

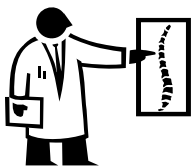
Facts about Vitamin D¹

Linda B. Bobroff and Isabel Valentin-Oquendo²

Why do we need vitamin D?

Vitamin D is needed for normal absorption of calcium and phosphorus. It also helps put these minerals into bones and teeth, making them stronger.

What happens if we don't get enough vitamin D?



Lack of vitamin D affects bones. In growing children, not getting enough vitamin D can lead to *rickets*. Children with rickets have bones that can't support their

weight. Adults who are vitamin D deficient have a high risk of softening of the bones (*osteomalacia*). They also can lose bone mass, which leads to brittle bones (*osteoporosis*).

How much vitamin D do we need?



The following table lists recommended daily intakes of vitamin D. Note that we need more vitamin D as we get older.

Life Stage	Vitamin D (per day)
Men, ages 19-50	5 µg (200 IU)
Women, ages 19-50	5 µg (200 IU)
Men, ages 51-70	10 µg (400 IU)
Women, ages 51-70	10 µg (400 IU)
Men, over age 70	15 µg (600 IU)
Women, over age 70	15 µg (600 IU)
Pregnancy	5 µg (200 IU)
Breastfeeding	5 µg (200 IU)
µg = micrograms IU = International Units	

How can we get enough vitamin D?

We can get vitamin D from two sources—sunlight and food.

Sunlight: When exposed to sunlight, the skin makes a compound that is converted to vitamin D in the liver and kidneys.



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2. Linda B. Bobroff, PhD, RD, LD/N, professor, and Isabel Valentin-Oquendo, MS, RD, LD/N, former assistant and curriculum coordinator, Family Nutrition Program, Department of Family, Youth and Community Sciences, Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida, Gainesville, 32611.

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We need about 10 to 15 minutes of sunlight on the face and arms, without sunscreen, two to three times a week to make enough vitamin D. People in the northern U.S. need a longer

time in the sun than those in the south for the same effect. Several factors affect how well the body makes vitamin D.

- Older people make less vitamin D.
- Dark-skinned people make vitamin D less easily than people with lighter skin.
- Kidney or liver disease will decrease vitamin D formation.
- Air pollution or sunscreen use keeps the sun's ultraviolet (UV) light from reaching the skin.

Food: Most fluid milk is fortified with vitamin D. People who drink milk every day probably get enough vitamin D. Eggs, sardines, and salmon contain vitamin D. Fortified breakfast cereals, breads, and orange juice also may contain this vitamin. Here are some foods and the amount of vitamin D they contain:

Food	Vitamin D	
	µg	IU
Herring, pickled, 3 oz	15	580
Salmon, cooked, 3 oz	8	310
Sardines, canned in oil, 3 oz	6	230
Milk, fortified, 1 cup	2.5	100
Shrimp, canned, 3 oz	2.25	90
Orange Juice, fortified, ¾ cup	1.9	75
Cereal, fortified, 1 serving	1-1.25	40-50
Egg yolk, cooked, 1 large	0.6	25
µg = micrograms IU = International Units oz = ounces		

What about supplements?

If you can't get enough vitamin D from your diet or sun exposure, you may want to ask your doctor about a supplement. Be careful with supplements because high doses of this vitamin can be toxic.



How much is too much?

Vitamin D toxicity can cause nausea, mood changes, and calcium deposits in the lungs, kidneys and heart. **You should not get more than 50 µg (2000 IU) of vitamin D each day from food and supplements.**

Where can I get 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, a registered dietitian (RD) can provide reliable information to you.

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

<http://fyics.ifas.ufl.edu>
<http://www.eatright.org>
<http://www.nutrition.gov>

