

The Wellness Express™

Jump on the train to good health

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Obscure Vitamin K May Provide Big Health Benefits

Presented by:

More likely than not, you have not heard much about vitamin K. In fact, you may have never heard of it at all. It certainly does not have the high profile of other vitamins. But as more research has been devoted to this nutrient, vitamin K has become a rising star over the last five years.

Your chiropractor will tell you that vitamin K plays an important role in both blood and bone health. Vitamin K assists blood clotting (coagulation). When a blood vessel is damaged, the blood forms clots to prevent blood loss and promote healing. Vitamin K helps develop proteins vital for proper blood clotting. It also assists the protein known as osteocalcin, which is crucial in promoting healthy bone growth, repairing bone fractures and helping prevent osteoporosis.

Vitamin K is actually made up of several similar substances. Perhaps the most important are vitamin K1 (*phylloquinone*) found primarily in green, leafy vegetables and vitamin K2 (*menaquinone*), which is mostly found in meat and fermented soy, cheese and curds.

Are You Getting Enough Vitamin K?

How much vitamin K should you get daily? The recommended daily intake is:

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- Adult men: 80 micrograms
- Adult women: 65 micrograms
- Children aged 7-10: 30 micrograms
- Infants: 10 micrograms

To get adequate amounts of vitamin K from your diet, you should choose spinach, broccoli, cabbage, lettuce, kale and citrus fruits. Milk and eggs are also a good source of this vitamin.

Scientific study indicates that vitamin K is a hardy nutrient, which keeps most of its nutritional value even when heated. When you cook with oil, opt for canola, soybean or olive - all are rich in vitamin K.

What the Research Reveals

Bone Fractures

Consuming an adequate amount of vitamin K is essential in helping prevent bone fractures. In a review of vitamin K studies that appeared in the *Archives of Internal Medicine*, researchers showed evidence that indicates hip fractures were reduced by 77% and vertebral fractures were reduced by 60% for people using vitamin K supplements.¹

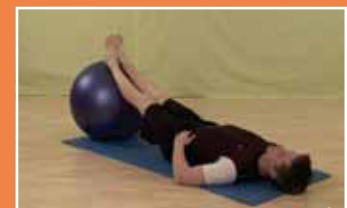
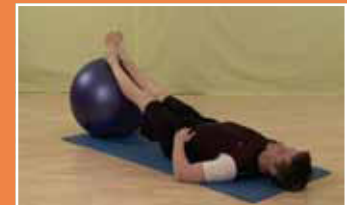
Exercise of the Week

Hip Thrust, Straight Legs (more difficult arm position)

(Consult your chiropractor before engaging in this or any other exercise.)

Start on your back with both feet on the ball, legs straight. Elbows rest on the floor, hands on the abdomen/hips. Pushing down into the ball with both feet, lift your hips toward the ceiling. Stop when body is straight. Hold for 2 counts. Return to starting position.

Repeat 10-15 times.



In a seven-year study on elderly men and women, participants who consumed the highest dietary amounts of vitamin K had a 65% lower risk of hip fracture than those who consumed lower amounts of the vitamin.²

Another study evaluated several hundred postmenopausal women. One group received 5mg of vitamin K1 daily while a second group received a placebo over a two year period. The vitamin K group had fewer bone fractures as well as a lower incidence of cancer.³

Cancer

The scientific community is increasingly interested in vitamin K's impact on some forms of cancer. In a study released last year, researchers at the Mayo Clinic in Minnesota discovered that people who consume higher dietary levels of vitamin K had a 45% lower risk of Non-Hodgkin lymphoma, a cancer of the lymphatic system involving tumors that develop in a specific type of white blood cell. The authors of the study believe vitamin K may block inflammatory cytokines, which are chemicals released from immune system cells and are involved in the growth of this type of cancer.⁴

A promising development is the use of vitamin K in the treatment of cancer of the liver. Patients are often prescribed the anti-cancer drug sorafenib. However, the medication can result in debilitating side effects, including weight loss, extreme fatigue and painful foot sores. Even though it can prolong life, the drug's side effects can be so severe that some patients have to quit taking the medication.

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But researchers at Thomas Jefferson University found that by combining sorafenib with vitamin K, physicians were able to reduce the dosage of sorafenib by 50% without losing any of its anti-cancer potency. With this reduction in the dosage, patients were better able to tolerate the medication.⁵

Insulin Resistance

Vitamin K and diabetes is also on the radar among medical researchers. The Jean Mayer Human Nutrition Research Center conducted a study on insulin resistance – a condition that causes the body to stop using insulin properly (this problem often develops into diabetes). When researchers gave the test group multivitamins containing 500 micrograms of vitamin K, men in the group saw a slower progression of insulin resistance compared to the control group.⁶

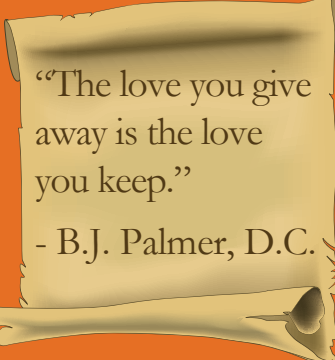
Other Important Health Benefits

Although not classified as a true antioxidant, vitamin K appears to protect cells from oxidative harm. The vitamin may lower the development of pro-inflammatory substances in the body and it appears to help create sphingolipids, a type of fat important to the brain and nervous system.

Get the Right Advice on Vitamin K

Do not use vitamin K supplements without first consulting a qualified healthcare professional, such as your chiropractor. If you take blood thinner medications, you may need to closely monitor your vitamin K intake both from diet and supplements. Large fluctuations in your levels of this vitamin can be dangerous. Discuss medication and vitamin K with your physician or pharmacist.

Quote to Inspire



“The love you give away is the love you keep.”

- B.J. Palmer, D.C.

References and sources:

1. Vitamin K and the Prevention of Fractures - *Arch Intern Med.* 2006; 166:1256 -126.
2. Dietary vitamin K intakes are associated with hip fracture but not with bone mineral density in elderly men and women - *Am J Clin Nutr.* 2000 May; 71(5):1201-8.
3. Vitamin K supplementation in postmenopausal women with osteopenia (ECKO Trial): A randomized controlled trial - *PLoS Medicine* (2008). 5(10): e196.
4. Vitamin K May Protect Against Developing Non-Hodgkin Lymphoma, Say Mayo Clinic Researchers – *Mayo Clinic*, <http://www.mayoclinic.org/news/2010-rst/5739.html>
5. Vitamin K and Sorafenib Combination Demonstrated Anti-Tumor Effects in Pancreas Cancer and Hepatocellular Carcinoma – *Jefferson University Hospitals* - <http://www.jeffersonhospital.org/News/2009-april-vitamin-k-pancreas-cancer-hepatocellular--carcinoma.aspx>.
6. Effect of Vitamin K Supplementation on Insulin Resistance in Older Men and Women – *Diabetes Care*, November 2008, vol. 31 no. 11, 2092-2096

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