

Vitamin D and your health

Why do I need vitamin D?

Vitamin D is a nutrient that helps your body absorb and use calcium for strong bones and teeth. Vitamin D also helps muscles, nerves and the immune system work properly.

Where can I get vitamin D?

You can get vitamin D from food and supplements. Your body can also make vitamin D when you are outside and the sun is on your bare skin. Many factors affect how much vitamin D your body can make:

- **Age:** less is made as you get older
- **Skin colour:** less is made by darker skin
- **Season:** little to none is made in the winter
- **Sunscreen use:** less is made by your skin

It's best not to rely on the sun to meet your vitamin D needs since sun exposure increases the risk of skin cancer.

How much vitamin D do I need each day?

It's important to get enough Vitamin D, but too much can cause health problems. The daily amount of vitamin D from food and supplements is shown in the table below.

Age	Aim for	Stay below
0-6 months	400 IU (10 µg)	1000 IU (25 µg)
6-12 months	400 IU (10 µg)	1500 IU (38 µg)
1-3 years	600 IU (15 µg)	2500 IU (63 µg)
4-8 years	600 IU (15 µg)	3000 IU (75 µg)
9-70 years*	600 IU (15 µg)	4000 IU (100 µg)
Over 70 years	800 IU (20 µg)	4000 IU (100 µg)

IU = international units; µg = microgram

*Including during pregnancy and lactation

Do some people need more vitamin D?

Yes. If you take certain medications or have specific medical conditions, your health care provider may suggest you take more vitamin D.

Which foods contain vitamin D?

Only a few foods contain vitamin D naturally, like egg yolk and fatty fish such as salmon, sardines and trout. The amount of vitamin D in fatty fish varies widely.

In Canada, vitamin D must be added to certain foods including cow's milk and margarine. Other foods such as yogurt, cheese, goat's milk and plant-based beverages may also have added vitamin D. Check the nutrition facts table on the food package to see if vitamin D has been added. The table below lists some foods that contain vitamin D.

Should I take a supplement?

Most people do not get the recommended amount of vitamin D from the foods they eat. A daily vitamin D supplement can help you meet your needs.

Health Canada recommends a daily vitamin D supplement of 400 IU for:

- Infants and young children under 2 years of age who are fed any amount of human milk (breast milk)
- People between 2 and 50 years of age who do not eat foods that contain vitamin D every day
- Adults 51 years of age and older

What should I look for when choosing a vitamin D supplement?

- Choose a supplement that has a Natural Product Number (NPN). A NPN means the supplement meets Health Canada's safety standards.
- Both vitamin D2 and D3 can meet your needs. Choose a form of vitamin D that's best for you:
 - **Liquid:** recommended for children under 4 years of age but can be used for all ages

- **Chewable:** for people 4 years of age and older who can safely chew and swallow
- **Pill:** for people who can safely swallow a pill
- Always read the label to confirm the dose and follow the instructions

Cod liver oil is generally not recommended as a source of vitamin D as it also contains large amounts of vitamin A. Too much vitamin A can be harmful, especially if you are pregnant.

Most multivitamins contain vitamin D. If you take a multivitamin, check the label to see how much vitamin D it contains. Make sure that your total daily vitamin D intake stays below the amounts shown in the table on page 1. Talk to a dietitian, pharmacist or your health care provider if you have questions about the type or amount of supplement that's best for you.

Food sources of vitamin D

Food	Serving size	Amount of vitamin D	
		IU	µg
Salmon, sockeye	75 g (2 ½ oz)	394-557	9.9-13.9
Salmon, pink	75 g (2 ½ oz)	414	10.4
Mackerel, Pacific	75 g (2 ½ oz)	343	8.6
Tuna, bluefin*	75 g (2 ½ oz)	219	5.5
Salmon, chum or Atlantic	75 g (2 ½ oz)	210	5.2
Herring, Atlantic	75 g (2 ½ oz)	161	4.0
Trout, Halibut or Sardines, Pacific	75 g (2 ½ oz)	145	3.6
Whitefish or Rockfish	75 g (2 ½ oz)	135	3.4
Tuna, yellowfin *	75 g (2 ½ oz)	106	2.6
Cow's milk	250 mL (1 cup)	200	5
Fortified orange juice	250 mL (1 cup)	100	2.5
Fortified plant-based beverages such as soy, oat and almond**	250 mL (1 cup)	84-200	2.1-5
Mackerel or Sardines, Atlantic	75 g (2 ½ oz)	74	1.9
Margarine	10 mL (2 tsp)	104	2.6
Tuna, canned, white (Albacore)*	75 g (2 ½ oz)	60	1.5
Tuna, canned, light	75 g (2 ½ oz)	36	0.9
Egg yolk	1	32	0.8

IU = international units; µg = microgram

Source: Canadian Nutrient File 2015

* For information about mercury and serving limits see: Government of Canada Mercury in Fish www.canada.ca/en/health-canada/services/food-nutrition/food-safety/chemical-contaminants/environmental-contaminants/mercury/mercury-fish.html

**Fortified plant-based beverages are not recommended for children under 2 years of age

For more information

- [HealthLinkBC file 69m Vitamin D and your baby](#)
- [HealthLinkBC File 68e Calcium and your health](#)

- Vitamin D content of specific foods: [Canadian Nutrient File](#)
- For more nutrition information, call **8-1-1** to speak with a registered dietitian

For more HealthLinkBC File topics, visit www.HealthLinkBC.ca/health-library/healthlinkbc-files or your local public health unit. For non-emergency health information and advice in B.C. visit www.HealthLinkBC.ca or call **8-1-1** (toll-free). For the deaf and hard of hearing, call **7-1-1**. Translation services are available in more than 130 languages on request.