



Vitamin A and Carotenoids

Helping your eyes, your immune system and more

If your mom ever told you that carrots were good for your eyes, it's because carrots are high in beta-carotene, a precursor to vitamin A. Vitamin A is important for healthy eyesight. It is needed by the retina in the form of a specific metabolite—the light-absorbing molecule retinal—that is necessary for both low-light and color vision.

Vitamin A, along with other vitamins and nutrients, also helps to prevent eye diseases like cataracts and macular degeneration. That's because vitamin A is an antioxidant, a compound that inhibits free radical damage. Because of their constant exposure to light, the eyes are particularly sensitive to free radical damage, but they aren't the only parts of the body that benefit from vitamin A's antioxidant capacity. It also protects fats in nervous system tissue, cell membranes and other organs.

Another benefit of vitamin A is in the immune system. It helps protect cells from harmful bacteria. It also helps counteract damage from pollution, tobacco smoke and radiation.

Other uses for vitamin A include aiding in the digestion of protein, assisting lactation, forming steroidal hormones and aiding DNA functions. It is used to form the cells lining the digestive, respiratory, reproductive and urinary tracts as well as in all tissue linings of the body. It maintains normal skin health by switching on genes and differentiating immature skin cells into mature epidermal cells. It is also involved in bone growth.

Vitamin A is one of the fat-soluble vitamins. There are three active forms of vitamin A in the body: retinol, retinal and retinoic acid, collectively known as retinoids. Retinoids are found only in animal foods and primarily in fatty foods. Foods containing vitamin A include liver, eggs and fish liver oils (cod liver oil). Vitamin A can also be found in whole milk dairy products, including butter and cheese.

Retinoids can also be synthesized from plant pigments known as carotenoids. The most famous of these is beta-carotene. Carotenoids can be thought of as vitamin A precursors. They are found in many colorful fruits and vegetables including carrots (from which they get their name). Eat vegetables and fruits with yellow, orange or red colors and dark, green leafy vegetables to obtain carotenoids in the diet.

Many members of the carotenoid family (alpha, beta, gamma) have been shown to have a positive influence on health. For example, lycopene (responsible for the red color in tomatoes) may support cardiac and prostate health; lutein (found in dark green vegetables) offers a variety of health benefits—especially for the eyes; and zeaxanthin (also found in dark green veggies) may support immune function as an antioxidant.

Vegetarians, young children, and alcoholics may need extra Vitamin A. You may also need more if you have liver disease, cystic fibrosis, Crohn's disease, bronchitis or eye problems. You may also benefit from extra vitamin A during the cold and flu season, when exposed to pollution, when traveling abroad or when doing a liver cleanse. Here are some supplements to consider.

NSP's Vitamin A & D Softgels

This formula contains 10,000 IU of vitamin A (200% of DV) and 400 IU of vitamin D (100% of DV) from fish oil. It strengthens the immune and glandular systems, maintains healthy skin and eyes, and supports strong bones and teeth. Generally, one to two capsules per day is sufficient, although higher doses have been taken for acne and other specific therapeutic purposes. Large doses should not be taken for extended periods of time.

Carotenoid Blend

This blend contains 4,000 IU vitamin A as beta-carotene (80% of DV), hibiscus flowers, alpha-carotene, lycopene, lutein, zeaxanthin, cryptoxanthin, astaxanthin, phytoene and phytofluene. It helps quench dangerous free radicals, support prostate health, support vision and protect against UV damage to the eyes and skin, support immune system function, and support the heart and circulatory system. Suggested use is one capsule, three times daily.

Selected References

The Comprehensive Guide to Nature's Sunshine Products by Tree of Light Publishing

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B-Complex Vitamins

Nutrients to promote nerve health and increase energy production in the cells

Feeling stressed out or low on energy? Chances are you're not getting enough B vitamins. Life in the 21st century is more hectic and demanding than ever, and most of us don't eat the way we should. Consequently, it is often important to supplement our diets with essential vitamins, and the Bs are some of the most important vitamins that need to be supplemented.

