:1): 250-500 mg
• Black cohosh (Cimicifuga racemosa) The dosage of Cimicifuga is based on its content of 27-deoxyacteine, which serves as an important biochemical marker to indicate therapeutic effect. The dosage of the Cimicifuga extract used in the majority of clinical studies has been 2 mg of 27-deoxyacteine twice daily. Here are the approximate dosage recommendations using other forms (non-standardized) of Cimicifuga racemosa:
  Powdered rhizome: 1-2 g Tincture (1:5): 4-6 ml Fluid extract (1:1): 3-4 ml (1 tsp) Solid (dry powdered) extract (4:1):
  250-500 mg
• Ginkgo biloba extract (24% ginkgo flavonglycoside content): 40 mg

Lifestyle
Exercise regularly—at least thirty minutes three times a week.

MenoMetrorrhagia (DUB);
Excessive menstrual bleeding refers to a blood loss greater than 80 ml, occurring during regular menstrual cycles (cycles are usually of normal length)

QUICK REVIEW
• Nutritional factors are often responsible for excessive menstrual blood loss.
• Iron therapy is a key consideration in treating menorrhagia.
• Even mild hypothyroidism can lead to excessive menstrual blood loss.

TREATMENT SUMMARY
The first step with menorrhagia is to rule out serious causes. Because excessive menstrual bleeding can reflect a serious condition, it is essential that you consult a physician if you are experiencing excessive menstrual blood loss. When the excessive bleeding has been determined to be functional (not due to a disease state), the following guidelines will usually be of great value.

Diet
The diet should be relatively low in sources of arachidonic acid (animal fats). Green leafy vegetables and other sources of vitamin K should be eaten freely.

Nutritional Supplements
• Vitamin C: 500-1,000 mg three times per day
  Bioflavonoids: 500-1,000 mg per day
• Vitamin A: 25,000 IU twice per day for two weeks, followed by 25,000 IU per day thereafter until the situation normalizes
NOTE: Vitamin A should not be used if there is any chance that a woman is pregnant or at risk of getting pregnant.

- Vitamin E: 200-400 IU per day
- Chlorophyll (fat-soluble): 25 mg per day
- Iron: 100 mg per day

**Botanical Medicines**
- Shepherd's purse (Capsella bursa pastoris), three times per day:
  - Dried leaves or by infusion (tea): 1.54 g
  - Tincture (1:5): 4-6 ml
  - Fluid extract (1:1): 0.5-2.0 ml
  - Powdered solid extract (4:1): 250-500 mg

**Migraine;**
Headache is typically pounding and on one side
Attacks are often preceded by psychological or visual disturbances, accompanied by anorexia, nausea, and gastrointestinal upset, and followed by drowsiness

**QUICK REVIEW**
- The first step in treating migraine headache is identifying the precipitating factor.
- Several clinical studies have estimated that approximately seventy percent of patients with chronic daily headaches suffer from drug-induced headaches.
- Many double blind, placebo controlled studies have demonstrated that the detection and removal of allergenic foods will eliminate or greatly reduce migraine symptoms in the majority of patients.
- Foods such as chocolate, cheese, beer, and wine precipitate migraine attacks in many people because they contain histamines and/or other compounds that can trigger migraines in sensitive individuals by causing blood vessels to expand.
- 5-HTP is at least as effective as other pharmacological agents used in the prevention of migraine headaches and is certainly much safer and better tolerated.
- Low magnesium levels may also play a significant role in many cases of headaches.
- Biofeedback and relaxation training have been judged as effective as the drug approach but are without any side effects.
- Feverfew and ginger extracts can help prevent migraine attacks.

**TREATMENT SUMMARY**
Identification of the precipitating factors, and their avoidance, is important in reducing the frequency of headaches. Due to the high frequency (eighty to ninety percent) of food allergy/intolerance in patients with migraine headache, we recommend beginning treatment by identifying and eliminating food allergies. This can be accomplished through blood analysis or by either pure water fast or the use of an elemental diet (see FOOD ALLERGY).

**Diet**
All food allergens must be eliminated and a four-day rotation diet utilized. Foods that contain vasoactive amines should initially be eliminated; after symptoms have been controlled, such foods can be carefully reintroduced. The primary foods to eliminate are alcoholic beverages, cheese, chocolate, citrus fruits, and shellfish. The diet should be low in sources of arachidonic acid (land-animal fats) and high in foods that inhibit platelet aggregation (vegetable oils, fish oils, garlic, and onion).
• Magnesium: 250-400 mg three times per day
• Vitamin B12: 25 mg three times per day
• 5-HTP: 100-200 mg three times per day

Botanical Medicines
• Feverfew (Tanacetum parthenium): 0.25-0.5 mg parthenolide
• Ginger (Zingiber officinalis):
  Fresh ginger: approximately 10 g per day (1/4-inch slice)
  Dried ginger: 500 mg four times per day
  Extract: standardized to contain 20% of gingerol and shogaol, 100-200 mg three times per day for prevention and 200 mg every two hours (up to six times per day) in the treatment of an acute migraine

Physical Medicine
• TENS to control secondary muscle spasm
• Acupuncture to balance meridians
• Biofeedback:
  The Association for Applied Psychophysiology and Biofeedback 10200 West 44th Avenue, Suite 304 Wheat Ridge, CO 80033 303-422-8436
  • Guided imagery:
    The Academy for Guided Imagery P.O. Box 2070 Mill Valley, CA 94942 800-726-2070

Multiple Sclerosis:
Sudden transient motor and sensory disturbances, including blurred vision, dizziness, muscle weakness, and tingling sensations
Evidence of demyelination on MRI

QUICK REVIEW
• Multiple sclerosis (MS) appears to be an autoimmune disease, based on a great deal of circumstantial evidence. A high intake of saturated fatty acids and animal fat is linked to MS.
Many studies have demonstrated a reduced capacity to detoxify free radicals in patients with MS.
Dr. Roy Swank, Professor of Neurology at the University of Oregon Medical School, has provided convincing evidence that a diet low in saturated fats, maintained over a long period of time, tends to retard the disease process and reduce the number of attacks.
Supplementation with sources of the omega-6 essential fatty acid linoleic acid for the treatment of MS has been investigated in at least three double blind trials.
Natural alpha-interferon therapy is showing promising results.

TREATMENT SUMMARY
Treatment of MS with diet, lifestyle modification, and supplementation should begin as soon as possible, as the earlier in the disease process this therapy is initiated the better the results will be. Several nonspecific measures are important, including avoidance of excessive fatigue, emotional stress, and marked temperature changes.
While not proven highly effective, the natural therapy for MS will help, and it poses no threat to a patient's health. In fact, it is quite healthful since the recommendations decrease the risk of atherosclerosis and other degenerative diseases. However, once MS
has progressed to significant disability, it is unlikely to be affected to any great degree by these measures.

**Diet**

Swank's dietary protocol is recommended:
- Saturated fat intake should be no more than 10 grams per day
- Daily intake of polyunsaturated oils should be 40-50 grams (margarine, shortening, and hydrogenated oils are not allowed)
- Normal amounts of protein are recommended
- Fish should be eaten three or more times a week

Fresh whole foods should be emphasized and consumption of animal foods (with the exception of cold-water fish) should be reduced, if not completely eliminated.

**Nutritional Supplements**
- High-potency multiple-vitamin-and mineral formula
- Vitamin E: 800 IU per day
- Selenium: 200-400 mcg per day (including the amount in the multiple)
- Vitamin B12 (methylcobalamin): 2 mg per day in the case of vitamin B12 deficiency; dosages up to 60 mg daily when using it as a therapy
- Flaxseed oil: 1 tbsp per day
- Pancreatin (10X): 350-700 mg three times per day between meals (on an empty stomach)

**Botanical Medicines**
- *Ginkgo biloba* extract (24% ginkgo flavonglycosides): 40-80 mg three times per day

**Obesity**

Obesity is defined as a state of being more than twenty percent above
- fat percentage greater than thirty percent for women and twenty-five percent men

**QUICK REVIEW**

A successful program for weight loss must be consistent with the four cornerstones of good health:
- proper diet
- adequate exercise
- positive mental attitude, and
- the right support for the body through natural measures.

