

Health Tips

Your Good Health Information From eDocAmerica

with

Dr. D


 Printer Friendly


Click Here!

to forward this
Health Tip to a friend

eDocAmerica

Services
Overview

Click
HERE...

Unsubscribe



If you wish to [unsubscribe](#) from any eDocAmerica mailings, please click on the image above.

Register Now

If you have not yet used eDocAmerica to communicate with our physicians, we urge you to give it a try. Email us about this or

Health Tip: Vitamins-Friends & Foes Part 2: Vitamins E, B, and K

Assuring an adequate intake of vitamins is important in preventing deficiency diseases. Anemia, osteoporosis, night blindness, and bleeding disorders are just a few of the diseases that can develop due to deficiencies. It is also possible to get too much of certain vitamins, particularly the fat soluble vitamins A, E, D, and K. Last week we looked at three vitamins, A, C and D. This week, we'll consider the other three major vitamin groups, E, B, and K.

Vitamin E



Friend: Naturally occurring vitamin E exists in eight chemical forms, but the most important as far as human nutrition is concerned is the form known as alpha-tocopherol. Vitamin E is a powerful anti-oxidant that protects cells from the damaging effects of free radicals. It is thought that free radicals damage cells and could contribute to the development of cardiovascular disease and cancer. Clinical trials, however, have not provided convincing evidence that routine use of vitamin E supplements prevents cardiovascular disease

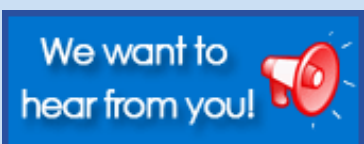
or reduces its morbidity and mortality.

Likewise, studies that have attempted to associate vitamin E intake with lowered cancer incidence have generally been inconclusive. A more definite connection has been established regarding the preventive effect of vitamin E on the development of age-related eye disorders, macular degeneration and cataracts.

Recommended intake: Most supplement labels list the amount of vitamin E in International Units (IUs), which is a measure of biological activity rather than quantity. The recommended Dietary Allowances (RDAs) for Vitamin E (Alpha-Tocopherol) varies with age, but for people 14 years of age or older, it is 15 mg, which is equivalent to 22.4 IU.

Food sources: Some of the best food sources for vitamin E include nuts, seeds, green leafy vegetables, and vegetable oils, especially sunflower and safflower oil. Many breakfast cereals are also fortified with vitamin E.

any other topic or question you have!



Foe: No adverse effects have been noted from dietary sources of vitamin E. High doses of vitamin E supplements, however, have been associated with bleeding disorders due to their effect on normal clotting. The Tolerable Upper Intake Levels (ULs) for adults, which was based on the potential for bleeding problems, is quite high at 1000 mg (1,500 IU) per day. One study even found a higher rate of death in trials where subjects consumed more than 400 IU of vitamin E supplements per day. Doses this high, however, are rarely recommended.

Vitamin B



Friend: There are a total of eight B vitamins. These are thiamine, riboflavin, niacin, pantothenic acid, biotin, vitamin B-6, vitamin B-12 and folate (also known as folic acid). While all serve important roles, three of the B vitamins, B-6, B-12 and folate are particularly important to our health. Vitamin B-6 is a component of over 100 enzymes that are involved in protein metabolism, is needed for red blood cell production, and is required for the nervous and immune systems to function effectively. Vitamin B6 also helps maintain the

blood glucose (sugar) within a normal range.

Vitamin B12 is required for proper red blood cell formation, neurological function, and DNA synthesis. Megaloblastic anemia and peripheral neuropathy are two diseases that can result from B-12 deficiency. Folate (as well as B-12 and vitamin B-6) is involved in homocysteine metabolism. Elevated homocysteine levels have been identified as a risk factor for cardiovascular disease. Studies have shown that taking supplemental B vitamins can lower homocysteine levels, although this has not been confirmed to reduce cardiovascular disease risk. In pregnant women, adequate folate stores are essential in order to assure healthy fetal development, in particular, the avoidance of the development of a neural tube disorder known as spina bifida.