B vitamins are necessary for nervous system function and the normal growth and metabolism of nutrients and proteins. B vitamins help your body to obtain or generate energy from the food you eat. They also help form red blood cells. You can get B vitamins from proteins such as fish, poultry, meat, eggs and dairy products. Leafy green vegetables, beans and peas also contain B vitamins. Some cereals and breads have B vitamins added to them, although they are generally cheap synthetic vitamins of questionable value.

B vitamins aid in the formation of antibodies and the synthesis of RNA and DNA as well as the growth and division of cells. Individuals with low cardiac output or sluggish metabolism benefit from higher levels of B vitamins. This group of vitamins also reduces blood levels of homocysteine—an amino acid that contributes to cardiovascular disease by damaging the protective outer layer of artery walls.

Let's take a look at the beneficial properties of the individual B vitamins:

Vitamin B1 (Thiamine)

Thiamine is required for carbohydrate metabolism. It combines with adenosine triphosphate (ATP) to form thiamine diphosphate—a coenzyme utilized in turning carbohydrates into energy inside the cell. Thiamine deficiency can occur in alcoholism, cirrhosis of the liver and gastrointestinal diseases. Decreased levels have been reported in individuals with Crohn's disease, for example. A high carbohydrate diet increases the need for this nutrient, as does hyperthyroidism, increased physical activity and infection. Preliminary data also suggests that thiamine deficiency in diabetics may exacerbate the development of diabetic neuropathy. Adequate intake of thiamine also reduces the risk of cataract formation.

Vitamin B1 is as an ingredient in all of NSP's Vitamin B Complex and multivitamin supplements.

Vitamin B2 (Riboflavin)

Riboflavin is required for tissue respiration. It is converted to coenzymes that act as hydrogen carriers for several enzymes known as flavoproteins. These enzymes are involved in cellular energy production. It has an antioxidant action due to its role in producing glutathione in the cell. Vitamin B2 may be effective for the prevention of cataracts and migraine headaches. A

high dietary intake of Vitamin B2 seems to be associated with a reduced risk of age-related lens opacification (cataracts). People who take a combination of riboflavin plus niacin daily seem to be at lower risk of developing cataracts compared to placebo. Taking 400 mg. of Riboflavin per day seems to significantly reduce the frequency of migraine headache attacks. Epidemiological evidence suggests that increasing Vitamin B2 intake may reduce the risk of precancerous cervical lesions, although more testing is needed to substantiate this finding.

Vitamin B2 is an ingredient in all of NSP's Vitamin B Complex and multivitamin supplements.

Vitamin B3 (Niacin or Niacinamide)

Niacin is also used in energy production in the cells. It has particular benefits for the cardiovascular system and has a definite cholesterol-lowering effect. In fact, it is commonly combined with cholesterol-lowering drugs. Niacin may also be helpful for high blood pressure, migraine headaches, dizziness, Alzheimer's disease, cataracts, cholera, diabetes and osteoarthritis. People have also taken niacin for acne, leprosy, ADHD, memory loss, preventing premenstrual headache, improving digestion, protection against environmental toxins, reducing the effects of aging improving orgasm. Excessive doses of niacin cause a flushing reaction, which causes redness, burning, tingling and/or itching.

Niacin is available as a single supplement from NSP and is an ingredient in all of NSP's Vitamin B Complex and multivitamin supplements.

Vitamin B5 (Pantothenic Acid)

Pantothenic acid is a precursor of coenzyme A, which is required in the acetylation reactions in gluconeogenesis, in the release of energy from carbs, in the synthesis and degradation of fatty acids, and in the synthesis of sterols, steroid hormones, porphyrins, acetylcholine and other compounds. It is essential for metabolism of carbohydrates, proteins and fats to release energy. It is a helpful supplement for people suffering from adrenal exhaustion.

Vitamin B5 is available as an ingredient in NSP's Vitamin B Complex supplements, or as Pantothenic Acid capsules (250 mg. each).

Vitamin B6 (Pyridoxine)

Vitamin B6 is involved in carbohydrate, lipid (fat) and amino acid metabolism. It is converted to the coenzymes pyridoxal phosphate and pyridoxamine phosphate, which are used in a wide variety of metabolic processes, including the conversion of tryptophan to niacin, synthesis of gamma-aminobutyric acid (GABA), metabolism of serotonin, norepinephrine and dopamine and the synthesis of hemoglobin. Vitamin B6 deficiency

in adults mainly affects the peripheral nerves, skin, mucous membranes and hematopoietic system.

