



The Cleansing Center

a preventive medicine clinic

IV Vitamin Cocktail Ingredients

Vitamin C – (Ascorbic Acid)

Vitamin C also known as, ascorbic acid, L-ascorbic acid, dehydroascorbic acid, the antiscorbutic vitamin, L-xyloascorbic acid and L-threo-hex-2-uronic acidylactone, is a much talked about vitamin, with people claiming it as a cure-all for many diseases and problems – from cancer to the common cold. Yet, this miracle vitamin cannot be manufactured by the body, and needs to be ingested.

Vitamin C is required in the synthesis of collagen in connective tissue, neurotransmitters, steroid hormones, carnitine, conversion of cholesterol to bile acids and enhances iron bioavailability. Ascorbic acid is a great antioxidant and helps protect the body against pollutants.

Because vitamin C is a biological reducing agent, it is also linked to prevention of degenerative diseases – such as cataracts, certain cancers and cardiovascular diseases.

Ascorbic acid also promotes healthy cell development, proper calcium absorption, normal tissue growth and repair – such as healing of wounds and burns. It assists in the prevention of blood clotting and bruising, and strengthening the walls of the capillaries.

Vitamin C is needed for healthy gums, to help protect against infection, and assisting with clearing up infections and is thought to enhance the immune system and help reduce cholesterol levels, high blood pressure and preventing arteriosclerosis.

Deficiency of vitamin C

When there is a shortage of Vitamin C, various problems can arise, although scurvy is the only disease clinically treated with vitamin C. However, a shortage of vitamin C may result in "pinpoint" hemorrhages under the skin and a tendency to bruise easily, poor wound healing, soft and spongy bleeding gums and loose teeth.

Edema (water retention) also happens with a shortage of vitamin C, and weakness, a lack of energy, poor digestion, painful joints and bronchial infection and colds are also indicative of an under-supply.

Vitamin A (Retinol)

Vitamin A and carotene can be obtained from either animal or vegetable sources. The animal form is divided between retinol and dehydroretinol whereas the vegetable carotene can be split into four very potent groups – alpha-carotene, beta-carotene, gamma-carotene and crypto-carotene. With enough beta-carotene available in the body, the body can manufacture its own vitamin A.

Vitamin A is required for night vision, and for a healthy skin. It assists the immune system, and because of its antioxidant properties is great to protect against pollution and cancer formation and other diseases. It also assists your sense of taste as well as helping the digestive and urinary tract and many believe that it helps slow aging.

It is required for development and maintenance of the epithelial cells, in the mucus membranes, and your skin, and is important in the formation of bone and teeth, storage of fat and the synthesis of protein and glycogen.

Deficiency of vitamin A

A deficiency of vitamin A may lead to eye problems with dryness of the conjunctiva and cornea, dry skin and hair, night blindness as well as poor growth.

Dry itchy eyes that tire easily are normally a warning of too little vitamin A. If the deficiency become severe, the cornea can ulcerate and permanent blindness can follow.

Abscesses forming in the ear, sinusitis, frequent cold and respiratory infections as well as skin disorders, such as acne, boils and a bumpy skin, as well as weight loss might be indicative of the vitamin being in short supply.

Insomnia, fatigue and reproductive difficulties may also be indicative of the vitamin in short supply. Your hair and scalp can also become dry with a deficiency, especially if protein is also lacking.

Vitamin D – (Ergocalciferol)

Vitamin D is also referred to as calciferol and can rightly be called the sunshine vitamin, since the body, in a sunny climate can manufacture this nutrient from sunshine on your skin using cholesterol from your body to do so.

Vitamin D helps with increasing the absorption of calcium, assists in bone growth and the integrity of bone and promotes strong teeth.

It also helps regulate the amount of phosphorus in the body as well as assisting in a healthy heart and nervous system. In some recent studies it has also shown great promise in assisting psoriasis, the immune system, thyroid function as well as normal blood clotting.

Deficiency of vitamin D

A shortage can lead to softening of the bone and muscle twitching and convulsions, and in children it causes rickets – resulting in bent legs. In adults, the shortage causes loss of minerals from the bones, (osteomalacia) where the bones are sore, tender, and weak muscles with the possibility of deafness developing. In older people, osteoporosis may appear when protein is also lost from the bone. Vitamin D in short supply is also linked to having a burning sensation in the mouth and throat, diarrhea, insomnia and visual problems.

Vitamin B1 (Thiamine)

Thiamin, also called vitamin B1, is used in many different body functions and deficiencies may have far reaching effects on the body, yet very little of this vitamin is stored in the body, and depletion of this vitamin can happen within 14 days.

Thiamin is also a miraculous nutrient, somebody suffering from beriberi, scarcely able to lift their head from their pillow, will respond quickly from injected thiamin, and will be on their feet within a matter of hours.

Thiamin may enhance circulation, helps with blood formation and the metabolism of carbohydrates. It is also required for the health of the nervous system and is used in the biosynthesis of a number of cell constituents, including the neurotransmitter acetylcholine and gamma-aminobutyric acid (GABA). It is used in the manufacture of hydrochloric acid, and therefore plays a part in digestion.