Most Americans are overweight because they eat too much fat and sugar, and are not physically active enough. Television watching has been linked to the onset of obesity, and there is a dose-related effect (i.e., the more TV that is watched, the greater the degree of obesity).

The physiological theories of obesity are tied to brain serotonin levels; diet induced thermogenesis, the activity of the sympathetic nervous system, the metabolism of the fat cells, and sensitivity to the hormone insulin. 5-hydroxytryptophan reduces the number of calories consumed and promotes weight loss.

When properly combined, plant stimulants such as ephedrine and caffeine can activate the sympathetic nervous system, thereby increasing the metabolic rate and diet-induced thermogenesis.

Fiber supplements have been shown to enhance blood sugar control and insulin effects, as well as actually reducing the number of calories absorbed by the body.
One of the key goals in enhancing weight loss is to increase the sensitivity of cells throughout the body to the hormone insulin. Chromium supplementation has been demonstrated to lower body weight yet increase lean body mass. Presumably as a result of increased insulin sensitivity. Medium-chain triglycerides (MCTS) may promote weight loss by increasing thermogenesis. Hydroxycitrate has been shown to be a powerful inhibitor of fat formation in animals. Clinical studies have indicated that CoQ10 may help promote weight loss.

**TREATMENT SUMMARY**
A successful program for weight loss must be consistent with the four cornerstones of good health: proper diet, adequate exercise, a positive mental attitude, and the right support for the body through natural measures. All of these components are critical and interrelated. A successful program must incorporate these four measures, as improvement in one facet may be enough to result in some positive changes, but impacting all four will produce the greatest results.

**Diet**
Follow the recommendations given in the chapter A HEALTH-PROMOTING Diet.

**Psychological Support**
It is extremely important to follow the recommendations given in the chapter A POSITIVE MENTAL ATTITUDE. Overweight individuals tend to suffer a great deal of assaults on their self-esteem and self-image.

**Lifestyle**
Exercise is absolutely critical to an effective weight-loss program. Follow the recommendations given in the chapter A HEALTHY LIFESTYLE.

**Nutritional Supplements**
Follow the recommendations given in the chapter SUPPLEMENTARY MEASURES.
- 5-HTP: 50-100 mg 20 minutes before meals for the first two weeks; then double the dosage if weight loss is less than 1 pound per week (higher dosages of 5-HTP [e.g., 300 mg]) are associated with nausea, but this symptom disappears after six weeks of use)
- Chromium: 200-400 mcg per day
- Medium-chain triglycerides: 1-2 tbsp per day in the diet
- Hydroxycitrate: 500 mg three times per day
- Coenzyme Q10: 100–300 mg per day

**Botanical Medicines**
Combinations of an ephedrine source, such as *Ephedra sinica*, with a methylxanthine source, such as coffee (*Coffea arabica*), tea (*Camellia sinensis*), cola nut (*Cola nitida*), and/or guarana (*Paullinia cupana*), can be used at a dosage that provides 20–30 mg of ephedrine and 80-100 mg of methylxanthines per day.

**Osteoarthritis;**
Mild early-morning stiffness, stiffness following periods of rest, pain that worsens on joint use, and loss of joint function
Local tenderness, soft tissue swelling, joint crepitus, bony swelling, restricted mobility, Heberden's nodes, and other signs of degenerative loss of articular cartilage
X ray findings (narrowed joint spaces, cartilage erosion, bone spurs, etc.)
QUICK REVIEW
• Osteoarthritis can be halted and even reversed.
• Aspirin and similar drugs may actually contribute to osteoarthritis by inhibiting cartilage repair.
• Nightshade family vegetables, such as tomatoes, potatoes, and eggplants, may trigger osteoarthritis in some cases.
• Antioxidants protect against osteoarthritis.

Glucosamine sulfate is the most thoroughly researched and most effective natural approach to osteoarthritis. Head-to-head studies using arthritis drugs have shown that glucosamine sulfate produces better results without side effects.

Chondroitin sulfate and cartilage preparations are poorly absorbed. Physical therapy and exercise can help relieve osteoarthritis.

Topically applied menthol or capsaicin preparations can help reduce the pain of osteoarthritis.

TREATMENT SUMMARY
Although glucosamine sulfate has proven remarkably effective on its own, the comprehensive treatment recommended here is based on reducing joint stress and trauma, promoting cartilage repair mechanisms, and eliminating foods and other factors that may inhibit normal cartilage repair.

Non-steroidal anti-inflammatory drugs such as aspirin, should be avoided as much as possible. If NSAIDs must be used, eglycyrrhizinated licorice (DGL) should be used to help protect the gastrointestinal tract from their damaging effects, and their use should be discontinued as soon as possible. (For information on DGL, see ULCERS).

Diet
All simple, processed, and concentrated carbohydrates must be avoided. Complex carbohydrate, high-fiber foods should be emphasized, and fats should be kept to a minimum. Plants of the nightshade family should be eliminated (tomatoes, potatoes, eggplant, peppers, and tobacco). Flavonoid-rich berries or extracts should be liberally consumed.

Nutritional Supplements
Glucosamine sulfate: 1,500 mg per day Niacinamide (optional): 500 mg six times per day (under strict supervision; liver enzyme must be regularly checked)
Vitamin E: 400-800 IU per day
Vitamin A: 5,000 IU per day Vitamin B6: 50 mg per day Pantothenic acid: 12.5 mg per day Zinc: 30-45 mg per day B complex 100 mg three times daily
Vitamin C to saturation, 2,000-10,000 mg daily in divided doses (just under dose that causes diarrhea)
Niacinamide (or Niacin if high lipids are also a concern) 500 mg every 8 hours
Copper: 1-2 mg per day Boron: 6 mg per day
Glucosamine SO4 500 mg three times daily for 6 months
Omega3 fatty acids 1.5 gm twice daily

Raw food/cultured dairy products such as cheese/yogurt

Botanical Medicines
• Alfalfa (Medicago sativa) (optional): equivalent to 5-10 g per day
Yucca leaves (optional): 2-4 grams three times per day
Devil's claw (*Harpagophytum procumbens*) (optional):
Dried powdered root: 1-2 grams three times per day
Tincture (1:5): 4-5 ml three times per day
Dry solid extract (3:1): 400 mg three times per day

**Topical Treatments**
Menthol-based creams or creams containing 0.025 percent or 0.075 percent capsaicin can be applied to affected areas up to four times per day.

**Physical Therapy and Exercise**
Physical activity that overly strains the joint must be avoided. Chiropractic and other techniques that aid in the normalization of posture, as well as orthopedic correction of structural abnormalities, should be utilized to limit joint strain. Daily non-traumatic exercise (walking, isometrics, or swimming) is important but should be carefully monitored. Short-wave diathermy, hydrotherapy, and other physical therapy modalities that improve joint perfusion are recommended.

**Osteoporosis;**
Usually without symptoms until severe backache or hip fracture occurs
Most common in postmenopausal white women
Spontaneous fractures of the hip and vertebra
Demineralization of spine and pelvis, as confirmed by X-ray techniques

**QUICK REVIEW**
- Osteoporosis involves both the mineral (inorganic) and non-mineral (organic matrix, composed primarily of protein) components of bone.
- Bone is dynamic living tissue that is constantly being broken down and rebuilt.
- Patients with low stomach acid secretion need a form of calcium that is already in a soluble and ionized state, such as calcium citrate, calcium lactate, or calcium gluconate.
- The concentration of calcium in the blood is strictly maintained within very narrow limits.
- Osteoporosis is best diagnosed by a procedure known as bone densitometry. The Osteomark-NTX can be used to monitor the rate of bone loss and the success (or failure) of therapy.