B6 is available as a single supplement from NSP and is an ingredient in all of NSP's Vitamin B Complex and multivitamin supplements.

Vitamin B7 (Biotin)

Found in small amounts in numerous foods, biotin is believed to be stored in the mitochondria where it acts as a coenzyme. It may be beneficial in hair loss, brittle nails, diabetes and mild depression.

Biotin is available as an ingredient in all of NSP's Vitamin B Complex supplements.

Vitamin B12 (Cobalamine)

Vitamin B12 acts as a cofactor or essential component in DNA synthesis, which makes it essential to cellular reproduction. It is also required for the production of red blood cells and a deficiency can result in pernicious anemia. B12 also plays a role in myelin synthesis in the nerves, cell reproduction, normal growth and normal erythropoiesis. It is responsible for binding with calcium for calcium uptake and utilization. It is also required in one of the pathways for homocysteine metabolism.

Low vitamin B12 levels are associated with conditions such as hearing loss in elderly women and chronic fatigue syndrome. Research suggests that Vitamin B12 supplementation can alleviate chronic fatigue syndrome by correcting red blood cell abnormalities and improving oxygen delivery to the tissues. Methylcobalamin seems to improve alertness and reduce sleep time in humans with normal sleep patterns due to its positive effect on melatonin production.

Since vitamin B12 is not present in plant foods, vegetarians and vegans must supplement with this vitamin. Deficiency can impair cognitive performance in adolescents who have been fed a strict vegetarian diet from infancy to 6 years of age.

NSP's Vitamin B12 Complete Liquid provides 1,000 mcg of B12, niacin, B6, B2, and B1. B12 is also an ingredient in all of NSP's B Complex supplements and multivitamins.

Folic Acid

Helps the body make healthy new cells. Everyone needs folic acid, but it is especially critical for pregnant women. When a woman has enough folic acid in her body before and during pregnancy, it can prevent major birth defects in her baby's brain or spine.

Folic Acid is available as an ingredient in all of NSP's Vitamin B Complex supplements and multivitamins, but it is also available as a single and is found in Nature's Prenatal for pregnant women.

B-Complex Supplements

B vitamins work best in combination with each other. So, while specific B vitamins might be taken short term for specific therapeutic purposes, it is best to take the B vitamins in a complete formula. Here are three supplements to consider.

Balanced B-Complex

NSP's Balanced Vitamin B Complex contains vitamin B1 (5 mg.), vitamin B2 (6 mg.), niacin (50 mg.), vitamin B6 (9 mg.), folic acid (400 mcg), vitamin B12 (50 mcg), biotin (100 mcg), pantothenic acid (45 mg.), calcium (120 mg.), wheat germ, choline, inositol, PABA, cabbage, wild lettuce, watercress, rice polish and phosphorus. It is a helpful supplement for nervous system disorders, combating stress and enhancing energy. Take one capsule three times daily.

NSP's B-Complex

This blend contains a different ratio of B-vitamins. It contains vitamin B1 (33 mg.), vitamin B2 (33 mg.), niacinamide (33 mg.), vitamin B6 (33 mg.), folic acid (133 mcg), vitamin B12 (33 mcg), biotin (100 mcg), pantothenic acid (33 mg.), choline (33 mg.), acerola, inositol, lemon bioflavonoids, PABA, rose hips, rutin and wheat germ. It can be used for the same purposes as Balanced B-Complex and has the same dosage recommendations.

Nutri-Calm

Another B-complex vitamin supplement is Nutri-Calm. It combines B-complex vitamins with vitamin C and schizandra fruit, choline, inositol, bee pollen, lemon bioflavonoids, valerian root extract, passion flower extract and hops flowers extract. This is a great supplement for helping people who are under a great deal of stress. It feeds the nerves and the adrenal glands, helping a person feel relaxed and energized at the same time. Dosage is one tablet three times a day or two tablets twice daily.

Selected References

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Vitamin C

Essential for adrenal function, cardiovascular health and much more...