It is also great for the brain and may help with depression and assist with memory and learning. In children it is required for growth and has shown some indication to assist in arthritis, cataracts as well as infertility.

Deficiency of vitamin B1

A deficiency will result in beriberi, and minor deficiencies may be indicated with extreme fatigue, irritability, constipation, edema and an enlarged liver. Forgetfulness, gastrointestinal disturbances, heart changes, irritability, labored breathing and loss of appetite may also be experienced.

With too little thiamin around a person may also experience nervousness, numbness of the hands and feet, pain and sensitivity, poor coordination, tingling sensations, weak and sore muscles, general weakness and severe weight loss.

Vitamin B2 (Riboflavin)

Riboflavin, or vitamin B2, is required by the body to use oxygen and the metabolism of amino acids, fatty acids, and carbohydrates. Riboflavin is further needed to activate vitamin B6 (pyridoxine), helps to create niacin and assists the adrenal gland. It may be used for red blood cell formation, antibody production, cell respiration, and growth.

It eases watery eye fatigue and may be helpful in the prevention and treatment of cataracts. Vitamin B2 is required for the health of the mucus membranes in the digestive tract and helps with the absorption of iron and vitamin B6.

Although it is needed for periods of rapid growth, it is also needed when protein intake is high, and is most beneficial to the skin, hair and nails.

Deficiency of riboflavin

A shortage of this vitamin may manifest itself as cracks and sores at the corners of the mouth, eye disorders, inflammation of the mouth and tongue, and skin lesions.

Dermatitis, dizziness, hair loss, insomnia, light sensitivity, poor digestion, retarded growth, and slow mental responses have also been reported. Burning feet can also be indicative of a shortage.

Vitamin B6 (Pyridoxine)

Pyridoxine is required for the balancing of hormonal changes in women as well as assisting the immune system and the growth of new cells. It is also used in the processing and metabolism of proteins, fats and carbohydrates, while assisting with controlling your mood as well as your behavior. Pyridoxine might also be of benefit for children with learning difficulties, as well as assisting in the prevention of dandruff, eczema and psoriasis.

It assists in the balancing of sodium and potassium as well promotes red blood cell production. It is further involved in the nucleic acids RNA as well as DNA. It is further linked to cancer immunity and fights the formation of the toxic chemical homocysteine, which is detrimental to the heart muscle.

Women in particular may suffer from pre-menstrual fluid retention, severe period pains, emotional PMS symptoms, premenstrual acne and nausea in early pregnancy. Mood swings, depression as well as loss of sexual drive is sometimes noted when pyridoxine is in short supply and the person is on hormone replacement therapy or on birth control pills.

Deficiency of vitamin B6

Irritability, nervousness and insomnia as well as general weakness, skin changes such as dermatitis and acne as well as asthma and allergies might develop when pyridoxine is in short supply. Symptoms may include nails that are ridged, an inflamed tongue as well as changes to your bones – which can include osteoporosis and arthritis. Kidney stones may also appear.

Vitamin B6 deficiency symptoms will be very much like those of B2 and B3. Vitamin B6 is needed by the body to manufacture its own B3 vitamin.

Vitamin B3 (Niacinamide)

Vitamin B3 is required for cell respiration, helps in the release of energy and metabolism of carbohydrates, fats, and proteins, proper circulation and healthy skin, functioning of the nervous system, and normal secretion of bile and stomach fluids. It is used in the synthesis of sex hormones, treating schizophrenia and other mental illnesses, and a memory-enhancer.

Nicotinic acid (but not nicotinamide) given in drug dosage improves the blood cholesterol profile, and has been used to clear the body of organic poisons, such as certain insecticides. People report more mental alertness when this vitamin is in sufficient supply.

Deficiency of vitamin B3

A deficiency may cause pellagra, the classic niacin deficiency disease, and is characterized by bilateral dermatitis, diarrhea, and dementia.

A shortage of niacin may be indicated with symptoms such as canker sores, depression, diarrhea, dizziness, fatigue, halitosis, headaches, indigestion, insomnia, limb pains, loss of appetite, low blood sugar, muscular weakness, skin eruptions, and inflammation.

Vitamin B5 (Dexpanthenol)

Vitamin B5 plays an important role in the secretion of hormones, such as cortisone because of the role it plays in supporting the adrenal gland. These hormones assist the metabolism, help to fight allergies and are beneficial in the maintenance of healthy skin, muscles and nerves.

Pantothenic acid is also used in the release of energy as well as the metabolism of fat, protein and carbohydrates. It is used in the creation of lipids, neurotransmitters, steroid hormones and hemoglobin. Some are of the opinion that pantothenic acid is also helpful to fight wrinkles as well as graying of the hair.

Deficiency of vitamin B5

With Vitamin B5 in short supply symptoms like fatigue, headaches, nausea, tingling in the hands, depression, personality changes and cardiac instability have been reported.