The primary goals in the treatment and prevention of osteoporosis are to:
- preserve adequate mineral mass
- prevent loss of the protein matrix and other structural components of bone
- assure optimal repair mechanisms to remodel damaged areas of bone
- Coffee, alcohol, and smoking cause a negative calcium balance (more calcium being lost than taken in) and are associated with an increase risk of developing osteoporosis.
- Although nutritional factors are important, the best thing a person can do to strengthen their bones is to get physical activity.

Many general dietary factors have been suggested as a cause of osteoporosis, including:
- low calcium-high phosphorus intake, high-protein diet, high-acid-ash diet, high salt intake, and trace mineral deficiencies.
- It appears that increased soft-drink consumption is a major factor that contributes to osteoporosis.
- A deficiency of vitamin K leads to impaired mineralization of bone. Boron deficiency may contribute greatly to osteoporosis as well as to menopausal symptoms.
- Although calcium supplementation on its own does not completely halt
the process of osteoporosis, it does slow the rate by at least thirty to fifty percent and offers significant protection against hip fracture. Avoid natural oyster-shell calcium, dolomite, and bone meal products because of the possibility of high lead content. Calcium bound to citrate or other members of the Krebs cycle appears to be the best form for absorption. Magnesium supplementation may turn out to be as important as calcium supplementation in the prevention and treatment of osteoporosis. A semi-synthetic isoflavonoid, similar in structure to soy isoflavonoids, has shown impressive results in a number of clinical studies of osteoporosis.

**TREATMENT SUMMARY**

Osteoporosis is a preventable illness if appropriate dietary and lifestyle measures are followed. Women of all ages, from the very young to the very old, should make building healthy and strong bones a lifelong priority. This involves avoiding dietary and lifestyle practices that leach calcium from the bones, and choosing dietary and lifestyle factors that promote bone health. Although most physicians highlight calcium intake, strong bones require much more than this important mineral. Bone is dynamic, living tissue that requires a constant supply of high-quality nutrients and regular stimulation (exercise).

The primary goal in the treatment of osteoporosis is prevention. In severe cases of osteoporosis, the recommendations given in this chapter should be used in conjunction with appropriate medical care, which may include the use of a variety of prescription drugs; follow the advice of your physician. Although drugs such as Fosamax and natural hormonal therapies such as calcitonin have side effects, the benefits (prevention of hip fracture) usually outweigh the risks in people who already have severe osteoporosis.

**Diet**

Follow the guidelines given in A HEALTHPROMOTING DIET. Be especially careful to limit dietary factors that promote calcium excretion, such as salt, sugar, protein, and soft drinks.

**Nutritional Supplements**

- High-potency multiple vitamin and mineral formula, according to the guidelines in the chapter SUPPLEMENTARY MEASURES
- Calcium: 800-1,200 mg per day
- Vitamin D: 400 IU per day
- Magnesium: 400--800 mg per day
- Boron (as sodium tetrahydroborate): 3-5 mg per day

**Otitis Media;**

Acute middle ear infection (acute otitis media):

- earache or irritability
- history of recent upper-respiratory-tract infection or allergy
- red, opaque, bulging eardrum with loss of the normal features
- fever and chills

Chronic inflammation of the middle ear (serous otitis media):

- painless hearing loss
- dull, immobile eardrum (tympanic membrane)

Infection or inflammation of the external ear canal (otitis externa):

- itching, discharge, or burning pain
QUICK REVIEW
Since an ear infection can be quite serious, it is necessary that a physician see any individual with symptoms of acute ear infection. Ear infections are extremely common in children under the age of six years. Acute otitis media is usually preceded by an upper-respiratory infection or allergy. Only forty-two percent of myringotomy tube insertions have been judged as being appropriate.
A number of well-designed studies have demonstrated that there are no significant differences in the clinical course of acute otitis media when conventional treatments were compared with a placebo.
• The primary risk factors for otitis media are day care attendance, wood-burning stoves, parental smoking
• Recurrent ear infection is strongly associated with early bottle-feeding, while breast feeding (for a minimum of four months) has a protective effect.
The role of allergy as the major cause of chronic otitis media has been firmly established in the medical literature. Elimination of food allergens has been shown to produce a dramatic effect in the treatment of chronic otitis media in over ninety percent of children in some studies.
The key factor in the natural approach to OW chronic ear infections in children appears to be the recognition and elimination of allergies, particularly food allergies. Since it is usually not possible to determine the exact allergen during an acute attack, the most common allergenic foods should be eliminated from the diet: milk and dairy products, eggs, wheat, corn, oranges, and peanut butter. The diet should also eliminate concentrated simple carbohydrates (sugar, honey, dried fruit, concentrated fruit juice, etc.) since they inhibit the immune system. These simple dietary recommendations will bring relief to most children in a matter of days.
As detailed in the chapter IMMUNE SUPPORT, measures should also be taken
TREATMENT SUMMARY
To enhance the immune system.
Supplementing the diet with a good children's multiple-vitamin-and-mineral formula is a good foundation. Deficiencies of any of a number of essential nutrients increase the likelihood of infection. Of particular importance appears to be the trace minerals, such as zinc, selenium, and manganese. Of course, vitamin C and the B vitamins are also critically important.
In addition to avoiding allergens and enhancing the immune system, locally applied heat is often very helpful in reducing discomfort. It can be applied as a hot pack, with warm oil (especially mullein oil), or by blowing hot air into the ear with the aid of a straw and a hair dryer. These treatments help reduce the pressure in the middle ear and promote fluid drainage.
The following dosage recommendations are given for children. Adults with otitis media should follow the dosage recommendations given in the chapter IMMUNE SUPPORT.
Nutritional Supplements
• Vitamin A: 50,000 IU per day for up to two days in children under six years of age, four days in children over six years of age
• Beta-carotene: age in years x 10,000 IU per day (up to 100,000 IU per day)
• Vitamin C: age in years x 50 mg every two hours
Bioflavonoids: age in years x 50 mg every two hours
Zinc: age in years x 2.5 mg per day (up to 30 mg)
Thymus extract: the equivalent of 120 mg of pure polypeptides with molecular weights less than 10,000, or roughly 500 mg of the crude polypeptide fraction, per day

Botanical Medicines

Echinacea sp. are very safe for children. One-half the adult dosage is appropriate for children under the age of six, and the full adult dosage (given below) is appropriate for children over the age of six. All dosages listed here can be given up to three times per day.

- Dried root (or as tea): 0.5-1 g
- Freeze-dried plant: 325-650 mg
- Juice of aerial portion of E. purpurea stabilized in 22% ethanol: 2-3 ml
- Tincture (1:5): 2-4 ml
- Fluid extract (1:1): 2-4 ml
- Solid (dry powdered) extract (6.5:1 or 3.5% echinacoside): 150-300 mg

Peptic Ulcer Disease:
Abdominal distress forty-five to sixty minutes after meals or during the night, both relieved by food, antacids, or vomiting
Abdominal tenderness
Chronic but periodic symptoms
Ulcer crater or deformity in the stomach or upper small intestine visible on X ray or fiber-optic (endoscopic) exam
Positive test for blood in the stool

QUICK REVIEW
Individuals with peptic ulcer must be monitored by a physician due to potential serious consequences if not effectively treated.
Ulcers are usually the result of a breakdown in protective factors that line the stomach or small intestine.
The bacterium Helicobacter pylori has been linked to both duodenal and gastric ulcers.
- Aspirin and other non-steroidal anti-inflammatory drugs (NSAIDs) are associated with a significant risk of developing an ulcer.
- Smoking is a significant factor in the occurrence and severity of peptic ulcers.
- An allergy to milk may be a causative factor in many cases of ulcers.
- A diet rich in fiber is associated with a reduced rate of duodenal ulcers as compared with a low-fiber diet.
- Raw cabbage juice is well documented as having remarkable success in treating peptic ulcers.
- Bismuth is a naturally occurring mineral that can act as an antacid and exert activity against H. pylori.
- DGL, a special form of licorice, has been shown to be more effective than Tagamet or Zantac in head-to-head comparison studies.
- Rhubarb or aloe vera preparations can be used to stop the bleeding of an ulcer.