Vitamin C, or ascorbic acid, is a well-known antioxidant with many beneficial properties. In addition to protecting your cells against the damaging effects of free radicals, vitamin C is important for your skin, bones and connective tissues. It is also an excellent anti-allergenic, anti-histamine, anti-abortive, anti-scorbutic, antiseptic, hepatoprotective, mast cell stabilizer, and vascular tonic.

Without vitamin C, the body cannot make collagen, the substance that holds the body's cells together and maintains skin integrity. This is why scurvy, a disease caused by vitamin C deficiency, leads to structural deterioration characterized by brown spots on the skin, spongy gums, and bleeding from all mucous membranes. The spots are most prevalent on the thighs and legs. A person with scurvy also looks pale, feels depressed and is partially immobilized.

The lack of energy experienced in scurvy relates to vitamin C's role in energy production. It is involved in iron absorption (helping to prevent anemia) and in the synthesis of enzymes, hormones and proteins. The adrenal glands need large amounts of this nutrient in order to support immunity and help produce energy.

Vitamin C is an antioxidant and helps to protect the body against aging and chronic and degenerative diseases. Adequate intake of vitamin C decreases the risk of cardiovascular disease and strokes and causes a small reduction in systolic blood pressure. People with the highest levels of ascorbic acid in their blood stream seem to be at a significantly lower risk of having a stroke.

Vitamin C is found in high concentrations in immune cells and is quickly consumed when the body fights infection. Although research shows mixed results, many people feel vitamin C helps decrease cold and flu symptoms and speed recovery.

Vitamin C is a natural antihistamine. A 1992 study found that taking 2 grams of vitamin C daily lowered blood histamine levels by 38 percent in healthy adults in just one week. Vitamin C may also be useful in lowering serum uric acid levels, resulting in a correspondingly lower incidence of gout.

Vitamin C is plentiful in *fresh* fruits and vegetables, but is lost with storage and processing. Oranges, lemons, limes, grapefruit, red and green peppers, tomatoes, broccoli and greens contain high concentrations of vitamin C. Kakadu plum and camu camu fruit contain the highest concentrations. Rose hips and wolfberries (lycium) are good herbal sources.

Vitamin C is the most widely taken nutritional supplement and is available in a variety of forms, including tablets, drink mixes and crystals. Timed-release versions are available, as are formulations containing bioflavonoids such as quercetin, hesperidin, and rutin.

Being a water-soluble vitamin, vitamin C must be taken regularly. Many mammals are able to produce it, but human beings are not, so a regular supply must be obtained in the diet. The North American Dietary Reference Intake recommends 90 mg. of vitamin C per day and no more than 2,000 mg. per day, but many people have taken far larger doses without harm. Being one of the water-soluble vitamins, excess vitamin C is readily flushed from the body. Too much C will cause loose stools.

Vitamin C Supplements

NSP offers four different vitamin C supplements—each optimized for specific nutritional needs. All of these products are helpful in maintaining healthy gums, healing wounds, assisting adrenal function under conditions of stress and fatigue, boosting the immune system, and much more. Here is a brief description of each.

Vitamin C Timed Release

This supplement contains 1,000 mg. of ascorbic acid per tablet, plus lemon bioflavonoid extract, hesperidin, rutin, acerola fruit extract, and rose hips extract. It allows more efficient use of vitamin C by slowly releasing it into the body over a six-hour period.

Vitamin C, Chewables (250 mg.)

These chewable tablets contain 250 mg. of vitamin C in a base of fructose, sorbitol, freeze-dried orange juice, calcium ascorbate, xylitol, rose hips extract, and natural orange, lemon and lime flavors. Chew one to two tablets one to several times daily.

Vitamin C Citrus Bioflavonoids

This product contains 500 mg. vitamin C per tablet along with calcium, phosphorus, grapefruit bioflavonoid extract, hesperidin, lemon bioflavonoid extract, orange bioflavonoid extract, rutin and rose hip extract. Bioflavonoids work synergistically with vitamin C to strengthen tissues. Take one tablet one or more times daily.

