

Vitamin K Fact Sheet for Consumers



Green leafy vegetables are the main source of vitamin K.

What is vitamin K and what does it do?

Vitamin K is a nutrient that the body needs to stay healthy. It's important for blood clotting and healthy bones and also has other functions in the body. If you are taking a blood thinner such as warfarin (Coumadin®), it's very important to get about the same amount of vitamin K each day.

How much vitamin K do I need?

The amount of vitamin K you need depends on your age and sex. Average daily recommended amounts are listed below in micrograms (mcg).

Life Stage	Recommended Amount
Birth to 6 months	2.0 mcg
Infants 7–12 months	2.5 mcg
Children 1–3 years	30 mcg
Children 4–8 years	55 mcg
Children 9–13 years	60 mcg
Teens 14–18 years	75 mcg
Adult men 19 years and older	120 mcg
Adult women 19 years and older	90 mcg
Pregnant or breastfeeding teens	75 mcg
Pregnant or breastfeeding women	90 mcg

What foods provide vitamin K?

Vitamin K is found naturally in many foods. You can get recommended amounts of vitamin K by eating a variety of foods, including the following:

- Green leafy vegetables, such as spinach, kale, broccoli, and lettuce
- Vegetable oils
- Some fruits, such as blueberries and figs
- Meat, cheese, eggs, and soybeans

You can find links to more food sources of vitamin K in the last section of this fact sheet, **Where can I find out more about Vitamin K?**

What kinds of vitamin K dietary supplements are available?

Vitamin K is found in multivitamin/multimineral supplements. Vitamin K is also available in supplements of vitamin K alone or of vitamin K with a few other nutrients such as calcium, magnesium, and/or vitamin D. Common forms of vitamin K in dietary supplements are phylloquinone and phytonadione (also called vitamin K1), menaquinone-4, and menaquinone-7 (also called vitamin K2).

Am I getting enough vitamin K?

Vitamin K deficiency is very rare. Most people in the United States get enough vitamin K from the foods they eat. Also, bacteria in the colon make some vitamin K that the body can absorb. However, certain groups of people may have trouble getting enough vitamin K:

- Newborns who don't receive an injection of vitamin K at birth
- People with conditions (such as cystic fibrosis, celiac disease, ulcerative colitis, and short bowel syndrome) that decrease the amount of vitamin K their body absorbs
- People who have had bariatric (weight loss) surgery

What happens if I don't get enough vitamin K?

Severe vitamin K deficiency can cause bruising and bleeding problems because the blood will take longer to clot. Vitamin K deficiency might reduce bone strength and increase the risk of getting osteoporosis because the body needs vitamin K for healthy bones.

What are some effects of vitamin K on health?

Scientists are studying vitamin K to understand how it affects our health. Here are some examples of what this research has shown.

Osteoporosis

Vitamin K is important for healthy bones. Some research shows that people who eat more vitamin K-rich foods have stronger bones and are less likely to break a hip than those who eat less of these foods. A few studies have found that taking vitamin K supplements improves bone strength and the chances of breaking a bone, but other studies have not. More research is needed to better understand if vitamin K supplements can help improve bone health and reduce osteoporosis risk.

Coronary heart disease

Scientists are studying whether low blood levels of vitamin K increase the risk of heart disease, perhaps by making blood vessels that feed the heart stiffer and narrower. More research is needed to understand whether vitamin K supplements might help prevent heart disease.

Can vitamin K be harmful?

Vitamin K has not been shown to cause any harm. However, it can interact with some medications, particularly warfarin (Coumadin®)—see the information below.

Are there any interactions with vitamin K that I should know about?

Yes, some medications may interact with vitamin K. Here are a few examples:

Warfarin (Coumadin®)

Vitamin K can have a serious interaction with the blood thinner warfarin (Coumadin®). If you take warfarin, make sure that the amount of vitamin K you consume from food and supplements is about the same every day. A sudden change in the amount of vitamin K you get can cause dangerous bleeding (if you consume less) or blood clots (if you consume more). You can find more information on the interaction between vitamin K and Coumadin® in this publication from the National Institutes of Health.

Antibiotics

Antibiotics can destroy the good bacteria in your gut. Some of these bacteria make vitamin K. Using antibiotics for more than a few weeks may reduce the amount of vitamin K made in your gut and therefore, the amount available for your body to use.

Bile acid sequestrants

Some people take bile acid sequestrants (such as cholestyramine [Questran®] and colestipol [Colestid®]) to lower blood cholesterol levels. These medications can reduce the amount of vitamin K your body absorbs, especially if you take them for many years.

Orlistat

Orlistat (Alli® and Xenical®) is a weight-loss drug. It reduces the amount of fat your body absorbs and can decrease the absorption of vitamin K.

Tell your doctor, pharmacist, and other health care providers about any dietary supplements and prescription or over-the-counter medicines you take. They can tell you if the dietary supplements might interact with your medicines or if the medicines might interfere with how your body absorbs, uses, or breaks down nutrients such as vitamin K.

Vitamin K and healthful eating

People should get most of their nutrients from food, advises the federal government's *Dietary Guidelines for Americans*. Foods contain vitamins, minerals, dietary fiber and other substances that benefit health. In some cases, fortified foods and dietary supplements may provide nutrients that otherwise may be consumed in less-than-recommended amounts. For more information about building a healthy diet, refer to the *Dietary Guidelines for Americans* and the U.S. Department of Agriculture's MyPlate.

Where can I find out more about Vitamin K?

For general information on vitamin K:

- Office of Dietary Supplements Health Professional Fact Sheet on Vitamin K
- Vitamin K, MedLinePlus®

For more information on food sources of vitamin K:

- Office of Dietary Supplements Health Professional Fact Sheet on Vitamin K
- U.S. Department of Agriculture's (USDA) National Nutrient Database

- USDA Nutrient Lists for vitamin K as either:
 - Phylloquinone, the form of vitamin K found in green leafy vegetables, listed by food or by content, or
 - Menaquinone, a form of vitamin K found in fermented foods and foods that come from animals, listed by food or by content

For more advice on buying dietary supplements:

- Office of Dietary Supplements Frequently Asked Questions: Which brand(s) of dietary supplements should I purchase?

For information about building a healthy diet:

- MyPlate
- *Dietary Guidelines for Americans*

Disclaimer

This fact sheet by the Office of Dietary Supplements provides information that should not take the place of medical advice. We encourage you to talk to your healthcare providers (doctor, registered dietitian, pharmacist, etc.) about your interest in, questions about, or use of dietary supplements and what may be best for your overall health. Any mention in this publication of a specific brand name is not an endorsement of the product.



For more information on this and other supplements, please visit our Web site at: <http://ods.od.nih.gov> or e-mail us at ods@nih.gov

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