

# Vitamin K All the Way

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**H**ave you ever wondered what happens when you get a paper cut? Why do you stop bleeding after a certain amount of time? You can thank the vitamin-K-rich foods you eat for that. Vitamin K plays an important role in blood clotting when an injury happens and supports bone health and strength.

## What is Vitamin K?

Vitamin K is a fat-soluble vitamin. This means that fat must be present in food and drinks for our body to absorb it. Vitamins do not provide the body energy. Instead, vitamins support specific bodily functions. There are two common forms of vitamin K. These include:

- K1, called phylloquinone, is in foods that come from plants, like dark leafy greens.
- K2, a group of chemicals called menaquinones, is found in some foods that come from animals, like egg yolks and beef products. It can also be made by bacteria living in the gut and is present in some fermented foods.

## Benefits of Vitamin K

Vitamin K is important for people of all ages. Without vitamin K, our bodies would not be able to stop bleeding when we are cut or injured. Doctors recommend that newborns receive a vitamin K shot immediately after birth to ensure normal blood clotting and prevent dangerous bleeding. Vitamin K is also important for building bone mass and regulating how the body uses calcium.

## Recommendations

Men are encouraged to take 120 micrograms a day, while women need 90 micrograms each day. Vitamin K needs are also 90 micrograms during pregnancy and breastfeeding.

## Sources of Vitamin K in the Diet

Although vitamin K is not commonly fortified in foods, a variety of foods supply it in sufficient amounts. For instance, 1 cup of leafy greens and 2 tablespoons of a salad dressing made with canola oil is enough to meet daily recommendations. The salad dressing has fat in it which is needed for our bodies to absorb and use the vitamin K effectively as a fat-soluble vitamin. Table 1 has some foods that serve as a source of vitamin K in the diet.

**Table 1. Food Sources of Vitamin K.**

Food	Micrograms (mcg) per serving	Percent DV*
1/2 cup boiled collard greens	530	442%
1 cup raw spinach	145	121%
1 cup kale	113	94%
1/2 cup broccoli	110	92%
1/2 cup canned pumpkin	20	17%
1/2 cup green peas	20	17%
1 tablespoon of Caesar salad dressing	15	13%
1/2 cup blueberries	14	12%
1 cup iceberg lettuce	14	12%
3 ounces of chicken	13	11%
1/2 cup grapes	11	9%
3 ounces of ground beef	6	5%
Abbreviations: DV, daily value		
*Percent DV based on 120 micrograms		
Source: National Institutes of Health, Office of Dietary Supplements		

### Tips to Increase Vitamin K Intake

- Make a fruit salad with blueberries and grapes and top with a dollop of yogurt.
- Build a small side salad made from spinach, kale, or iceberg lettuce and your favorite salad dressing.
- Drizzle canola or olive oil over roasted broccoli.
- Simmer dark leafy greens in pasta sauce, soups, and stews.
- Add dark leafy greens to casseroles and omelets.
- Incorporate canned pumpkin into baked goods.
- Use chicken in pasta dishes, casseroles, tacos, or on top of pizza.
- Look for packaged foods with vitamin K listed on the Nutrition Facts label. Keep in mind some foods that have vitamin K, like fresh fruits and vegetables, do not have a Nutrition Facts label.

### Vitamin K Levels

Vitamin K deficiency is rare in adults in the United States. Most diets provide appropriate amounts of vitamin K. However, those who have a hard time absorbing fat in their diet or those taking antibiotics long-term may be at risk for deficiency. Newborns are born without vitamin K stores, and breast milk is not a good source of the vitamin. To prevent deficiency and prevent excessive bleeding in newborns, it is critical to get a dose of vitamin K at birth.

Vitamin K levels in the blood are not routinely checked, except for those who have bleeding disorders or are taking blood thinners. While deficiencies are rare, the main signs are uncontrolled bleeding and easy bruising. A common test used to estimate vitamin K levels is a prothrombin time test, which measures the time it takes for a tiny cut on the skin to stop bleeding.

Because vitamin K supports blood clotting when wounded, those taking certain blood thinners (e.g., Coumadin, Warfarin) are often asked to reduce or maintain a consistent intake of food sources of vitamin K and to avoid supplements that include vitamin K. We know that vitamin K has other important functions in the body, so it should not be eliminated altogether. Not all commonly prescribed blood thinners interact with vitamin K. If you are unsure about a blood thinner, discuss with a health-care provider or pharmacist.

For most people, vitamin K supplements are not necessary unless directed by a health-care provider. Vitamin K is in most multivitamins and can be found as a stand-alone supplement. Vitamin K supplements may also include vitamin D and calcium because of the role it plays in supporting and maintaining bone health.

Little is known about too much vitamin K in the body. It is not stored to the same degree as other fat-soluble vitamins. What your body does not use or store can be removed as waste. This decreases the likelihood of vitamin K toxicity in the body.

### Summary

Vitamin K plays a very important role in blood clotting when wounded and in bone health. While there is still more to learn, we can prioritize a variety of foods in the diet to meet daily vitamin K recommendations. If you have concerns about vitamin K levels or you feel you should supplement with vitamin K, talk to your health-care provider about your individual needs.

### References

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