Vitamin C Ascorbates

This powdered form of vitamin C contains 1,800 mg. vitamin C per serving, plus calcium, potassium and magnesium ascorbates, acerola fruit extract, rutin and hesperidin bioflavonoid extract. Mixed with liquid chlorophyll, it makes a great energy pick-me-up.

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Vitamin D3

The “sunshine vitamin” for healthy bones and immunity

Do you get 10-15 minutes of exposure to sunlight everyday? If not, you may have a deficiency of vitamin D. Vitamin D is produced in your skin when you are exposed to the ultra violet (UV) frequencies found in natural sunlight. Unfortunately, many people get very little exposure to natural sunlight and, as a result, may wind up deficient in vitamin D.

Perhaps you work indoors. In the winter, many people in Northern climates drive to work in the dark, work all day under artificial lights and then drive home in the dark. Sunlight filtered through a window will not produce vitamin D. Cloud cover and smog reduce UV light and vitamin D production.

Vitamin D is primarily known for its role in promoting calcium absorption from the intestinal tract. It helps to maintain adequate levels of calcium and phosphorus in the blood to enable the mineralization of bone. Without sufficient vitamin D, bones become thin, brittle or misshapen. A severe deficiency produces the disease known as rickets in children and osteomalacia in adults. Vitamin D is needed to prevent osteoporosis in the elderly, too.

However, the benefits of vitamin D do not end with the role it plays in maintaining proper calcium and phosphorous levels for bone health. Vitamin D also affects the immune system. It promotes phagocytosis (anti-tumor activity) and helps modulate the immune system. Some evidence suggests it may have a role in protecting the body against cancer.

Insufficient levels of vitamin D may also be linked to an increased susceptibility to other chronic diseases. These include high blood pressure, tuberculosis, periodontal disease, multiple sclerosis, chronic pain, depression, schizophrenia, seasonal affective disorder, peripheral artery disease, type 1 diabetes and several autoimmune diseases. There is debate about whether vitamin D plays a protective role in preventing heart disease, but heart attacks are more frequent in winter and are lowest in summer in temperate climates. Also cholesterol levels were found to be lower in gardeners during the summer months.

Very few foods in nature contain vitamin D. It is found in fish, such as salmon, tuna, and mackerel and fish liver oils. These are the best sources, but smaller amounts are found in beef liver, cheese and egg yolks. Vitamin D3 is the form found in these foods.

The U.S. Dietary Reference Intake for adequate intake of vitamin D for men and women aged 19–50 is 5 micrograms per day, which is 200 IU per day. This recommendation doubles for men and women aged 51-70 (400 IU per day) and triples for people over the age of 70 (600 IU per day).

However, during winter months at higher latitudes or in the absence of exposure to sunlight the need for Vitamin D is much higher

than these basic amounts. In the absence of exposure to UV from sunlight children probably need 1000 IU of vitamin D per day and adults need four times that amount (4000 IU).

Diary products are commonly fortified with vitamin D2 or D3. Other foods that may be fortified with a form of vitamin D include margarine, breakfast cereals and bread. A glass of milk typically contains 100 IU of vitamin D, but many people do not consume dairy products due to milk allergies, lactose intolerance or strict vegetarian diets. As a result, many people wind up being deficient.

Deficiencies can also occur because of liver or kidney disorders which interfere with the conversion of the vitamin or rare hereditary disorders. However, the most common cause of deficiency is lack of exposure to sunlight and lack of dietary intake.

It is interesting that people are being encouraged to use sunscreen to protect their skin from UV radiation when vitamin D deficiency may be a contributing factor to the development of skin cancer. A sunscreen with a sun protection factor (SPF) rating of only 8 inhibits more than 95% of vitamin D production in the skin. Following a campaign encouraging Australians to “cover up” to protect against skin cancer there was an increase in vitamin D deficiency. People who wear clothing that protect all parts of the body from exposure to sunlight for religious reasons have also been shown to be at risk for vitamin D deficiency.

One billion people in the world are currently vitamin D deficient. Obese individuals often have lower levels of vitamin D and are at increased risk for deficiency. Cases of rickets are still occurring periodically in the United States, particularly among African American infants and children. This severe vitamin D deficiency usually occurs in cases of prolonged, exclusive breast feeding of dark-skinned infants whose mothers are vitamin D deficient. The use of sunscreen on children and the increase of indoor activities with limited exposure to sunlight is also causing vitamin D deficiencies in children.

