



**For the week of
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Editor:

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Vitamin K appears vital for bones

What does vitamin K do?

As long as you're not a stickler for English spelling, that's an easy one to remember: Vitamin K was named for the Danish word "koagulation," because it was discovered in the 1930s by a researcher in Denmark, and one of its primary functions is to help your blood clot, or coagulate, when you're bleeding.

In fact, vitamin K helps an enzyme convert the chemical structure of certain proteins to their mature form, allowing the proteins to bind with calcium. Vitamin K is used by the liver to form at least four different kinds of proteins that help clot blood. And, it activates at least three proteins vital to bone health. It also plays a key role with other proteins that help your blood and kidneys.

Like vitamin D, your body can make its own vitamin K. Unlike vitamin D, which is made when your skin is exposed to sunlight, vitamin K is made from bacteria found naturally in the intestines.

Still, people do need some vitamin K from food, and in recent years researchers have realized that people may not be getting enough. That's according to work done at the Vitamin K Laboratory at the U.S. Department of Agriculture's Human Nutrition Research Center on Aging at Tufts University in Boston. In fact, the researchers believe that vitamin K may be as important as vitamin D and calcium in the

prevention of osteoporosis.

The "Adequate Intake" for vitamin K is 90 micrograms a day for women and 120 micrograms a day for men. In 2000, researchers at the vitamin K lab studied vitamin K consumption from 14-day food intake diaries of a nationwide sample of about 2,000 households. From those figures, they concluded that people age 18 to 44 rarely get enough vitamin K.

One reason is that, while a little vitamin K is in a lot of foods, relatively few Americans eat on a daily basis vegetables such as spinach, broccoli, kale, asparagus, lettuce, cabbage or others high in vitamin K. Vitamin K is also found in some types of oils, but the type in hydrogenated fats, despite being abundant in the American food supply, is less effectively absorbed by bones than the form contained in non-hydrogenated oils.

The best advice is to keep finding ways to incorporate leafy greens, broccoli, asparagus and other vegetables high in vitamin K into your daily routine. That's good guidance anyway, because they contain many other healthful nutrients.

Chow Line is a service of Ohio State University Extension and the Ohio Agricultural Research and Development Center. Send questions to Chow Line, c/o Martha Filipic, 2021 Coffey Road, Columbus, OH 43210-1044, or filipic.3@osu.edu.