TREATMENT SUMMARY
The first step is to identify and eliminate or reduce all factors implicated in the etiology of peptic ulcers: food allergy, cigarette smoking, stress, and drugs-especially aspirin.
and other NSAIDs. Once the causative factors have been controlled, attention should be directed at healing the ulcer, inhibiting factors that aggravate the ulcer (e.g., reducing excess acid secretion if present), and promoting tissue resistance. Finally, the proper diet and lifestyle should be developed to prevent further recurrence.

Antacids can be used as part of the initial treatment for symptomatic relief. All antacids are relatively safe when used on an occasional basis, but avoid antacids that contain aluminum. We recommend following label instructions and avoiding the regular use or overuse of antacids. Taken regularly, antacids can lead to malabsorption of nutrients, bowel irregularities, kidney stones, and other side effects.

We recommend holding off on the bismuth subcitrate until the other recommendations have failed, including a one-month trial of DGL. We have had particularly good results when using DGL to treat both gastric and duodenal ulcers. For the rare patient who simply cannot get past the taste of licorice, we recommend bismuth subcitrate or Robert's formula (see CROHN'S DISEASE AND ULCERATIVE COLITIS).

**Psychological**

Develop an effective stress-reduction program; eliminate or control stressors, and design a regular relaxation plan.

**Diet**

Eliminate allergenic foods, especially milk. Eat a diet high in dietary fiber, and consume fresh cabbage juice and vegetable juices on a regular basis.

**Nutritional Supplements**

- Vitamin A: 5,000 IU per day
- Vitamin C: 500 mg three times per day
- Vitamin E: 100 IU three times per day
- Flavonoids: 500 mg three times per day
- Zinc: 20-30 mg per day
- Glutamine: 500 mg three times per day
- Bismuth subcitrate: 240 mg twice per day before meals

**Botanical Medicines**

*Deglyrrhizinated Licorice (DGL)*

The standard dosage for DGL in acute cases is two to four 380-mg chewable tablets between or twenty minutes before meals. For more mild chronic cases, for maintenance, the dosage is one to two tablets twenty minutes before meals. Taking DGL after meals is associated with poor results. DGL therapy should be continued for at least eight to sixteen weeks after there is a full therapeutic response.

It appears that, in order to be effective in healing peptic ulcers, DGL must mix with saliva. DGL may promote the release of salivary compounds that stimulate the growth and regeneration of stomach and intestinal cells. DGL in capsule form has not been shown to be effective.

*Aloe vera* Drink 1 liter per day when there is active bleeding of an ulcer.

**Periodontal disease;**

Gingivitis: inflammation of the gums characterized by redness, contour changes, and bleeding

Periodontitis: localized pain, loose teeth, demonstration of dental pockets, redness, swelling, and/or signs of infection
X-ray may reveal alveolar bone destruction

QUICK REVIEW

• Periodontal disease is best treated with combined expertise: a dentist or periodontist and a nutritionally minded physician.
• Although oral hygiene is of great importance in treating and preventing periodontal disease, it is not sufficient in many cases.
• The patient's immune system and other defense mechanisms must be normalized if development and progression of the disease are to be controlled.
• Faulty dental work is a common cause of gingival inflammation and periodontal destruction.
• Tobacco smoking is associated with increased susceptibility to severe periodontal disease and tooth loss.
• Vitamin C plays a major role in preventing periodontal disease.

Sugar is known to significantly increase plaque accumulation while decreasing white blood cell function. Vitamin E has been demonstrated to be of considerable value in treating patients with severe periodontal disease.

A review of seven studies using Coenzyme Q10 found that seventy percent of the 332 patients involved responded favorably to supplementation.

Flavonoids are extremely effective in reducing inflammation and stabilizing collagen structures of the gums. Folic acid, either as a mouthwash or a pill, has produced significant reductions of gingival inflammation in double-blind studies.

Sanguinarine, an alkaloid derived from bloodroot, demonstrates useful properties in preventing dental plaque formation.

As discussed above, many factors are involved in the initiation and promotion of periodontal disease. Effective therapy requires that all relevant factors be controlled. Since there are as yet no clear guidelines for determining which factors are most important for a given patient, a general approach is recommended here. If you are a smoker, we strongly encourage you to stop, as continued smoking greatly decreases the success of any therapy for periodontal disease.

Hygiene
Visit a dentist periodically to eliminate plaque and calculus accumulation as needed. Brushing after meals and daily flossing are necessary.

Diet
A diet high in dietary fiber may have a protective effect via increased salivary secretion. Avoidance of sucrose and all refined carbohydrates is extremely important.

Nutritional Supplements
• Vitamin C: 3-5 grams per day in divided doses
• Vitamin E: 400-800 IU per day
• Beta-carotenes: 250,000 IU per day (higher doses if indicated) for up to six months (although not clinically tested in this condition, beta-carotenes are recommended instead of vitamin A due to their similar effects and greater safety)
• Selenium: 400 mcg per day
• Zinc: 30 mg of zinc picolinate per day (60 mg per day if another form); or wash mouth with 1/2 ounce of a 5% zinc solution twice per day
• Folic acid: 2 mg per day; or wash mouth with 1/2 ounce of a 0.1% solution of folic acid twice per day Quercetin: 500 mg three times per day
Botanical Medicines
High-flavonoid-content extracts, such as those from bilberry (*Vaccinium myrtillus*), hawthorn (*Crataegus sp.*), grape seed (*Vitis vinifera*), or green tea (*Camellia sinensis*) can be used at a dosage of 150 to 300 mg per day. Of these extracts, green tea extract, or the liberal consumption of green tea as a beverage, may be the most cost-effective. For a green tea extract with a fifty-percent polyphenol content, the dosage would be 200 to 300 mg twice per day.
- *Sanguinaria canadensis*: use toothpaste-containing extract
- *Centella asiatica triterpenoids*: 30 mg twice per day of pure triterpenoids

Pharyngitis:
Sore throat with pain on swallowing Red throat with swollen tonsils Tender cervical lymph nodes

QUICK REVIEW
- Over ninety percent of all cases of sore throat are caused by viruses.
- It is important to see a physician to rule out strep throat as the cause.
- Vitamin C is very important in the prevention of rheumatic fever.
- Goldenseal prevents the adherence of strept bacteria to the lining of the throat.
- Changing to a new toothbrush or washing the toothbrush in the dishwasher every seventeen to thirty-one days has been shown to help many people who are prone to a sore throat.
- If antibiotics are used or have been used, it is important to use a probiotic supplement containing *Lactobacillus acidophilus* and *Bifidobacterium bifidus*.

TREATMENT SUMMARY
The time-honored advice to drink plenty of fluids, restrict food intake, and get plenty of rest is very important. We also recommend eliminating concentrated sugars and suspected food allergens from the diet. Because fever is a natural defense mechanism, it should be supported. Drugs to lower fever should not be used unless the body temperature approaches 104 degrees F, at which point the body's ability to control its temperature becomes impaired.

Diet
Eliminate all sources of concentrated simple sugars: sugar, honey, fruit juice, dried fruit, etc. Restrict food intake to less than 1,000 calories/d, increase fluid intake to 8 ounces per hour, using water and the herbal teas listed below.

