

## Vitamin K

### Why We Need It

Vitamin K, a fat-soluble vitamin, helps the body make proteins, especially those needed for normal clotting of blood when you bleed. It is needed for making important proteins for blood, bones and kidneys, also.

### Amounts Needed

Recommended daily intakes of vitamin K are listed on the following table.

#### Recommended Daily Intakes of Vitamin K

	Age	Vitamin K (µg/day)	
<b>Infants</b>	birth–6 months	2	
	6 months–1 year	2.5	
<b>Children</b>	1–3 years	30	
	4–8 years	55	
<b>Males</b>	9–13 years	60	
	14-18 years	75	
	19 years and over	120	
<b>Females</b>	9–13 years	60	
	14-18 years	75	
	19 years and over	90	
	pregnant	≤ 18	75
		19-50	90
	breastfeeding	≤ 18	75
19-50		90	

µg = micrograms

**Source:** adapted from the Dietary Reference Intakes series, National Academies Press. Copyright 1997, 1998, 2000, 2001, 2002, 2004, by the National Academies of Sciences.

No Tolerable Upper Intake Level (UL) has been established for vitamin K.

### Sources

**Food:** Vitamin K is found mostly in green, leafy vegetables and some fruits. Vegetable sources include collards, spinach, broccoli, Brussels sprouts, and cabbage. Good fruit sources include kiwi, blackberries, and blueberries.

Here are some foods and the amount of vitamin K they contain.

#### Food Sources of Vitamin K

Food	Vitamin K (µg per serving)
<b>turnip greens, cooked, ½ cup</b>	425
<b>spinach, raw, 1 cup</b>	145
<b>broccoli, cooked, ½ cup</b>	110
<b>cabbage, cooked, ½ cup</b>	37
<b>kiwi fruit, 1 medium</b>	30
<b>blackberries, 1 cup</b>	30
<b>okra, cooked, ½ cup</b>	30
<b>blueberries, 1 cup</b>	30
<b>red grapes, 1 cup</b>	25
<b>green beans, cooked, ½ cup</b>	10
µg = micrograms	

**Bacteria:** Like vitamin D, vitamin K is produced by the body. Vitamin K is made by the bacteria that normally live in the large intestines, and some of it is absorbed by the body.

**Shots:** A shot of vitamin K is usually given to newborns soon after birth, because they have very little of this vitamin in their bodies. This shot allows their blood to clot normally during the first weeks of life.

## If We Don't Get Enough

Blood takes a long time to clot if the body does not get enough vitamin K. This can result in excessive blood loss and increased risk of death from injuries. A vitamin K deficiency is very unlikely unless a person has a rare health problem. However, prolonged use of antibiotics can destroy some of the bacteria that produce vitamin K in your intestines.

## Interaction With Anticoagulants

Anticoagulants, or blood-thinning drugs, interfere with normal use of vitamin K by the body. If you take an anticoagulant medication such as warfarin (Coumadin®), you should keep your vitamin K intake consistent from day to day. Consuming very large or very small amounts of this vitamin can change how these drugs work. For example, too much vitamin K can make your blood clot faster, so limit your intake of foods high in vitamin K like spinach and turnip greens.

In addition, check with your doctor before taking vitamin E supplements (e.g. herbs such as ginkgo and garlic) if you take anticoagulant medications. High doses of vitamin E can interfere with the action of vitamin K in the body.

## Supplements

Multivitamin supplements may or may not contain vitamin K. Usually it is not necessary to take a vitamin K supplement, since most people get plenty of this vitamin in food. With the exception of people who take anticoagulants, research has shown no problems from consuming too much vitamin K from food **or** supplements. Moderation is still the best approach.

**If you take an anticoagulant medication, avoid supplements that contain vitamin K.**

## For More Information

The Family and Consumer Sciences (FCS) agent at your county Extension office may have more written information and nutrition classes for you to attend. Also, your doctor, health care provider, or a registered dietitian (RD) can provide reliable information.

Reliable nutrition information may be found on the Internet at the following sites:

<http://hgic.clemson.edu>  
<http://virtual.clemson.edu/groups/NIRC/>  
<http://www.eatright.org>  
<http://www.nutrition.gov>  
<http://www.nal.usda.gov/fnic>

### Sources:

1. Turner, Elaine R. University of Florida Extension. *Facts About Vitamin K*. FCS8666. April 2006.  
<http://edis.ifas.ufl.edu/publications.html>
2. Duyff, Roberta Larson. American Dietetic Association *Complete Food and Nutrition Guide, 3<sup>rd</sup> Edition*. 2006.
3. National Academies of Sciences. National Academies Press. *Dietary Reference Intakes series*. 2004.

---

This information has been reviewed and adapted for use in South Carolina by Janis G. Hunter, HGIC Nutrition Specialist, and Katherine L. Cason, Professor, State Program Leader for Food Safety and Nutrition, Clemson University. (New 07/07.)

---

This information is supplied with the understanding that no discrimination is intended and no endorsement by the Clemson University Cooperative Extension Service is implied.