Recommended intake: The recommended intake of vitamin B-6 is 1.3 to 1.7 milligrams per day, depending on age and gender. The Institute of Medicine's recommended intake of vitamin B-12 is 2.4 micrograms per day, with slightly more being necessary for pregnant or lactating women. Most adults should receive 400 micrograms of folate per day, and 600 micrograms a day for pregnant women. The upper limit of intake of supplemental folate (non-dietary) for adults is set at 1,000 micrograms per day.

Food sources: Good sources of vitamin B-6 include fortified cereals, beans, poultry, fish, and some fruits and vegetables. Vitamin B-12 is found naturally in animal products such as fish, poultry, meat, eggs, or dairy. Vitamin B-12 is generally not present in plant foods and vegetarians need to be particularly careful about getting enough to prevent a deficiency. Many breakfast cereals are "fortified" with vitamin B-12 and some nutritional yeast products also contain vitamin B-12. Fruits and vegetables, whole grains, beans, breakfast cereals, and fortified grains and grain products are excellent sources of folate.

Foe: The institute of Medicine has established an upper tolerable limit for vitamin B-6 intake at 100 mg per day (an amount that can only be achieved through high dose supplements). Doses above this level can lead to nerve

damage affecting the arms and legs.

No upper limit for vitamin B-12 intake exists because of its low potential for toxicity.

A major reason for not exceeding folate intake is that getting too much can mask the appearance of an anemia caused by vitamin B-12 deficiency. This could allow the B-12 deficiency to progress to the point of causing irreversible nervous system damage. Since folate is involved in DNA metabolism, there is also concern that too much could cause accelerated growth of tumors, including colorectal, breast, and prostate cancers.

Vitamin K

Friend: Vitamin K is a fat-soluble vitamin that plays an important role in blood clotting. Vitamin K controls the formation of coagulation factors in the liver and is so important that people who take anticoagulants such as warfarin (Coumadin) must make sure that their vitamin K level is stable. Data from the Framingham Heart Study also shows an association between high vitamin K intake and reduced risk of hip fracture in men and women and increased bone mineral density in women.



Recommended intake: The Institute of Medicine's current recommended daily intake for vitamin K is 120 micrograms for men and 90 for women.

Food sources: Vitamin K1 is found in cabbage, cauliflower, spinach and other green leafy vegetables, cereals, soybeans, and many cooking oils. A second type of vitamin K (vitamin K2) is also made by the bacteria within the gastrointestinal tract. This can be an important issue when people on anticoagulants take certain antibiotics. Should an antibiotic kill vitamin K-producing bacteria, extreme prolongation of clotting time and excessive bleeding could occur.

Foe: There is no known toxicity associated with high doses of vitamin K and thus a tolerable upper intake level has not been established. A synthetic form of vitamin K, vitamin K3, however is toxic and has been banned from over-the-counter supplements by the FDA. Large doses of vitamin K3 has been responsible for causing allergic reactions, breakdown of red blood cells, and liver damage.

Making sure that we get an adequate supply of vitamins is crucial to maintaining our health. While the use of supplemental vitamins is common, the best sources come from the foods that we eat. As beneficial as vitamins are, however, it is important to remember that in some cases you can get too much of a good thing.

If you or someone in your family would like to know more about Vitamins, then click on the 'Ask eDoc' icon, to the right, login, and send us your questions.

We would love the opportunity to assist you.



Have you ever used eDocAmerica?

To register, just [Click Here](#) and follow the simple directions. The entire process should take less than 5 minutes.
You'll be glad you did.



11719 Hinson Road, Suite 130 Little Rock, Arkansas 72212

Toll Free 1-866-525-eDoc (3362) www.eDocAmerica.com

Copyright 1999-2009 eDocAmerica. All rights reserved. Patent Pending. [\[click here to unsubscribe\]](#)