Nutritional Supplements
- **Vitamin A**: 50,000 IU per day for up to two days in infants and up to one week in adults, or beta-carotene: 200,000 IU per day
  NOTE: Do not use vitamin A in women who are pregnant or at risk for pregnancy, due to a link with birth defects at high dosages.
- **Vitamin C**: 500 mg every two hours
- **Bioflavonoids**: 1,000 mg per day
- **Zinc**: take lozenges that supply 15-25 mg of elemental zinc (gluconate form without citrate mannitol or sorbitol); dissolve in the mouth every two waking hours after an initial double dose; continue for up to 3 days
- **Thymus extract**: the equivalent of 120 mg pure polypeptides with molecular weights less than 10,000, or roughly 500 mg of the crude polypeptide fraction
Botanical Medicines

• *Echinacea sp.*
  Dried root (or as tea): 0.5-1 g three times per day
  Freeze-dried plant: 325-650 mg three times per day
  Juice of aerial portion of E. purpurea stabilized in 22% ethanol: 2-3 ml three times per day
  Tincture (1:5): 2-4 ml three times per day
  Fluid extract (1:1): 2-4 ml three times per day
  Solid (dry powdered) extract (6.5:1 or 3.5% echinacoside): 150-300 mg three times per day

Goldenseal (*Hydrastis canadensis*) The dosage should be based on berberine content. As there is a wide range of quality in goldenseal preparations, standardized extracts are recommended. Three times per day dosages are:
  Dried root or as infusion (tea): 2-4 g Tincture (1:5): 6-12 ml (1 1/2-3 tsp) Fluid extract (1:1): 2-4 ml (1/2-1 tsp) Solid (powdered dry) extract (4:1 or 8-12% alkaloid content): 250--500 mg

Local Treatment

• Gargle with salt water twice per day: 1 tbsp salt in 8 ounces of warm water
• Ginger (*Zingiber officinalis*): strong tea made with fresh root

**PMS**

B6 several hundred mg/d
(Take B complex & C as well to complement the B6)
Recurrent signs and symptoms that develop during the seven to fourteen days prior to menstruation
Typical symptoms include: decreased energy level, tension, irritability, depression, headache, altered sex drive, breast pain, backache, abdominal bloating, and edema of the fingers and ankles

**QUICK REVIEW**
Premenstrual Syndrome (PMS) is estimated to affect between thirty and forty percent of menstruating women. The primary hormonal disturbance in PMS is that estrogen levels are elevated and progesterone levels are reduced.
An increased estrogen-to-progesterone ratio leads to impaired liver function, reduced levels of serotonin (an important mood-elevating neurotransmitter) in the brain, lower endorphin levels, impaired vitamin B6 activity, and alterations in other hormone levels.
• The primary nutritional recommendations for PMS are: increase consumption of plant foods (vegetables, fruits, legumes, whole grains, nuts, and seeds); consume small-to-moderate quantities of meat and dairy products; reduce fat and sugar intake; increase consumption of soy foods; eliminate caffeine intake; and keep salt intake low.
• Low thyroid function (hypothyroidism) has been shown to affect a large percentage of women who have PMS.
• Most women who have PMS tend to employ "negative" coping styles.
• Vitamin B6 and magnesium are the two most important nutritional supplements for treating PMS.
• The four most useful herbs in the treatment of PMS are angelica or dong quai, licorice root, black cohosh, and chasteberry.
• The use of progesterone creams should be reserved as the last choice after other natural measures have failed.

TREATMENT SUMMARY
Here are the important steps to take to help you prioritize and implement the various measures detailed above:

1. Evaluate your PMS symptoms by completing the questionnaire in this chapter.
2. Rule out hypothyroidism and/or depression. Determine your basal body temperature (discussed in HYPOTHYROIDISM). If your basal body temperature is below 97.8 degrees Fahrenheit, or if you are suffering from other symptoms associated with PMS, consult your physician for complete thyroid-function testing. Determine whether depression may be a factor by taking the self-test in the DEPRESSION chapter. If it is, follow the recommendations given in that chapter.
3. Begin following the dietary recommendations for PMS:
   • Follow a vegetarian or predominantly vegetarian diet
   • Reduce your intake of fat
   • Eliminate sugar intake
   • Reduce exposure to environmental estrogens in foods
   • Increase your intake of soy foods
   • Eliminate caffeine intake
   • Keep salt intake low
4. Follow the guidelines for nutritional supplementation given in this chapter.
5. Select the appropriate herbal support:
   • If you have PMS-associated breast pain, infrequent periods, or a history of ovarian cysts, take chasteberry extract [Take one of the following forms daily: fluid extract, 2 ml; dry powdered extract (0.5% agnuside content), 175 to 225 mg]
   • If you typically experience menstrual cramps, take angelica (dong quai) [One of the following forms can be taken three times per day: powdered root or as tea, 1-2 g, tincture (1:5), 4 ml (1 tsp); fluid extract, 1 ml (1/4 tsp)]
   • If you are bothered by PMS water retention, take licorice [One of the following forms can be taken three times per day: powdered root or as tea, 1-2 grams; fluid extract (1:1), 4 ml (1 tsp);

Psoriasis:
Sharply bordered reddened rash or plaques covered with overlapping silvery scales
Characteristic locations: the scalp, the backside of the wrists, elbows, knees, buttocks, and ankles; and sites of repeated trauma
Family history in fifty percent of cases
Nail involvement results in characteristic "oil drop" stippling (thimble-like appearance)
Possible arthritis

QUICK REVIEW
Psoriasis is caused by a pileup of skin cells that have replicated too rapidly. The basic defect is an imbalance in the cellular control compounds cyclic AMP and cyclic GMP. Incomplete protein digestion, bowel toxemia, and impaired liver function are linked to psoriasis.
Reducing the intake of arachidonic acid, a fat found exclusively in animal foods, while increasing the intake of omega-3 fatty acids is a primary nutritional recommendation. Several orally administered natural medicines have been shown to be effective in treating psoriasis: omega-3 fatty acids, active vitamin D, fumaric acid, silymarin, and sarsaparilla.
• Sunlight (ultraviolet light) is extremely beneficial for individuals with psoriasis.
Topical treatments with preparations containing glycyrrhetinic acid from licorice, chamomile extracts, and capsaicin from cayenne pepper can be helpful.

TREATMENT SUMMARY
Despite the complexity of this disease, the therapeutic approach is fairly straightforward.

Diet
Limit consumption of sugar, meat, animal fats, and alcohol. Increase intake of fiber and cold-water fish. Eliminate sources of gluten.

Nutritional Supplements
• High-potency multiple vitamin and mineral formula
• Flaxseed oil: 1 tbsp per day
• Vitamin A: 50,000 IU per day (not to be used by pregnant or women at risk for pregnancy)
• Vitamin E: 400 IU per day
• Chromium: 400 mcg per day • Selenium: 200 mcg per day • Zinc: 30 mg per day
• Water-soluble fiber (psyllium, pectin, guar gum, etc.): 5 g at bedtime

Botanical Medicines
• Goldenseal (Hydrastis canadensis) The dosage should be based on berberine content. As there is a wide range of quality in goldenseal preparations, standardized extracts are preferred. Take one of the following three times per day:
Dried root or as infusion (tea): 2-4 g Fluid extract (1:1): 2-4 ml (1/2-1 tsp) Solid (powdered dry) extract
(4:1 or 8-12% alkaloid content): 250-500 mg
• Sarsaparilla species (one of the following three times per day):
Dried root or by decoction: 1-4 g Liquid extract (1:1): 8-16 ml (2-4 tsp) Solid extract (4:1): 250-500 mg
• Silymarin (from Silybum marianum): 70-210 mg three times per day

Psychological Factors
Evaluate stress levels and utilize stress reduction techniques as appropriate.

Physical Medicines
• Ultrasound: 42--45°C for twenty minutes, three times per week
• UVB: 295-305 nm, 2 mw/cm² for three minutes, three times per week

Topical Treatment
Preparations that contain one or more of the ingredients described above. Apply to affected areas of the skin two to three times per day.

