



Are you getting enough vitamin D?

What does vitamin D do? How much of it do we need?

Vitamin D plays a wide variety of roles. For one thing, it helps the body absorb calcium, which builds strong bones and prevents osteoporosis. Vitamin D's effect is significant: If you don't get enough, your body absorbs only 10 to 15 percent of the calcium you consume. With vitamin D, absorption jumps to 30 to 40 percent.

In addition, muscles, nerves, the immune system and many other bodily functions all require vitamin D to do their jobs properly.

The recommended amount of vitamin D for most people is 600 IU (international units) per day. Infants up to 12 months need less, 400 IU, and adults 71 or older need more, 800 IU.

How do you know if you're getting enough? It's not easy. Fortunately, nearly all milk in the United States is fortified with vitamin D, at a rate of 400 IU per quart — but that equals just 100 IU per cup. Other dairy foods, including cheese and ice cream, are usually made with non-fortified milk, so they often don't provide any vitamin D. Fish that's high in fat, such as salmon, tuna and mackerel, is a good source. Beef liver, cheese and egg yolks have small amounts. Breakfast cereal and juice often are fortified with vitamin D. Check Nutrition Facts labels to be sure.

Luckily, people also get vitamin D from the sun. One type of ultraviolet radiation converts a chemical in the skin into vitamin D3, which the liver and kidneys transform into active vitamin D.

However, the sun doesn't always help much, especially during the winter or if people use sunscreen, and experts are concerned that vitamin D deficiency is much too common. Some people are more at risk: People who are obese tend to have lower blood levels of vitamin D. Those with darker skin and older people have more trouble converting the sun's rays into vitamin D and thus are also at higher risk.

The only way to know if your vitamin D level is low is to get a blood test. Your doctor then can tell you whether you should take a vitamin D supplement.

Interestingly, some scientists believe the current recommended amounts are too low. More vitamin D, they say, could not only prevent deficiencies but offer additional benefits against a whole range of illnesses and chronic diseases. For example, a recent study in the journal *Hypertension* found that African-Americans who took 4,000 IU of vitamin D a day for three months averaged a four-point drop in blood pressure.

However, experts are cautious about recommending a higher intake, because excess vitamin D is not passed from the body but is stored in fat tissue. Over time, too much of this good thing can become toxic. More research will help determine if higher amounts are advisable.

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.



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