Suggested Use

NSP's Vitamin D3 contains 2,000 IU natural vitamin D3 derived from lanolin harvested from the wool fat of sheep from New Zealand and Australia. These animals are certified BSE-free. Take 1–2 tablets daily with a meal.

Selected References

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<http://ods.od.nih.gov/factsheets/vitamind.asp>

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Vitamin E

The antioxidant vitamin that protects your cardiovascular system

Over the past thirty years, the function and value of vitamin E in human nutrition has been exaggerated, misunderstood or minimized. Today, experts agree that vitamin E is a proven antioxidant, anticoagulant, antithrombolytic, cicatrisant and nutritive agent. Although vitamin E is the most common vitamin found in nature, it is lacking in processed foods because modern food processing often destroys it. For instance, whole wheat contains vitamin E, but within a few days of being ground into flour the vitamin E starts to deteriorate. In white flour it is removed completely.

Vitamin E refers to a group of eight fat-soluble compounds that include both tocopherols and tocotrienols. These compounds act as antioxidants and stop the formation of free radicals created by the oxidation of fats. Vitamin E also helps fats and oils from becoming rancid.

Being fat-soluble, vitamin E is incorporated into cell membranes, protecting them from damage. Vitamin E is very beneficial for the cardiovascular system. It inhibits the formation of blood clots in the circulatory system, which helps protect a person from coronary thrombosis (heart disease), strokes, pulmonary thrombosis and other clotting disorders. However, because of its blood thinning action, vitamin E should be used with caution by those taking blood-thinning medications.

Vitamin E also helps to balance cholesterol and aids in the regeneration of tissue that is lost or damaged due to atherosclerosis. It works with selenium, other antioxidant vitamins, hawthorn, ginkgo and capsicum to promote circulatory health.

As an enzymatic activity regulator, vitamin E modulates smooth muscle growth by inhibiting the protein kinase C (PKC). Vitamin E also has a positive effect on gene expression by regulating the expression of scavenger receptor genes and modulating the expression of connective tissue growth factors. This process is responsible for the repair of wounds. Vitamin E applied topically has been known to help wounds heal without scarring and to soften scars that have already formed. It works well with zinc in promoting wound healing.

Vitamin E helps maintain the storage of vitamin A and iron in the body. It also plays roles in signaling cellular functions and in neurological functions. It improves the ability of the body to utilize oxygen at the cellular level and protects fat-soluble vitamins, cell membranes and red blood cells.

Vitamin E deficiency typically results in the development of:

- Spinocerebellar Ataxia
- Skeletal Myopathy
- Peripheral Neuropathy
- Retinopathy
- Impaired immune function

Two hundred to four hundred IU of vitamin E is generally adequate for most people. For maximum activity and benefit, both vitamin E tocopherols and tocotrienols are necessary. Check with your health care provider about using vitamin E if you are on blood thinners or other drugs.

Good sources of vitamin E include nuts and nut oils, vegetable oils, whole grain wheat, seeds and leafy greens. Regular consumption of foods containing vitamin E is generally adequate for most people. However, people who don't regularly eat these foods or who have liver disease, cystic fibrosis or Crohn's disease may need extra vitamin E. Here are some supplements to consider.

Vitamin E Complete with Selenium

This supplement contains 400 IU vitamin E plus 25 mcg. selenium per softgel. It incorporates alpha, beta, delta and gamma tocopherol as well as alpha, beta, gamma and delta tocotrienol, rather than isolated alpha tocopherol as is found in most vitamin E supplements. This formula offers the cardio-protective and antioxidant benefits of vitamin E and the glandular and cellular benefits of the trace mineral selenium. Taken in combination, vitamin E and selenium work to help quench free radicals that form as by-products of metabolic activity and as a result of exposure to damaging environmental chemicals. Both nutrients play key roles in the production of certain enzymes needed to maintain overall health, prevent premature aging, and keep tissue supple. It is available in both 60 or 200 count softgels.