Psychiatric;
(Depression, Psychosis, Bipolar, Schizophrenia)
B3/Niacin 10,000-20,000 mg/d (Works best when given with adequate/high dose Vit C which also improves tolerance of Niacin)
All B-Vitamins need to be taken in concert as a group, B-Complex is necessary to round out the higher doses of any specific B vitamin.
Rheumatoid Arthritis;
Fatigue, low-grade fever, weakness, weight loss, joint stiffness and vague joint pain may precede the appearance of painful, swollen joints by several weeks
Severe joint pain with considerable inflammation that usually begins in the small joints and progresses to eventually affect all joints
X-ray findings usually show soft tissue swelling, erosion of cartilage, and joint-space narrowing
"Rheumatoid factor" is present in the blood

QUICK REVIEW
• Rheumatoid arthritis (RA) is an autoimmune reaction in which antibodies develop against components of joint tissues.
• RA is a classic example of a multi-factorial disease, wherein an assortment of genetic and environmental factors contributes to the disease process.
• Standard medical therapy is of limited value in treating most cases of RA, as it fails to address the complex underlying causes of this disease.
• Diet has been strongly implicated in rheumatoid arthritis for many years, both in regard to cause and cure.
• Elimination of allergenic foods has been shown to offer significant benefit to some individuals with rheumatoid arthritis.
• Altered gastrointestinal tract flora have been linked to RA and other autoimmune diseases.
• A vegetarian diet has been shown to produce significant benefits in treating RA.
• In the dietary treatment of RA, the importance of consuming a diet rich in fresh fruits and vegetables cannot be overstated.
• Several natural anti-inflammatory compounds (e.g., curcumin, bromelain, and ginger) have shown positive effects in treating RA.
• Physical therapy (i.e., exercise, heat, cold, massage, diathermy, lasers, and paraffin baths) has a major role in the management of RA.

TREATMENT SUMMARY
RA is a disease known to have many contributing factors. Effective treatment using natural therapies requires controlling as many of these factors as possible. Foremost is the use of dietary measures to reduce the causes and ameliorate the symptoms of RA. Symptomatic relief can also be attained through the use of standard physical therapy techniques (i.e., exercise, heat, cold, massage, diathermy, lasers, and paraffin baths), anti-inflammatory botanicals, and nutrients.
Rheumatoid arthritis is often an aggressive disease that needs aggressive treatment. In mild-to-moderate cases of RA, the physical measures listed in the previous paragraph are extremely effective on their own. In severe cases, NSAIDs and other drugs may be necessary—at least in the acute phase. However, we encourage our patients not to abandon the natural measures, as they will actually enhance the effectiveness of the drugs, resulting in lower dosages. When the drugs are necessary, use deglycyrrhizinated licorice (DGL) to protect against developing peptic ulcers. After isolating and eliminating all allergens, a generally healthy diet is recommended: rich in whole foods, vegetables, and fiber, and low in sugar, meat, refined carbohydrates, and animal fats. Foods particularly beneficial for the RA patient include: cold-water fish
(mackerel, herring, sardines, and salmon) and flavonoid rich berries (cherries, hawthorn berries, blueberries, blackberries, etc.).

**Nutritional Supplements**

- DHEA: 50-200 mg per day
- EPA: 1.8 g per day or flaxseed oil: 1 tbsp per day
- Niacinamide: 500 mg four times per day (check liver enzyme values in the blood every six months)
- Pantothenic acid: 500 mg four times per day
- Vitamin C: 1-3 g per day in divided doses
- Vitamin E: 400-800 IU per day
- Copper: 1 mg per day
- Manganese: 15 mg per day
- Selenium: 200 mcg per day
- Zinc: 45 mg per day

- Betaine HCI: 10-70 grains with meals (see the chapter DIGESTION and ELIMINATION for instructions)
- Pancreatin (10 x USP): 350 mg-750 mg between meals three times per day or
- Bromelain: 250--750 mg (1,800-2,000 men) between meals three times per day

**Botanical Medicines**

The following botanicals may be used alone or in combination with others. Severe inflammation and joint destruction require more aggressive therapy. Individuals with a history of corticosteroid use (e.g., prednisone) and those being weaned of corticosteroids should take adrenal-supportive herbs such as Chinese thoroughwax (*Bupleuri falcatum*), licorice *Glycyrrhiza glabra*), and *Panax ginseng*. These herbs support the adrenal glands by preventing and/or reversing the adrenal gland atrophy (shrinkage) induced by these drugs.

- Curcumin: 400 mg three times per day or Ginger: incorporate 8-10 grams of fresh ginger into the diet each day, or recommend ginger extracts standardized to contain 20% gingerol and shogaol at a dosage of 100-200 mg three times per day

Chinese thoroughwax (*Bupleuri falcatum*) (dosages to be taken three times per day):
- Dried root: 2-4 g Tincture (1:5): 5-10 ml Fluid extract (1:1): 2-4 ml Solid extract (4:1): 200-400 mg
- *Panax ginseng* (dosages to be taken three times per day)
- Crude herb: 4.5-6 g per day Standardized extract (5% ginsenosides): 500 mg 1-3 times per day
- Licorice (*Glycyrrhiza glabra*) (dosages to be taken three times per day) Dried root: 2-4 g
  - Tincture (1:5): 10-20 ml
  - Fluid extract (1:1): 4-6 ml Solid extract (4:1): 250-500 mg

**Physical Medicine**

- Heat (moist packs, hot baths, etc.): 20-30 minutes one to three times per day
- Cold packs for acute flare-ups
- Paraffin baths (if skin irritation is caused by hot water)
- Active (or, in severe cases, passive) range-of-motion exercises: 3-10 repetitions 1-3 times per day
- Progressive isometric (and isotonic as the joints improve) exercise: 3-10 repetitions several times per day, with generous periods of rest
- Massage: once per week

**Rosacea;**
Chronic acne-like eruption on the face of middle-aged and older adults associated with face. The primary involvement occurs over the flushed areas of the cheeks and nose. More common in women (3:1), but more severe in men.

QUICK REVIEW
' Low gastric acid output may be a factor in many cases.
• Lack of B-vitamins, especially vitamin B2 (riboflavin), may cause rosacea.

TREATMENT SUMMARY
Although the causes of rosacea have not yet been determined, sufficient information is available to adequately treat most patients. Addressing hypochlorhydria, avoiding foods that can cause flushing of the face, and B vitamin supplementation form the basis of therapy.

General Recommendations See the chapter ACNE.

Diet
• Avoid coffee, alcohol, hot beverages, spicy foods, and any other food or drink that causes a flush.
• Eliminate all refined and/or concentrated sugars from the diet.
• Do not eat foods that contain trans-fatty acids, such as milk, milk products, margarine, shortening, or other synthetically hydrogenated vegetable oils, as well as fried foods.
• Avoid milk and foods high in iodized salt.

Nutritional Supplements
Multiple-vitamin-and-mineral formula providing B-complex vitamins according to recommendations given in the chapter SUPPLEMENTARY MEASURES. Hydrochloric acid: as recommended in the chapter DIGESTION AND ELIMINATION Pancreatin (8-10 X USP): 350-500 mg before meals

Seasonal Affective Disorder (SADD);
Regularly occurring winter depression, frequently associated with summer hypomania.

QUICK REVIEW
• Although many variables may be responsible for SAD, lack of exposure to full-spectrum natural light appears to be the most logical explanation.
• Nighttime melatonin use may be helpful.
• The antidepressive effects of full spectrum light therapy designed to replicate natural sunlight have been demonstrated in well-monitored, controlled studies.

The St. John's wort extract standardized to contain 0.3 percent hypericin (see DEPRESSION), at a dosage of 300 mg three times per day, has been shown to relieve SAD.

TREATMENT SUMMARY
Since the cause of SAD appears to be light related, the treatment goal is to extend the length of light exposure on winter days. This can be accomplished by using full-spectrum lighting, as described in this chapter. In addition, we recommend nighttime melatonin supplementation (3 mg forty-five minutes before retiring) and daytime St. John's wort extract (0.3% hypericin content, 300 mg three times per day).

