# Vitamin D

# Why is vitamin D important?

Vitamin D helps maintain bone health. Low levels of vitamin D are associated with infections, autoimmune diseases, diabetes, many types of cancer, heart disease, depression, and some pregnancy problems such as preeclampsia and preterm labor.

# How do I know if I am getting enough vitamin D?

You can ask your health care provider to check your serum D level or 25(OH)D. This test is done by taking a sample of your blood. You may want to check with your insurance company to see whether it covers this test. A good serum 25(OH)D level should be higher than 20 ng/mL (or 50 nmol/L).

### Where does vitamin D come from?

You get vitamin D from 3 sources: ultraviolet (UVB) rays from sunlight or tanning lights, foods with vitamin D, or vitamin D supplements (pills).

To obtain enough vitamin D from sunlight, a light-skinned woman needs to remain in sunlight with most body parts uncovered for at least 20 minutes at least 2 times a week when the sun is highest in the sky in the summer months. For most of us living in North America, the UVB rays are not strong enough for us to produce enough vitamin D during the rest of the year. A dark-skinned woman needs to be in the sun for at least twice as long.

There are few foods that contain vitamin D. Cod liver oil, salmon, mackerel, and canned tuna are the foods with the largest amounts of vitamin D. Smaller amounts of vitamin D are found in beef liver, sardines, and egg yolk. Fortified milk is the most common food source for vitamin D. Some orange juices, yogurts, and breakfast cereals are also fortified with vitamin D. The table shows the amount of vitamin D in some food sources.

The most reliable way to get the vitamin D your body needs is to take a vitamin D supplement. Talk with your health care provider before starting vitamin D supplements.

# How much vitamin D should I be taking?

The Institute of Medicine recommends that women aged under 70 years as well as women who are pregnant or breastfeeding get 600 international units (IU) of vitamin D daily and women aged over 70 years get 800 IU of vitamin D daily. The safe upper intake is about 4000 IU of vitamin D daily. If you have a history of osteoporosis, fractures, malabsorption, kidney or liver disease, or a problem that requires you to take steroid medicines, consult your health care provider, because you may need more or less vitamin D than is recommended.

# Does my infant need to take vitamin D if I am breastfeeding?

Yes, the American Academy of Pediatrics recommends that all breastfeeding infants get 400 IU of vitamin D supplements daily until the infant is able to consume 32 ounces (1 quart) of fortified cow's milk daily.

Food Sources of Vitamin D	
Food	International Units Per Serving
Cod liver oil, 1 tablespoon	1360
Salmon (sockeye), cooked, 3 ounces	447
Mackerel, cooked, 3 ounces	388
Tuna, canned in water, drained, 3 ounces	154
Milk, nonfat, reduced fat, and whole, vitamin D–fortified, 1 cup	115-124
Orange juice fortified with vitamin D, 1 cup (check product labels, because amount of added vitamin D varies)	100
Yogurt, fortified with 20% of the DV for vitamin D, 6 ounces (more heavily fortified yogurts provide more of the DV)	80
Margarine, fortified, 1 tablespoon	60
Liver, beef, cooked, 3.5 ounces	49
Sardines, canned in oil, drained, 2 sardines	46
Egg, 1 large (vitamin D is found in yolk)	41
Ready-to-eat cereal, fortified with 10% of the DV for vitamin D, 0.75-1 cup (more heavily fortified cereals might provide more of the DV)	40
Cheese, Swiss, 1 ounce	6

Abbreviation: DV, daily value.

Source: Office of Dietary Supplements, National Institutes of Health.

# For More Information

Vitamin D Council

http://www.vitamindcouncil.org

Vitamin D Fact Sheet

http://dietary-supplements.info.nih.gov/factsheets/vitamind.asp

GrassrootsHealth

http://www.grassrootshealth.net/

American Academy of Pediatrics: Children's Health and Vitamin D

http://www.aap.org/healthtopics/vitamind.cfm

Institute of Medicine Dietary Reference Intakes for Calcium and Vitamin D

http://www.iom.edu/Reports/2010/Dietary-Reference-Intakes-for-Calcium-and-Vitamin-D.aspx

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