



Questions & Answers About Vitamin D

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Q: What is vitamin D?

Vitamin D is a fat-soluble vitamin that is important for many functions in the body. This nutrient helps us absorb calcium to build and maintain strong bones throughout life. Muscles need vitamin D to move, and nerves need it to carry messages between the brain and body systems. Researchers have linked vitamin D to roles in maintaining heart health and immune function. Vitamin D may play a role preventing cancer, diabetes and other chronic diseases. Too little vitamin D may play a role in depression and other mental illnesses.

Q: How much vitamin D do I need?

The amount of vitamin D you need depends on your age and other factors. The table below shows the recommended dietary allowances (RDA) for vitamin D.

Age	Male	Female	Pregnancy	Lactation
0-12 months*	10 mcg (400 IU)	10 mcg (400 IU)		
1-13 years	15 mcg (600 IU)	15 mcg (600 IU)		
14-18 years	15 mcg (600 IU)	15 mcg (600 IU)	15 mcg (600 IU)	15 mcg (600 IU)
19-70 years	15 mcg (600 IU)	15 mcg (600 IU)	15 mcg (600 IU)	15 mcg (600 IU)
>71 years	20 mcg (800 IU)	20 mcg (800 IU)		

Key to abbreviations: mcg = micrograms; IU = international units
 *Follow the guidance from your health care provider for infants and throughout life.

Source of information:

<https://ods.od.nih.gov/factsheets/VitaminD-Consumer/>

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Q: What foods provide vitamin D?

Very few foods contain vitamin D. Some foods, such as milk, are fortified with vitamin D. Fortified means that vitamin D was added to the food product. Cereal and orange juice often are fortified with vitamin D. Vitamin D is found naturally in fatty fish such as salmon, tuna and mackerel. Vitamin D is found in small amounts in cheese and egg yolks.

This table shows foods that are good sources of vitamin D as well as some foods that are not good sources of vitamin D. Even though whole grains, fruits and vegetables do not contain any vitamin D, they do contain nutrients that the body needs.

Food	Portion Size	Micrograms per serving	Percent (%) Daily Value
Cod liver oil	1 tablespoon	34	170
Salmon (sockeye)	3 ounces	14.2	71
Vitamin D-fortified milk	1 cup	2.9	15
Ready-to-eat cereal	1 cup	2.0	10
Sardines	2 sardines	1.2	6
Egg	1 large	1.1	6
Beef liver	3 ounces	1.0	5
Tuna fish, canned in water	3 ounces	1.0	5
Cheddar cheese	1 ounce	0.3	2
Chicken breast	3 ounces	0.1	1
Mushrooms	½ cup	0.1	1
Apple	1 whole	0	0
Whole-wheat bread	1 slice	0	0
Almonds	1 ounce	0	0

Source of information:

<https://ods.od.nih.gov/factsheets/VitaminD-HealthProfessional>

The Nutrition Facts labels found on most foods show the amount of vitamin D per serving.

Nutrition Facts

8 servings per container

Serving size 2/3 cup (55g)

Amount per serving

Calories 230

% Daily Value*

Total Fat 8g 10%

Saturated Fat 1g 5%

Trans Fat 0g

Cholesterol 0mg 0%

Sodium 160mg 7%

Total Carbohydrate 37g 13%

Dietary Fiber 4g 14%

Total Sugars 12g

Includes 10g Added Sugars 20%

Protein 3g

Vitamin D 2mcg 10%

Calcium 260mg 20%

Iron 8mg 45%

Potassium 240mg 6%

* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

Vitamin D-rich Recipe Ideas

Main Dish Salad

Toss your favorite salad greens and sliced vegetables in a bowl. Top with sliced hard-cooked eggs (rich in vitamin D) and a grilled/broiled salmon filet (rich in vitamin D). Add favorite dressing. Serve with a glass of milk.



This “breakfast on the go” is rich in potassium, and vitamins D and C.

Orange Creamsicle Smoothie

1 medium frozen banana, previously peeled and sliced

2 tsp. pure vanilla extract

½ c. vitamin D fortified orange juice

¾ c. vitamin D fortified vanilla Greek low-fat yogurt

1 orange, peeled and sliced

Whirl all ingredients together in blender.

Makes two servings.

Each serving has 190 calories, 1.5 grams (g) fat, 6 g protein, 41 g carbohydrate, 3 g fiber, 60 milligrams sodium and about 10% of the daily recommendation for vitamin D.

Q: Does the sun provide vitamin D?

The body can make vitamin D when skin is directly exposed to the sun. Getting sun through a car window will reduce the amount of vitamin D made. People with dark-colored skin also will not make as much vitamin D. However, avoid becoming sunburned; wear sunscreen and take other precautions, especially if you work or play in the sun.

Q: Can I get too much vitamin D?

Getting too much vitamin D is possible but not likely. The upper limit of vitamin D is 100 micrograms (4,000 IU) for adults. Many people do not get the recommended 15 micrograms per day, so the possibility of getting too much is highly unlikely. If you do get too much vitamin D, that can lead to a toxicity and cause a number of issues including nausea, vomiting and weakness.

Q: Should I be taking a vitamin D supplement?

People in the northern parts of the U.S. generally do not make enough vitamin D from sun exposure, especially during winter months. Consider the foods you eat. Consult your health care provider and/or a registered dietitian to determine if you need a dietary supplement and how much you would need to take.

More Information

If you would like more information, please visit <https://ods.od.nih.gov/factsheets/VitaminD-Consumer/>.

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For more information on this and other topics, see www.ndsu.edu/extension

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