NSP's Vitamin E

This product contains 100 IU of vitamin E per softgel in a base of cold-pressed soybean oil. It comes in a 180 count bottle.

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Quality Multiple Vitamin and Minerals

There are many ways to get your “one-a-day” nutritional health insurance

In a country where there is such an abundance of food, you wouldn't expect people to be malnourished. In fact, in an ideal world, all of the nutrition our bodies require would come from the natural foods we eat. However, there is a problem with almost all of the food Americans consume—it simply isn't natural. First of all, most food is grown via chemical farming, which results in less nutritional density than traditional foods. And, eating organic simply means no chemicals were used. It doesn't mean the food was grown for optimum nutrition.

If this wasn't bad enough, most food goes through various processing methods that strip much of its nutritional value away. What good is it to grow organic grain and then turn it into white flour? Refining removes nutrients from even the best food.

Furthermore, even if we eat a lot of fresh fruits and vegetables, most of the produce in the average supermarket is at least two weeks old. Much of it was harvested before it was fully mature (so it didn't develop its full nutritional content). Then it is shipped thousands of miles before it arrives at the local supermarket. During this time many nutrients are lost.

The bottom line is that the average modern diet simply does not contain the nutritional density required for optimal health. So, in spite of the propaganda that taking vitamin supplements is wasting money, many people find they feel better and even heal from various diseases when they get the vitamins they need. There is ample research to suggest that a high-quality, daily multivitamin and mineral supplement is one of the cheapest forms of “health insurance” you can buy.

Here are some great options for getting the vitamins and minerals you need.

Super Supplemental

Super Supplemental contains 100% or more of the recommended daily requirements of vitamins A, C, D3, E, B1, B2, niacin, B6, folic acid, B12, biotin and pantothenic acid. It also supplies the minerals magnesium, zinc, selenium, copper, manganese, calcium, phosphorus, chromium and potassium. It is available with and without iron, too. Other nutrients in Super Supplemental include choline, inositol, p-aminobenzoic acid, lycopene, lutein, lemon bioflavonoids and rutin. The base of the formula contains foods and herbs—alfalfa, asparagus, broccoli, cabbage, rose hips and kelp.

Time-Release Multiple Vitamin and Mineral

This product provides vitamins A, C, D, E, B1, B2, B6, B12, biotin and pantothenic acid, along with the minerals calcium, phosphorus, magnesium, selenium iron, iodine, zinc, copper and

manganese. Other nutrients in this formula are PABA, choline, inositol, lemon bioflavonoids, rutin and hesperidin. The base of foods and herbs contains yucca, alfalfa, kelp, rose hips, chamomile, psyllium seed, dandelion root, myrrh gum, goldenseal and wheat germ. This is all delivered in a time-release technology, that releases the nutrients over an extended period of time for better assimilation.

SynerPro Multiple Vitamin and Mineral

This provides 100% or more of the daily requirements of vitamins A, C, D, E, B1, B2, niacin, B6, folic acid, B12, biotin and pantothenic acid, along with the minerals calcium, phosphorus, magnesium, selenium, manganese, chromium, iron, iodine, zinc, copper and molybdenum. This formula has a special base of whole food antioxidants, which include broccoli, turmeric, red beet, rosemary, carrot, tomato, cabbage, orange and grapefruit bioflavonoids and hesperidin.

VitaWave

If you don't like swallowing pills, then VitaWave can provide your vitamins and minerals in a liquid form. It contains vitamins A, E, K, B1, B2, niacinamide, B6, B12, biotin and pantothenic acid, and the minerals calcium, magnesium, zinc, iodine, selenium, copper, manganese, chromium, boron and molybdenum. It also contains 220 mg. of the amino acids taurine, cysteine, glutamine, glycine, histidine, isoleucine, lysine, methionine, phenylalanine, proline, threonine, tyrosine and valine per serving. The herbal blend in VitaWave includes oat straw, saw palmetto, Korean ginseng, green tea leaf, stevia, stinging nettle root, damiana, grape skin and seed extract and bilberry. Other nutrients in this liquid nutritional powerhouse are lemon bioflavonoids, choline bitartrate, inositol, PABA, lutein, lycopene, alpha lipoic acid and dead sea salt.

