

Vitamins Are Vital

How Vitamin Supplements Can Improve Your Health

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. Back in the 1930's, Dr. Weston Price discovered that "civilized" diets had 1/4th of the water-soluble vitamins and 1/10th of the fat-soluble vitamins of traditional diets. That was in the 1930's. Things have gotten much worse since then.

So, in spite of the propaganda that taking vitamins 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.

Understanding Vitamins

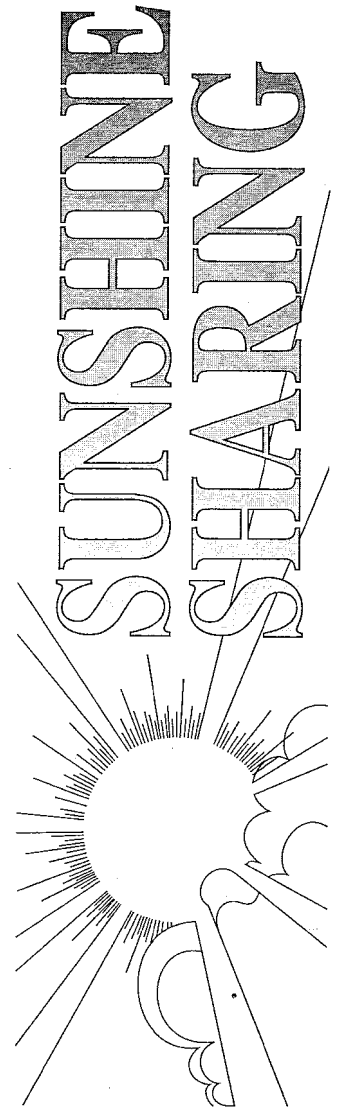
Scientists have labeled thirteen groups of chemical compounds as vitamins. They are vitamins A, C, D, E, K and the B vitamins: thiamine, riboflavin, niacin, pantothenic acid, biotin, vitamin B-6, vitamin B-12 and folate. These alphabet designations are grouped according to biological activity, and each group may contain more than one substance that shows that biological activity. For example, "vitamin A" includes the compounds retinal, retinol, and four known carotenoids which convert to an active form of the vitamin in the body.

Although generally thought of as nutrients the body can't synthesize, which must be obtained from the diet, this isn't quite true of all vitamins. Vitamin D is synthesized from cholesterol when the skin is exposed to ultraviolet light, but must come from the diet during the dark days of winter. And some vitamins can be synthesized from precursors found in food, such as vitamin A, which can be produced from beta-carotene.

Vitamins also have diverse biochemical functions. Some have hormone-like functions as regulators of mineral metabolism (vitamin D), while others are regulators of cell and tissue growth and differentiation (some forms of vitamin A). The vitamins A, C, D and E function as antioxidants. The largest number of vitamins (B complex vitamins) help enzymes to work as catalysts in metabolism.

In this issue of *Sunshine Sharing* we'll examine each of the major vitamin groups, learn what they can do to improve health and how we can obtain them from food. We'll also suggest times when supplementing with that vitamin may be helpful.

Turn the page to learn how vitamins can improve your health...



Important Notice

The information in *Sunshine Sharing* is for educational purposes only and should not be used to diagnose and treat diseases. If you have a health problem, we recommend you consult a competent health practitioner before embarking on any course of treatment.

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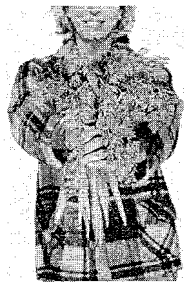
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Vitamins from A to K

Let's take a look at the 13 compounds known collectively as vitamins and what they do for human health.

Vitamin A: Vital to Vision and More



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.

Retonoids can also be synthesized from plant pigments known as carotenoids. The most famous of these is betacarotene. 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.

Being a fat-soluble vitamin, retonoids act as antioxidants and protect fats from going rancid. Vitamin A protects cells from the damaging effects of free radicals and also helps to counteract the effects of radiation, tobacco smoke and pollutants. It especially helps protect the sensitive tissues of the eye from damaging UV radiation, which is why folklore says carrots are good for your eyes.

Vitamin A plays a role in the immune system by helping to protect cells from bacterial infection. It also has roles in bone growth, reproduction and cellular functions.

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.

NSP's **Vitamin A&D** is derived from fish oils and contains 10,000 IU of vitamin A and 400 IU of vitamin D. The contents of this softgel capsule can be used externally around the eyes for treating infection or macular degeneration, or applied to the skin to relieve various skin disorders.

Another good supplement is **Carotenoid Blend**, which contains a variety of carotenoids: beta-carotene, alpha-carotene, lutein, lycopene, zeaxanthin, cryptoxanthin, phytoene, phytofluene and astaxanthin. This supplement can be very helpful in cooling inflammation and protecting the body from environmental pollution.

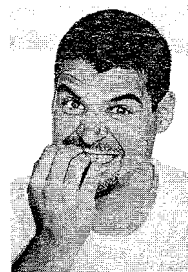
B Vitamins for Nerves and Energy

The B vitamins are actually eight different vitamins that have a variety of properties. They are: B1 (thiamine), B2 (riboflavin), B3 (niacin), B5 (pantothenic acid), B6, B7 (biotin), B12 and folic acid.