Seborrhea;
Superficial reddened small bumps and scaly eruptions occurring on the scalp, cheeks, and skin folds (the armpit, groin, and neck)
Usually does not itch Seasonal, worse in winter

QUICK REVIEW
• Seborrhea may be due to a B vitamin deficiency.
• A biotin deficiency is the most frequent cause of "cradle cap."
• Vitamin B6 ointment can help in treating the sicca variant of seborrheic dermatitis.

TREATMENT SUMMARY
Although the optimal approach to treating all seborrheic dermatitis patients is not clear at this time, effective therapy is available for most patients. In infants, biotin supplementation and control of food allergies are the keys. If the child is nursing, biotin can be given to the mother and the mother should avoid common food allergens (milk, corn, wheat, citrus, peanuts, and eggs). For adults, supplementing with large doses of vitamin-B complex is the primary therapy.

Diet
Detect and treat food allergens. In nursing infants, the food allergies of the mother should be considered.

Nutritional Supplements
The following recommendations are for adults.
• Biotin: 3 mg twice per day
• B-complex: Follow the dosage recommendations for the various B vitamins given in the chapter

SUPPLEMENTARY MEASURES.
• Zinc: 20-30 mg per day
• Flaxseed oil: 1 tbsp per day

Topical treatment
Pyridoxine ointment 50 mg/g (water soluble base)

Sinusitis;
History of acute viral respiratory infection, dental infection, or nasal allergy
Nasal congestion and thick discharge
Fever, chills, and frontal headache
Pain, tenderness, redness, and swelling over the involved sinus
Chronic infection may produce no symptoms other than mild postnasal discharge, a musty odor, or a nonproductive cough

QUICK REVIEW
• Any factor that causes swelling of the mucous membranes that line the sinuses may result in obstruction of drainage and subsequent infection. • Antibiotic therapy is of limited value.
• Addressing the underlying cause of chronic sinusitis, along with supportive therapy, appears to be the most rational approach.
• Patients with acute sinusitis have responded to bromelain therapy,

TREATMENT SUMMARY
In cases of acute sinusitis, the therapeutic goals are to reestablish drainage and to clear the acute infection. Various measures can be used: local application of heat, local use of
volatile oils and botanicals with antibacterial properties, and immune system support (see IMMUNE SUPPORT).

Since chronic sinusitis is often associated with allergy, long-term control is dependent on isolation and elimination of the food or air-borne allergens and correction of the underlying problem that allowed the allergy to develop (see FOOD ALLERGY for a more thorough discussion). During the acute phase, elimination of the common food allergens (milk, wheat, eggs, citrus, corn, and peanut butter) is recommended until a more definitive diagnosis can be made.

Local applications of heat have been shown to be very effective in alleviating both short- and long-term symptoms of allergic rhinitis.

We have found that patients with chronic sinusitis often suffer from yeast syndrome (chronic Candidiasis). Take the self-test in CANDIASIS to determine whether this situation applies.

Nutritional Supplements
(See IMMUNE SUPPORT for more information)

- Vitamin C: 500 mg every two hours
- Bioflavonoids: 1,000 mg per day
- Vitamin A: 5,000 IU per day
- Beta-carotene: 25,000 IU per day
- Zinc: 20-30 mg per day
- Thymus extract: the equivalent of 120 mg pure polypeptides with molecular weights less than 10,000, or roughly 500 mg of the crude polypeptide fraction

Botanical Medicines
(All dosages three times per day)

- Echinacea sp.
  Dried root (or as tea): 0.5-1 g
  Freeze-dried plant: 325-650 mg juice of aerial portion of E. purpurea stabilized in 22% ethanol: 2-3 ml Tincture (1:5): 2--4 ml
  Fluid extract (1:1): 2-4 ml
  Solid (dry powdered) extract (6.5:1 or 3.5% echinacoside): 150-300 mg
  Hydrastis canadensis (goldenseal) The dosage should be based on berberine content. As there is a wide range of quality in goldenseal preparations, standardized extracts are recommended. Three times a day dosages follow:
  Dried root or as infusion (tea): 2--4 g
  Tincture (1:5): 6-12 ml (1/2-3 tsp) Fluid extract (1:1): 2-4 ml (1/2-1 tsp) Solid (powdered dry) extract (4:1 or 8-12% alkaloid content): 250-500 mg
- Bromelain (1,200-1,800 mcu): 250-500 mg between meals

Topical Treatment
- Intranasal douche with saline solution (available at pharmacies)
- Swab passages with oil of bitter orange Menthol or eucalyptus packs over sinuses (take care to avoid irritation)

Physical Therapy
- Local applications of hot packs (discontinue if pain increases without drainage)

Sports Injuries;
Tendinitis; Acute or chronic pain localized in a tendon Limited range of motion
Bursitis; Severe pain of the affected joint, particularly on movement Limited range of motion

QUICK REVIEW
Proper stretching and warm-up before exercise are important preventive measures.
• After an injury or sprain, immediate first-aid to the injured area (rest, ice, compression, and elevation) is very important.
• Deficiency of vitamin C is associated with defective formation and maintenance of tendon and bursal tissues.
• Vitamin A, zinc, vitamin E, and selenium, as well as vitamin C, are important not only for their wound healing properties, but also for their antioxidant effects.
• Bromelain has been reported in scientific studies to exert a wide variety of beneficial effects, including reducing inflammation in cases of sports injury or trauma.
• Curcumin, the yellow pigment of Curcuma longa (turmeric), exerts excellent anti-inflammatory and antioxidant effects.
• Physical therapy can aid in pain relief and recovery from injury.

TREATMENT SUMMARY
Treatment of the muscle, joint, tendon, or bursal damage caused by acute and chronic injuries involves two phases: inflammation inhibition and protection of the injured tissues, followed by promotion of healing after the acute phase has resolved. For any serious injury, a physician should be consulted immediately. Indications for a physician include: severe pain, injuries to the joints, loss of function, and pain that persists for more than two weeks.

RICE
• Rest the injured part
• Ice the painful area
• Compress the injured area with an elastic bandage
• Elevate the injured part above the level of the heart
The ice and compress should be applied for thirty minutes, followed by fifteen minutes without either to allow blood flow to return. After the acute inflammatory stage (twenty-four to forty eight hours), gradually increasing range-of-motion and stretching exercises should be used to maintain and improve mobility and prevent adhesions (abnormal scar formation).

Nutritional Supplements
• High-potency multiple-vitamin-and mineral formula, as described in the chapter

SUPPLEMENTARY MEASURES
• Vitamin C: 500-1,000 mg three to four times per day
• Flavonoids (choose one):
  Grape seed or pine bark extract 50-100 mg three times per day
  Citrus bioflavonoids: 500-1,000 mg three times per day

Botanical Medicines
• Curcumin (from turmeric): 200-400 mg three times per day between meals
• Bromelain (1,800-2,000 milk-clotting or gelatin-digesting units, mcu and gdu, respectively): 250-750 mg three times per day between meals

Physical Medicines
• TENS: if needed for pain control
• Ultrasound: three times per week during the recovery phase and if adhesions or contractures develop

Urticaria;
Hives (urticaria): raised and swollen welts with blanched centers (wheals) that may coalesce to become giant welts. Limited to the superficial portion of the skin.

Angioedema: Similar eruptions to hives, but with larger swollen areas that involve structures beneath the skin.

Chronic versus acute: Recurrent episodes of urticaria and/or angioedema of less than six weeks duration are considered acute, while attacks persisting beyond this period are designated chronic.

Special forms: Special forms have characteristic features (dermographism, cholinergic urticaria, solar urticaria, cold urticaria).

QUICK REVIEW
• Fundamental to the treatment of hives is recognition and control of causative factors.
• Drug reactions are the leading cause of hives in adults.
• In children, hives are usually due to foods, food additives, or infections.
• Antibiotics, including penicillin and related compounds, are the most common cause of drug-induced hives.
• Although any food can be the causative agent, the most common offenders are: milk, fish, meat, eggs, beans, and nuts.
• Several food additives (e.g., tartrazine, benzoate) and aspirin increase the production of a compound that results in an increase in the number of mast cells throughout the body. Elimination of food additives leads to tremendous improvement in chronic hives in children.