Solstic Twenty-Four

Another way to get vitamins and minerals in a liquid form is Solstic Twenty-Four. These stick packs can be carried in a purse or pocket and easily dissolve in water to create an instant beverage containing vitamins A, C, D, E, K, B1, B2, niacin, B6, folic acid, B12, biotin and pantothenic acid, along with the minerals calcium, magnesium, zinc and potassium. They are sweetened with a natural citrus sweetener and stevia.

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Super Trio

Basic nutrition for a fast-paced world

Good nutrition is an important part of staying healthy. Unfortunately, people living in a fast-paced, junk-food world don't often take the time to eat right. They skip meals or grab something on the go.

Super Trio is a convenient way to obtain some of the basic nutrients needed to stay healthy. It provides a basic vitamin and mineral supplement, an antioxidant supplement to reduce free radical damage and the essential good fats needed to reduce inflammation and maintain health. Packaged in convenient packets that can be placed in a purse, briefcase or pocket, Super Trio is an easy way to ensure you are getting important nutrients your body needs for good health.

Here are the three nutritional products in Super Trio.

Super ORAC

Super ORAC focuses on neutralizing oxidation and destructive effects of free radicals on our bodies. ORAC stands for oxygen radical absorbance capacity and this product has a high ability for getting rid of free radicals. Free radicals are believed to be the cause of premature aging and many chronic and degenerative diseases such as heart disease, cancer and senility.

Super ORAC contains green tea extract, which is rich in protective flavanols, flavandriols, flavonoids, and phenolic acids. It also contains mangosteen pericarp extract, which contains xanthenes, known for their antioxidant and anti-inflammatory properties.

This fruit is full of antioxidants and more than half of the two hundred known natural xanthenes, which help boost the immune system. Mangosteen is also known for stimulating the immune system, anti-inflammatory properties, and antimicrobial abilities. When taken orally, Mangosteen is used to treat dysentery, diarrhea, urinary tract infections, gonorrhea, tuberculosis, and cancer.

Another key ingredient in Super ORAC is turmeric. Traditionally, in both Ayurvedic and Chinese medicine, it was used to aid liver action, to treat jaundice, and as also used for digestive problems. Turmeric has antioxidant, antibacterial, and anti-inflammatory properties.

Açaí berry has received a lot of publicity recently because of its healing abilities. Açaí has anti-inflammatory properties, boosts the immune system, increases energy, aids in good sleep,

reduces sores and pain, and overall helps maintain regular function of the body's systems and organs.

Other ingredients in Super ORAC include quercetin, resveratrol and selenium. Quercetin has antioxidant, anti-inflammatory, anticarcinogenic, and cardio-protective properties and works on the function of the immune system.

Resveratrol is a polyphenolic compound with anti-inflammatory action. Selenium is an important mineral for the immune system.

Super Omega 3 EPA

The American diet is too high in omega-6 essential fatty acid (EFA) and contains too little of the omega-3 fatty acids. Omega-3 helps to reduce inflammation and the risk of cardiovascular disease. It also helps overcome insulin resistance in cells. Omega-3 is also used to help lower cholesterol levels and aid circulation. In addition, Omega-3 plays a primary role in cell membranes, which makes these fats extremely important for the health of the heart, brain, and basically the whole body.

Super Supplemental Vitamins and Minerals

This formula is a well-balanced multiple vitamin and mineral product that delivers 100 percent of the U.S. RDA of 12 essential vitamins and major amounts of 13 important minerals. It also contains carotenoid antioxidant—lutein, which promotes health of the eyes, heart, and skin and lycopene, which works with the health of the liver, lungs, prostate, colon and skin.

Suggested Use

Super Trio contains 60 cello-packs that combine Super ORAC, Super Omega-3, and Super Supplemental. Take one packet twice a day with meals. One box supplies nutritional supplements for an entire month.

Selected References

The Comprehensive Guide to Nature's Sunshine Products by Tree of Light Publishing

PDR for Nutritional Supplements edited by S.S. Hendler, PhD and D. Rorvik

Herbal Therapy and Supplements by Merrily Kuhn and David Winston

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