



Patient & Family Guide  
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# Calcium



[www.nshealth.ca](http://www.nshealth.ca)

# Calcium

## Why do I need calcium?

Your body needs calcium for:

- › strong bones and teeth.
- › normal blood clotting.
- › your muscles, nerves, and heart to work well.

Bones are living tissues. They are always renewing and repairing themselves. Calcium and vitamin D are needed to keep bones healthy. Getting enough calcium can slow bone loss and lower the risk of broken bones as you get older.

## Osteoporosis

Osteoporosis is a condition where bones become thin and brittle, and are more likely to break. Eating foods with calcium helps keep your bones healthy and prevents osteoporosis.

## How much calcium do I need?

<b>Age, sex</b>	<b>Calcium needed (mg each day)*</b>
19 to 50 years, male and female	1000 mg
51 to 70 years, male	1000 mg
51 to 70 years, female	1200 mg
71 years and older, male and female	1200 mg
Pregnant or breastfeeding, 14 to 18 years	1300 mg
Pregnant or breastfeeding, 19 to 50 years	1000 mg

\*This includes calcium from both food and supplements.

## How much calcium is too much?

Do not take in more than the Tolerable Upper Intake Level (UL) each day, as listed in the table below, unless told by your dietitian or primary health care provider. Intake above the UL may raise your risk of harmful side effects, like kidney stones.

Age, sex	Calcium limit (UL each day)*
19 to 50 years	2500 mg
51 to 70 years, male and female	2000 mg
71 years and older	2000 mg
Pregnant or breastfeeding, 14 to 18 years	3000 mg
Pregnant or breastfeeding, 19 to 50 years	2500 mg

\*This includes calcium from both food and supplements.

## Excellent food sources of calcium

**About 250 to 300 mg of calcium per serving:**

Although many food labels do not list how many milligrams of calcium are in each serving, try to find **foods with more than 20% Daily Value (DV) of calcium listed on their label. Excellent sources include:**

- › 1 cup (250 ml) milk (whole, 2%, 1%, skim, or chocolate)
- › 1 cup (250 ml) buttermilk
- › 1/2 cup (125 ml) evaporated milk
- › 3/4 cup yogurt, no fruit added
- › 1/3 cup (50 ml) skim milk powder
- › 1 cup macaroni and cheese, homemade
- › 1/3 cup (85 ml) tofu, processed with calcium sulphate
- › 1 bottle (235 ml) commercial liquid nutritional supplement (such as Ensure<sup>®</sup>, Boost<sup>®</sup>)
- › 1 cup calcium-fortified soy beverage, almond milk, or rice milk\*
- › 1 cup calcium-fortified orange juice\*

\*Added calcium tends to settle to the bottom. Shake fortified beverages before serving.

## Good food sources of calcium

160 to 249 mg of calcium per serving

Check labels for foods with 13 to 20% DV of calcium to find good sources like:

- › 1 1/4 inch (3 cm) cube hard cheese (like blue, cheddar, Swiss, Edam, Gouda, Gruyère, mozzarella)
- › 1 cup (250 ml) cottage cheese (1 or 2%)
- › 3/4 cup (180 ml) drinkable yogurt or kefir
- › 3/4 cup (180 ml) fruit-flavoured yogurt
- › 1 cup (250 ml) soft ice cream
- › 1 tbsp (15 ml) blackstrap molasses
- › 1/2 can (105 g) canned salmon with bones
- › 1/2 can (55 g) sardines with bones
- › 3 tbsp (45 ml) Parmesan cheese
- › 1/2 cup (125 ml) almonds
- › 1 cup (250 ml) **cooked** spinach. Calcium in spinach has a lot of oxalate. Oxalate is a chemical that makes it hard for your body to absorb calcium.
- › 1 1/2 cups (375 ml) cream soup made with milk

## **Fair sources of calcium**

**125 to 159 mg of calcium per serving:**

**Check labels for foods with 10 to 12% DV of calcium to find fair sources, like:**

- › 1 cup (250 ml) baked beans, canned
- › 1 cup (250 ml) navy beans, soaked, drained, and cooked
- › 1/2 cup (125 ml) collard greens, cooked
- › 10 figs, dried
- › 1 pouch calcium-fortified instant oatmeal
- › 1/2 cup (125 ml) soy flour
- › 1/2 cup (125 ml) pudding (instant, cooked, ready to eat, or rice)

## **Other sources of calcium**

**75 to 124 mg of calcium per serving**

**Check labels for foods with 6 to 9% DV of calcium, like:**

- › 1 cup (250 ml) broccoli, cooked
- › 1 cup (250 ml) kale, raw
- › 1 cup (250 ml) pinto beans, soaked, drained, and cooked
- › 1/2 cup (125 ml) beet greens or bok choy, cooked

