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O: 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)
19–50 years	15 mcg (600 IU)	15 mcg (600 IU)	15 mcg (600 IU)	15 mcg (600 IU)
51–70 years	15 mcg (600 IU)	15 mcg (600 IU)		
>70 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.

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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

Nutrition Fa	CLS
8 servings per container Serving size 2/3 cup	(55a
	(009
Amount per serving Calories 2	230
% Dail	y Value
Total Fat 8g	10%
Saturated Fat 1g	5%
Trans Fat 0g	
Cholesterol 0mg	09
Sodium 160mg	79
Total Carbohydrate 37g	13%
Dietary Fiber 4g	149
Total Sugars 12g	
Includes 10g Added Sugars	20%
Protein 3g	
Witamin D Oman	10%
Vitamin D 2mcg	
Calcium 260mg	209
Iron 8mg	459
Potassium 240mg	69

a day is used for general nutrition advice.

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

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.

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
- 3/4 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.

More Information

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

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