B vitamins help your body to obtain energy from food, being used in the mitochondria for cellular energy production. They are critical for nervous system support, which is why they are often thought of as anti-stress vitamins, especially when taken with vitamin C. Not only are B vitamins essential for the synthesis of neu-

rotransmitters, they also help to form red blood cells and aid in liver detoxification.

Utilizing energy from refined carbohydrates, especially sugar, consumes extra B vitamins depleting reserves. So complex carbohydrates such as whole grains, leafy green vegetables, beans, peas and nuts are better energy sources than refined carbohydrates because they naturally contain B vitamins. You can also get B vitamins from fish, poultry, meat, eggs and dairy products.



One critical B vitamin that is not found in plant foods is vitamin B-12. It is necessary for the production of red blood cells and nervous and immune function. Vegetarians must supplement this vitamin to maintain good health. **Vitamin B12 Complete** contains 1,000 mcg of B12 along with niacin, B6, B2 and B1 in a liquid base for easy assimilation. If you are anemic, or low in energy, you might also try supplementing with B-12.

Folic acid is another important B vitamin. Although everyone needs folic acid, it is especially important for women who are pregnant. When a woman has enough folic acid before and during pregnancy, it can prevent major brain and spine birth defects. **Folic Acid Plus** contains 400 mcg of folic acid plus vitamin C and bee pollen. Folic acid is also found in **Nature's Prenatal**.

In addition to B12 and folic acid, NSP offers **Niacin** and **Pantothenic Acid** as single vitamin supplements. Niacin is helpful for heart disease and high blood pressure. Pantothenic acid is helpful for rebuilding exhausted adrenal glands.

Generally speaking, the B vitamins work better when taken together. So a B-complex vitamin supplement or a multivitamin is the best way to get extra B vitamins, if your body needs them. Situations where extra B vitamins may be required include periods of extreme stress, mood disorders (such as sadness, depression and anxiety), fatigue, anemia, exposure to environmental toxins and

Understanding Vitamins

Vitamins are classified as either water-soluble or fat-soluble. In humans there are four fat-soluble vitamins (A, D, E, and K) and nine water-soluble vitamins (the eight B vitamins and vitamin C).

Water-soluble vitamins dissolve easily in water and generally pass through the body with the urine. Because they are not readily stored, consistent daily intake is important. Water-soluble vitamins have very low toxicity and can safely be consumed in much higher quantities than the US recommended daily allowances (RDAs).

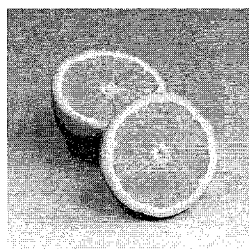
Fat-soluble vitamins are absorbed through the intestinal tract with the help of lipids (fats). They can also be stored, so daily intake is not as critical. Because they are more likely to accumulate in the body, they are more likely to cause problems when consumed in excessive quantities. However, vitamin toxicity is extremely rare even with fat-soluble vitamins.

For the most part, vitamins are obtained with food, but as we've already indicated, a lot of modern foods are lower in vitamin content than traditional foods. For most people in modern society vitamin supplements are a necessity for optimal health.

high blood levels of homocysteine. Because B vitamins are water-soluble they must be consumed regularly.

Balanced B-Complex offers all the essential B vitamins in a healthy balance. **Nutri-Calm** is another supplement based largely on B vitamins, and includes vitamin C along with herbs and nutrients that help the body cope better with stress.

Can You See the Need for Vitamin C?



Vitamin C is a well-known antioxidant with many beneficial properties. In addition to protecting cells against the effects of free radicals, vitamin C is important for skin, bones, and connective tissues. It promotes tissue healing and helps the body absorb iron. It is also an excellent anti-allergenic, anti-histamine, anti-abortive,

anti-scorbutic, antiseptic, hepatoprotective, mast cell stabilizer and vascular tonic.

Vitamin C comes from fruits and vegetables such as citrus, red and green peppers, tomatoes, broccoli, and greens, but they have to be fresh, as vitamin C is readily lost through exposure to heat and light. Because of this, supplementation may be valuable.

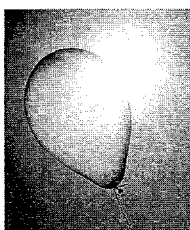
People who may require extra vitamin C include pregnant or breast-feeding women, smokers, those recovering from surgery, burn victims and people under high levels of stress. Although its use for colds is controversial, many people feel it does help them stay healthier and recover more quickly from colds and flu.

Vitamin C is a natural antihistamine, making it useful for allergy sufferers. It helps to tone veins and arteries and can be helpful for treating varicose veins, spider veins, easy bleeding and gingivitis, especially when combined with bioflavonoids as in **Vitamin C Citrus Bioflavonoids**.

Vitamin C is also available in a time-release form and in a powdered form called **Vitamin C Ascorbates**. A little powdered C mixed with **Liquid Chlorophyll** in water makes a powerful natural energy pickup. Powdered vitamin C is also great for keeping fruits from darkening when you are drying or preserving them.

