Vitamin D Screening and Supplementation

UVM Medical Center Patient Instructions - Learning About Vitamin D

Why is vitamin D important?

Your body needs vitamin D to absorb calcium. Calcium keeps your bones, muscles and heart, healthy and strong. If you do not get enough vitamin D throughout your life, you have an increased chance of developing osteoporosis. This means your bones may break easily. In children, they may not grow properly or rickets may develop. Rickets is weak bones.

Vitamin D can also boost your immune system, reduce inflammation and may prevent cardiovascular events.

Vitamin D and calcium are added to many foods. Your body can also make vitamin D from sun exposure.

How much vitamin D do I need?

Age	Amount
0–12 months	400 IU
1–70 years	600 IU
>70 years	800 IU

International Units (IUs)

Where can I find vitamin D in my diet?

Food	IUs per serving*	% DV**
Cod liver oil, 1 tablespoon	1,360	340
Swordfish, cooked, 3 ounces	566	142
Salmon (sockeye), cooked, 3 ounces	447	112
Tuna fish, canned in water, drained, 3 ounces	154	39
Orange juice fortified with vitamin D, 1 cup (check product labels, as amount of added vitamin D varies)	137	34
Milk, nonfat, reduced fat, and whole, vitamin D-fortified, 1 cup	115-124	29-31
Yogurt, fortified with 20% of the DV for vitamin D, 6 ounces (more heavily fortified yogurts provide more of the DV)	80	20
Margarine, fortified, 1 tablespoon	60	15
Sardines, canned in oil, drained, 2 sardines	46	12
Liver, beef, cooked, 3 ounces	42	11
Egg, 1 large (vitamin D is found in yolk)	41	10
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	10
Cheese, Swiss, 1 ounce	6	2

* IUs = International Units.
** DV = Daily Value.

What makes me at risk for vitamin D deficiency?
Some people do not make vitamin D as well as others from the sun and may require vitamin D supplements.

Things that may reduce how much vitamin D your body makes include:

- Dark skin
- Age older than 65 years
- Obesity
- Low sun exposure
- Digestive problems, such as Crohn's, cystic fibrosis or celiac disease
- Liver and kidney disease

What are signs of deficiency?

Signs of vitamin D deficiency include fatigue, muscle pain, weakness.

Blood tests for vitamin D can check your vitamin D level. However, there is no standard normal range used by all laboratories. The Institute of Medicine recommends a blood level of 20 ng/mL of vitamin D for healthy bones.

Are there risks from too much vitamin D?

You should not consume more than 4,000 IU daily. Side effects of high vitamin D are related to increased calcium in the blood. Symptoms may include nausea, vomiting, constipation, or weakness. Excessive urine output, kidney stones or an irregular heart rhythm may also occur.

Vitamin D may interact with other medicines. Tell your doctor about all of the medicines you take, including over-the-counter drugs, herbs, and pills.

Please contact your doctor with any question or concerns.