- › 2 slices white bread
- › 1 cup (250 ml) chickpeas
- › 1 cup (250 ml) chili with beans, canned
- › 1/2 cup (125 ml) cottage cheese (1 or 2%)
- › 1/2 cup (125 ml) dessert tofu
- › 1/2 cup (125 ml) okra, frozen and cooked
- › 1 processed cheese slice
- › 1 cup (250 ml) white beans, canned
- › 1 cup (250 ml) soybeans, cooked

## **How can I get more calcium from food?**

- Eat foods with calcium throughout the day, instead of all at once. This helps your body take in the calcium from your food.
- Mix canned cream soups with milk instead of water.
- Try cocoa made with milk instead of water.
- Add cheese to soups, casseroles, sandwiches, burgers, and salads.
- Use yogurt as a topping for baked potatoes or as a vegetable dip.
- Make hot cereal with milk, or add 1 to 2 tbsp of skim milk powder before cooking.
- Add skim milk powder to mashed potatoes, meat loaf, milkshakes, and muffin, cake, and cookie recipes.



## **If you are lactose intolerant:**

- Try lactose-reduced milk (like Lactaid® or Lacteeze®).
- Take lactase tablets (like Lactaid® or Lacteeze®) when eating foods with lactose. Lactase is an enzyme that helps break down lactose.
- Hard cheeses like Parmesan, cheddar, Edam, Gouda, mozzarella, and Swiss are low in lactose.
- Check food labels for yogurt with “live bacterial culture” or choose lactose-free yogurt. These are often well tolerated.
- Some vegetarian cheese products are fortified with calcium. Check food labels for a % DV of at least 6%.
- Over-the-counter supplements like Ensure® and Boost® are lactose-free and are excellent sources of calcium.
- Small amounts of regular milk and milk products may be well tolerated when taken with other foods.

# Vitamin D

Vitamin D is important so your body can use the calcium you eat to keep your bones healthy.

The Tolerable Upper Intake Level (UL) is 4000 IU a day for adults of all ages.

**Do not take in more than the 4000 IU a day unless told by your dietitian or primary health care provider.**

**How much vitamin D do I need?**

<b>Age</b>	<b>Vitamin D needed (IU (international units) a day)</b>
70 years and younger	at least 600 IU
71 years and older	at least 800 IU
Pregnant or breastfeeding, any age	at least 600 IU
Diagnosed with osteoporosis, 50 years and younger	400 to 1000 IU
Diagnosed with osteoporosis, 51 years and older	800 to 2000 IU

## **How can I get more vitamin D?**

### **From food:**

The main sources of vitamin D are egg yolks and fatty fish (like salmon, mackerel, herring, and sardines). In Canada, all fluid cow's milk has been fortified with vitamin D. If you are using a milk substitute (like rice, almond, and soy drinks), check the label to make sure there is added vitamin D and calcium. Milk and fortified milk substitutes have about 100 IU of vitamin D in each cup (250 ml).

### **From supplements:**

Choose a vitamin D supplement that lists vitamin D3. This is the active form of vitamin D. It comes in pills, chewable tablets, liquid, and drops. Choose the kind you like best, and are likely to keep taking.

Multivitamins usually have vitamin D, as do some calcium supplements.

### **From sunshine:**

Our bodies can make vitamin D from contact with ultraviolet (UV) radiation from sunshine. Many people get some vitamin D from the sun. You may not get enough vitamin D because:

- You limit your time in the sun and/or use sunscreen to avoid the risk of skin cancer.
- Your skin pigmentation (colour) needs more time in the sun to make vitamin D.

- You may get less UV radiation because of the season. UV strength is lower in the winter than in the summer.
- You may get less UV radiation from sunshine because of the time of day, clouds, smog, and clothing.

**Health Canada recommends that everyone over age 50 take a vitamin D supplement of 400 IU every day.**

**For more information on calcium, vitamin D, and healthy eating, visit:**

- Dietitians of Canada
  - › [www.dietitians.ca](http://www.dietitians.ca)
- Osteoporosis Canada
  - › [www.osteoporosis.ca](http://www.osteoporosis.ca)

It can be hard to make changes to your eating habits. If you have any questions, please ask to talk with a dietitian. We are here to help you.

Dietitian: \_\_\_\_\_

Phone: \_\_\_\_\_



### **Looking for more health information?**

Find this pamphlet and all our patient resources here: <https://library.nshealth.ca/PatientEducation>

Contact your local public library for books, videos, magazines, and other resources.

For more information, go to <http://library.novascotia.ca>

Connect with a registered nurse in Nova Scotia any time: call 811 or visit <https://811.novascotia.ca>

Learn about other programs and services in your community: call 211 or visit <http://ns.211.ca>

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The information in this pamphlet is to be updated every 3 years or as needed.