

Are You Getting Enough Vitamin D?

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Vitamin D, also known as calciferol, is important for people of all ages. Vitamin D is unique in that it is a vitamin in foods we eat and is also a hormone that our bodies can make in small amounts. Research shows us that Vitamin D is important in a wide range of body functions, including supporting bone health, managing inflammation, maintaining immune health, and even managing blood sugar.

What is Vitamin D?

Vitamin D is a fat-soluble vitamin. This means that fat must be present for our body to absorb it from food and beverages. Vitamins do not provide our bodies with energy. Instead, vitamins support specific bodily functions. Vitamin D aids in the absorption of phosphorous and calcium in the body and brings them to our bones and teeth. Vitamin D also helps regulate how much calcium remains in the body. Consuming the recommended amount of vitamin D each day reduces the risk of hip and other bone fractures. Research also shows that older adults who meet their vitamin D needs reduce the risk of falls by more than 20 percent.

Vitamin D is also known as the sunshine vitamin, because our bodies can convert sunlight into the vitamin. However, many people are spending less time outside or live in parts of the world where sunshine is not strong enough for skin to make the vitamin in the amounts that we need. In Kentucky, the sun is only strong enough for our bodies to make vitamin D during the summer months. People with darker skin tones have a harder time getting vitamin D from the sun. This means we must rely on food and drinks, and supplements, if necessary, to meet our needs.

Recommendations

It is estimated that 90 percent of adults in the United States do not get enough vitamin D each day. Vitamin D levels can be checked with a blood draw when you visit your health-care provider. Most adults should aim for 20 nanograms per milliliter or more of vitamin D in their blood. If you are unsure of your vitamin D levels, ask for bloodwork to check levels the next time you visit your health-care provider.

To reach the recommended amount of vitamin D in the blood, most people need to take in at least 600 International Units (IUs) or 15 micrograms a day of vitamin D from foods and drinks. For adults over the age of 70, the recommended dietary intake increases to 800 IU or 20 micrograms per day.

When the body does not have enough vitamin D over time, the bones soften. In children, this condition is called “rickets,” and in adults the softening of bones is called osteomalacia. These conditions put people at increased risk of bone fractures, bone pain, and muscle weakness.

Sources of Vitamin D in the Diet

Few foods have naturally occurring vitamin D. Luckily, several foods commonly found on grocery shelves are fortified with vitamin D. Food labels are not required to list the amount of vitamin D in a food unless the food has been fortified with vitamin D. Foods providing 20 percent or more of the daily value of vitamin D are considered to be excellent sources, but foods providing lower percentages of the daily value of vitamin D also contribute to a healthful diet.

See Table 1 for vitamin D sources and consider ways to add these foods and beverages into your diet.

Tips to Raise Vitamin D Intake

- Drink an eight-ounce glass of low-fat or fat-free milk with meals.
- Eat yogurt with fruit for breakfast.
- Blend together milk and fruit for a smoothie snack.
- Make oatmeal with milk instead of water.
- Add cheese to a tossed salad.
- Add fish to your diet a couple of times per week.
- Add vitamin D-fortified foods to your diet in the winter months.
- Take a 15-minute walk on a sunny, warm day.

Table 1: Food Sources of Vitamin D.

Food	Micrograms (mcg) per serving	Percent DV*
Cod liver oil, 1 tablespoon	34.0	170
Trout (rainbow), farmed, 3 ounces	16.2	81
Salmon (sockeye), 3 ounces	14.2	71
White mushrooms, raw, sliced, ½ cup	9.2	46
Yogurt, fortified with 20% of the DV for vitamin D, 6 ounces	4	20
Soy, almond, and oat milks, fortified with vitamin D, 1 cup	2.5-3.6	13-18
Milk, nonfat, reduced fat, or whole, vitamin D-fortified, 1 cup	2.9	15
Ready-to-eat cereal, fortified with 10% of the DV for vitamin D, 1 serving	2.0	10
Orange juice fortified with vitamin D, 1 cup (check product labels, as amount of added vitamin D varies)	2.0	10
Egg, 1 large, scrambled (vitamin D is found in yolk)	1.1	6
Sardines, canned in oil, drained, 2 sardines	1.2	6
Beef liver, cooked, 3 ounces	1.0	5
Tuna fish (light), canned in water, drained, 3 ounces	1.0	5
Cheddar cheese, 1.5 ounces	0.4	2

* DV = Daily Value, based on 20 micrograms

Source: National Institutes of Health, Office of Dietary Supplements

Taking a Vitamin D Supplement

Certain groups of people may be encouraged to take a vitamin D supplement. These groups include infants fed breastmilk, toddlers, older adults, people with very little exposure to sunlight, people with darker skin tones, and people who have issues absorbing nutrients. In addition, people who have lactose intolerance may consider a vitamin D supplement. If you are lactose intolerant, you may not eat many products with vitamin D and may be at risk for vitamin D deficiency.

Vitamin D supplements found on store shelves may be labeled as D₂ or D₃. Some studies suggest that vitamin D₃, also known as cholecalciferol, may be better absorbed by the body than other forms of the vitamin. Take the supplement with a snack or meal that also has some fat in it to make it easier for your body to absorb the vitamin.

No matter the individual or circumstance, it is a good practice to always check with your health-care provider before adding any kind of dietary supplement to your daily routine. If you are encouraged by a health-care provider to take a vitamin D supplement, you may be asked to take a certain amount each day for a set amount of time. Be sure to clarify with your provider how long they would like you to take the daily supplement.

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