Vitamin D: The Sunshine Nutrient

Recent discoveries document the critical importance of vitamin D. It helps the body absorb calcium, which bones need to grow. It strengthens the body's defenses against illness and even has anti-cancer properties. It helps improve moods during the long winter night and may even reduce your risk of heart disease.



You can get vitamin D in three ways: through your skin, from your diet and from supplements. The body forms vitamin D from cholesterol in the skin after exposure to direct sunlight for about 10 to 15 minutes. During the winter months, many people get no exposure to sunlight, resulting in deficiencies, unless adequate amounts are obtained from the diet. Foods rich in vitamin D include egg yolks, saltwater fish, and liver. Some other foods, like milk and cereal, often have added vitamin D, but not in the most valuable form, which is vitamin D3.

Recent research suggests that the majority of people in North America (70-80%) are deficient in vitamin D3, meaning most people can benefit from supplementing with it, especially on cloudy days and during the winter months. People who might need extra vitamin D3 include breast-feeding mothers, seniors, those with dark skin, patients suffering from liver disease, cystic fibrosis, hardening of the arteries, cancer, Crohn's disease, the obese and those who have had gastric bypass surgery. Women concerned about bone loss should take vitamin D3 along with a good mineral supplement like **Skeletal Strength**, which supplies a complex of minerals and not just calcium.

Vitamin D3 can be found in **Vitamin A&D**, **Vitamin D3** tablets and **Elderberry D3fence**. NSP's Vitamin D3 tablets contain 2,000 IU of natural vitamin D3 derived from lanolin. The latest guidelines suggest that the average adult needs between 2,000 to 3,000 mg. of vitamin D per day.

Cardiovascular Care with Vitamin E

Like vitamins A and D, vitamin E is a fat-soluble vitamin and has antioxidant benefits that prevent cholesterol and other fats from oxidizing. Contrary to popular belief, cholesterol is not harmful to health unless it becomes oxidized. These fat-soluble vitamins, found naturally in cholesterol-rich foods, prevent that from happening.



Besides its antioxidant benefits, vitamin E is an anticoagulant, antithrombotic and cicatrissant. This means that it helps to prevent blood clots from forming in the circulatory system, thus inhibiting thrombosis, heart attacks and stroke. It also helps wounds to heal without scarring.

Good sources of vitamin E are vegetable oils, whole grain wheat, nuts, seeds, and leafy greens. However, all these foods must be fresh. For instance, the germ in whole wheat is a good source of vitamin E, but within a few days of grinding the grain, the vitamin is destroyed. The same thing happens with vegetable oils.

NSP's **Vitamin E** contains 100 IU. About 200 to 400 IU per day are adequate for most people. **Vitamin E with Selenium** combines 400 IU of vitamin E with 25 mcg of selenium which works well with the vitamin. Zinc also combines well with vitamin E, especially for healing wounds without scarring. Vitamin E also works well with the herbal combination **Ginkgo/Hawthorn** for supporting cardiovascular health. Vitamin E is also helpful for varicose veins when taken with **MegaChel** and **butcher's broom**.

Continued on Page Four

Additional Help and Information

For more information about vitamins and vitamin supplements, contact the person who gave this newsletter to you. Their contact information should be found at the top of page four. They have additional handouts and resource materials to help you. You can also consult some of the following sources:

*NIH: National Institutes of Health Office of Dietary Supplements
PDR for Nutritional Supplements by Sheldon Saul Hendler
& David Rorvik
The Comprehensive Guide to NSP by Tree of Light Publishing*



Vitamin Supplements Passé or Unsung Heros?

Millions of Americans take vitamin supplements on a regular basis. Some nutritionists claim they're wasting their money. Do we really get all the vitamins we need from food or can vitamin supplements help with health problems?

Continued from Page Three

One caution: vitamin E supplements may be problematic for people who take blood thinners and other medicines. Check with your health care provider about the use of vitamin E with these and other medications.

The Clotting Factor: Vitamin K

Vitamin K is best known for making proteins for blood clotting. If you don't have enough vitamin K, you may experience excessive bleeding. However, vitamin K (particularly vitamin K2) is helpful for cardiac health and for healthy bones.

Most people get vitamin K from plants such as green vegetables and dark berries. Bacteria in the intestines also produce small amounts of vitamin K. Vitamin K2 is found in **Solstic Cardio** and **Krill Oil with K2**.

Putting It All Together: Multivitamins



Single vitamins are best used for specific therapeutic purposes, but a good multiple vitamin and mineral product is best for prevention and general health. Products to consider include **Super Supplemental** and **Multiple Vitamin & Mineral**, **Synerpro**, **Vitawave Liquid Vitamin and Minerals** and **Solstic Twenty-Four** provide nutrients in a drinkable form. Solstic Twenty-Four comes

in packets that are easily carried in a purse or a briefcase. Children can take **Sunshine Heroes Multiple Vitamin & Mineral**, a chewable multivitamin.

To help you select the products that are right for you, talk to the person who gave you this newsletter. They can offer additional suggestions and help.