Frequent infection, fatigue, abdominal pains, sleep disturbances and neurological disorders including numbness, paresthesia (abnormal sensation such as "burning feet" syndrome), muscle weakness and cramps are also possible indications that this nutrient is in short supply.

Biochemical changes include increased insulin sensitivity, lowered blood cholesterol, decreased serum potassium, and failure of adrenocorticotropin to induce eosinopenia.

Vitamin E (d-alpha tocopheryl acetate)

Vitamin E is a powerful antioxidant, protects your cells from oxidation, and neutralizes unstable free radicals, which can cause damage. This is done by the vitamin E giving up one of its electrons to the

electron deficient free radical, making it more stable. While Vitamin E performs its antioxidant functions, it also protects the other antioxidants from being oxidized.

This antioxidant capability is then also great in helping to prevent degenerative diseases – including heart disease, strokes, arthritis, senility, diabetes and cancer. It also assists in fighting heart disease and cancers and is essential for red blood cells, helps with cellular respiration and protects the body from pollution – especially the lungs. Vitamin E is also useful in preventing blood clots from forming and promotes fertility, reduces and/or prevents hot flashes in menopause. An increase in stamina and endurance is also attributed to Vitamin E.

Vitamin E is also used topically to great effect for skin treatments – in helping the skin look younger, promoting healing and cutting down the risk of scar tissue forming. Used on the skin it is also reported to help with eczema, skin ulcers cold sores and shingles.

Deficiency of vitamin E

Deficiency of Vitamin E is not common, and the symptoms not very clear cut, but may include fatigue, inflamed varicose veins, wounds healing slowly, premature aging and sub-fertility. When Vitamin E is in short supply symptoms may include acne, anemia, muscle disease, dementia, cancers, gallstones, shortened red blood cell life span, spontaneous abortion (miscarriage), and uterine degeneration.

Vitamin B7 / Vitamin H (Biotin)

Biotin, as referred to as Vitamin H is part of the Vitamin B complex group and might be interesting to some people since one of the most visible symptoms of shortage of this vitamin is thinning of hair which can lead to total hair loss.

This does not mean that baldness is a sign of Vitamin H in short supply – severe hair loss might just be indicative of biotin being deficient.

Vitamin H is used in cell growth, the production of fatty acids, metabolism of fats, and proteins. It plays a role in the Krebs cycle, which is the process in which energy is released from food.

Biotin is also indicated for healthy hair and skin, healthy sweat glands, nerve tissue, and bone marrow, and assisting with muscle pain.

Vitamin H not only assists in various metabolic chemical conversions, but also helps with the transfer of carbon dioxide. Biotin is also helpful in maintaining a steady blood sugar level.

Deficiency of biotin – vitamin H

Although a shortage of Biotin is very rare, it can happen and may result in dry scaly skin, fatigue, loss of appetite, nausea and vomiting, mental depression as well as tongue inflammation and high cholesterol.

Vitamin B9 (folic acid)

Folic acid is required for DNA synthesis and cell growth and is important for red blood cell formation, energy production as well as the forming of amino acids. Folic acid is essential for creating heme, the iron containing substance in hemoglobin, crucial for oxygen transport.

It is important for healthy cell division and replication, since its involvement as coenzyme for RNA and DNA synthesis. It is also required for protein metabolism and in treating folic acid anemia. Folic acid also assists in digestion, and the nervous system, and works at improving mental as well as emotional health. This nutrient may be effective in treating depression and anxiety.

Shortage of folic acid may be indicated with diarrhea, heartburn and constipation.

Folic acid is very important in the development of the nervous system of a developing fetus.

Deficiency of vitamin B9

A deficiency of folic acid on an unborn baby may increase the risk of the baby being born with spina bifida and other serious defects of the nervous system.

When deficient of folic acid, you might suffer from fatigue, acne, a sore tongue, cracking at the corners of your mouth (same as deficiency of vitamin B2, vitamin B6 as well as iron). Long term deficiency may result in anemia and later in osteoporosis, as well as cancer of the bowel and cervix.

Vitamin B12 (Cyanocobalamin)

Cobolamin is needed in the manufacture of red blood cells and the maintenance of red blood cells and it stimulates appetite, promotes growth and release energy. It is often used with older people to give an energy boost, assist in preventing mental deterioration and helps with speeding up thought processes. Some people are also of the opinion that it helps with clearing up infections and provide protection against allergies and cancer. This vitamin is also used in the metabolism of fats, proteins and carbohydrates.

Deficiency of vitamin B12

Some symptoms of a deficiency will include a sore tongue, weakness, fatigue, and weight loss, back pain and apathy. It might further result in loss of balance, decreased reflexes, tingling of the fingers, ringing in the ears etc.

A deficiency may also result in the raising of the level of homocysteine in the blood – which in high doses can be toxic to the brain, which may be involved in Alzheimer disease. Severe deficiency may result in pernicious anemia also called Addisonian pernicious anemia.

Another problem that appears in deficiency is the eroding of the myelin sheath – the fatty sheath of tissue, which insulates the nerve fibers in your body.