Chronic Candidiasis can be an underlying factor in cases of chronic hives. Vitamin C prevents the secretion of histamine by white blood cells and increases the breakdown of histamine.
• The flavonoid Quercetin inhibits both the manufacture and release of histamine and other allergic/inflammatory mediators by mast cells and basophils.
• It is important to rule out low thyroid function or the presence of antibodies against the thyroid gland in cases of chronic hives.

DRUGS THAT CAN CAUSE URTICARIA
Acetylsalicylic acid
Allopurinol
Antimony
Antipyrines
Barbiturates
Bismuth
Chlorhydrate
Chlorpromazine
Corticotropin (ACTH)
Eucalyptus Fluorides
Gold
Griseofulvin (cold urticaria)
Insulin
Lodine
Liver extract
Menthol
Meprobamate
Mercury
Morphine, opium
Para-amino salicylic acid
Penicillin
Phenacetin
Phenobarbital
Pilocarpine
poliomyelitis vaccine
Potassium
Sulfocyanate
Procaine
Promethazine
Quinine
Reserpine
Saccharin
Thiamine chloride
Thiouracil

TREATMENT SUMMARY
The first goal of treatment is to identify and control all of the factors that promote the hives. Acute hives is usually a self limiting disease, especially once the eliciting agent has been removed or reduced. Chronic hives also responds to the removal of the eliciting agent(s).

Diet
An elimination diet is of utmost importance in the treatment of chronic hives (see FOOD ALLERGY. The diet should not only eliminate suspected allergens, but also all food additives.

Nutritional Supplements
• Vitamin C: 1 g three times per day
• Vitamin B12: 1,000 mcg per day orally, or by injection once per week
• Quercetin: 200-400 mg twenty minutes before each meal

Psychological Measures
Perform relaxation techniques daily. Listening to audio taped relaxation programs may be an appropriate way to induce the desired state.

Physical Medicine
Sunbathe daily for fifteen to twenty minutes or use a WA solarium, especially in cases of chronic physical urticaria. Obviously sunbathing is contraindicated in solar urticaria.

Vaginitis;
Increased volume of vaginal secretions
Abnormal color, consistency, or odor of vaginal secretions Vaginal and vulval itching, burning, or irritation
Pelvic area may show Patchy redness, and the vaginal mucosa may be inflamed Painful urination or pain with intercourse

QUICK REVIEW

TREATMENT SUMMARY
Since approximately ninety percent of all cases of vaginitis are due to candida, trichomonas, or gardnerella infections, the following recommendations are primarily directed toward treatment of these organisms. Immune support (through proper diet, nutritional supplementation, and botanical medicines) is an important aspect of the therapy. In recurrent infections, please follow the recommendations given in the chapter IMMUNE SUPPORT.

**General Recommendations**
1. Consult a physician for accurate diagnosis.
2. Treatment failures may be due to incorrect diagnosis, re-infection, failure to treat predisposing factors, or resistance to the treatment used.
3. In all cases of vaginitis, it is important to use live *Lactobacillus* preparations to reestablish a healthy colony of these desirable organisms in the vagina.
4. Sexual activity should be avoided during treatment to prevent reinfection and to reduce trauma to inflamed tissues. If this is not possible, at least assure that condoms are used.
5. In recurrent cases, consider having sexual partners treated.
6. Wear cotton underwear.

**Diet**
For all causes of vaginitis, a nutrient-dense diet is recommended. All refined foods and simple carbohydrates should be eliminated. The focus should be on high-quality whole foods. If food allergies are suspected, allergens should be determined and eliminated.

**Nutritional Supplements**
- High-potency multiple vitamin and mineral formula according to the guidelines given in the chapter SUPPLEMENTARY MEASURES
- *Lactobacillus sp.*: one to two billion live organisms per day

**Local Treatment**
Douches and saturated tampons are effective methods of achieving high concentrations of therapeutic agents in the vagina. The following agents are useful in treatment of the common forms of vaginitis. The list is by no means exhaustive. Only the agents that have been mentioned in several articles or texts are included. Many other agents are doubtlessly also effective. Choose one or more of the agents below; do not try to use all at once. The variety provides alternatives for use in resistant cases.
- **Betadine**: various gels, suppositories, and fluids are available; a 1:100 dilution in a retention douche kills most organisms within 30 seconds
- **Boric Acid Caps**: 600 mg placed in capsules
  Repeated use may cause irritation, and use for more than seven days may result in problems from systemic absorption
- **Gentian Violet**: swab or soak tampon as described in Sensitivity reactions are common, and staining of clothes can occur if a pad is not used
- **Lactobacillus sp.**: dissolve enough in 10 ml of water to provide one billion organisms; use a syringe to douche the material into the vagina

**Varicose Veins;**
Dilated, tortuous, superficial veins in the legs
May be without symptoms or may be associated with fatigue, aching discomfort, feelings of heaviness, or pain in the legs
Fluid retention (edema), discoloration, and ulceration of the skin may develop. Women are affected four times as frequently as men.

**QUICK REVIEW**
- A diet high in fiber prevents varicose veins.
- Veins can be strengthened with flavonoid-rich extracts.
- Several herbal extracts have been shown to act as *venotonics-agents* that enhance the structure, function, and tone of veins—and produce excellent clinical results.

**TREATMENT SUMMARY**
Varicose veins are extremely common in our society, largely due to dietary and lifestyle factors. The supplements and botanicals are recommended to strengthen the walls of the vein and increase fibrinolytic activity. To treat or reduce the risk of developing varicose veins, we recommend that you:

1. Consume a diet high in fiber
2. Avoid standing in one place for long periods of time (use elastic support stocking if standing is necessary)
3. Employ measures to increase the integrity of the connective tissue and vein wall
4. Enhance fibrinolytic activity
5. Exercise regularly
6. Avoid being obese

**Diet**
Consume a high-complex-carbohydrate diet rich in dietary fiber. The diet should contain liberal amounts of proanthocyanidin- and anthocyanidin-rich foods, such as blackberries, cherries, blueberries etc. Garlic, onions, ginger, and cayenne should also be consumed liberally.

**Nutritional Supplements**
- Vitamin C: 500-3,000 mg per day
- Vitamin E: 200-600 IU per day
- Bioflavonoids: 100-1,000 mg per day
- Zinc: 15-30 mg per day

**Botanical Medicines**
Choose one or more:
- Horse chestnut (*Aesculus hippocastanum*): use extracts that provide a daily dosage of 50 mg escin
- Gotu kola (*Centella asiatica*): use extracts that provide a daily dosage of 30-60 mg triterpenic acids
- Butcher's broom (*Ruscus aculeatus*): use extracts standardized to contain 9-11% ruscogenin at a dosage of 100 mg three times per day
- Bilberry (*Vaccinium myrtillus*): use extracts standardized to contain 25% anthocyanoside; 80-160 mg three times per day
- Grape seed (*Vitis vinifera*) or pine bark (*Pinus maritima*): use extracts standardized to contain 95% or more procyanidolic oligomers (PCOs or OPCs); 150-300 mg per day
- Bromelain (1,200-1,800 mcu): 500--750 mg two to three times per day between meals

**Vitamin D** (D3 preferred)  
Max Dose 50,000-200,000 iu/d, usual dose 1,000-4,000 iu/d
Excessive doses of 1,25 dihydroxy Vitamin D have been linked with Th1 inflammation. This in turn has been linked to intracellular cell-wall deficient bacterial infections that cause autoimmune diseases such as Rheumatoid Arthritis, Systemic Lupus Erythematosis, Sarcoidosis, Fibromyalgia and others. For more information go to www.marshallprotocol.com

**Vitamin E**

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