

Eating Guidelines to Prevent Osteoporosis

It's Never Too Late!



What is Osteoporosis?

"Osteo" means bone, and "porosis" means porous. When you have osteoporosis, your bones have become thin, weak and porous (like a sponge) instead of being strong and dense (like a brick). Because of this, your bones have a higher chance of breaking, especially if you fall.

Osteoporosis is also called "the silent thief" because it slowly "steals" your bone density over many years without giving you any signs or symptoms. Many people don't even know they have osteoporosis until a bone breaks or fractures.

About 1.4 million Canadians have osteoporosis. The disease is more common in women but men can also develop osteoporosis. 1 in 4 women over the age of 50 and at least 1 in 8 men over the age of 50 have osteoporosis.

Are You at Risk for Osteoporosis?

Here are just a few of the risk factors for osteoporosis:

- **Age 65+:** Bones naturally get thinner as we grow older.
- **Family history:** If a family member, especially your mom, had a fracture caused by osteoporosis, there is a higher chance you will get osteoporosis.
- **Early menopause:** Estrogen helps to keep women's bones healthy. At menopause estrogen levels drop and women start to lose bone density faster. If menopause starts early (before age 45), the risk of bone density loss is greater.
- **Low calcium intake:** Without enough calcium, our bones don't get a chance to be as strong as they can. See below for the recommended amount of calcium to aim for.
- **Low bone mineral density:** A bone density test is an x-ray that shows if your bones are losing mineral content. Low bone mineral density is a major risk factor for osteoporosis.
- **Weight:** If you weigh less than 57 kg (125 lbs) or weigh at least 4.5 kg (10 lbs) less than you did at the age of 25 you may have a higher chance for developing osteoporosis.

To see a complete list of risk factors, visit the Osteoporosis Canada website at www.osteoporosis.ca. The good news is that it is never too late to keep your bones strong and healthy!



Steps you can take

Eat a healthy diet to keep your bones strong and lower your chances of developing osteoporosis. Use "*Eating Well with Canada's Food Guide*" www.healthcanada.gc.ca/foodguide to plan your meals and snacks. Focus on getting enough calcium and vitamin D every day, and follow the tips below.

1. Get Enough Calcium

Why: Calcium is a mineral that helps to build and keep your bones and teeth strong. Almost all of the calcium in our body is found in our bones, so think of your bones as a "calcium bank". If you don't get enough calcium from food or supplements every day, then your body will make a "withdrawal" from the calcium bank. This can make your bones thin and weak.

How Much Calcium:

Age in years	Aim for an intake of * milligrams (mg)/day	Stay below* mg/day
Men and Women 19-50	1000	2500
Women 51-70	1200	2000
Men 51-70	1000	2000
Men and Women 71 and older	1200	2000
Pregnant and Breastfeeding Women 19 and older	1000	2500

*This includes calcium from food and supplements

Best Food Sources

- Milk
- Cheese
- Yogurt
- Fortified soy beverage
- Kefir
- Calcium-fortified orange juice
- Beans, tofu, nuts, fish, some vegetables and fruit contain calcium too!

See the "Food Sources of Calcium" fact sheet in the Additional Resources section for a list of foods and their calcium content.



Tip: Milk and Alternatives have the most calcium per serving. To get enough calcium, adults aged 51 and older need 3 servings from the Milk and Alternatives food group every day; adults aged 50 and below need 2 servings a day.

Use the "Calcium Calculator" from the Osteoporosis Canada www.osteoporosis.ca/index.php/ci_id/5355/la_id/1.htm to know if you are getting enough calcium.

Supplements: If you are not getting enough calcium from food, take a calcium supplement. Calcium carbonate and calcium citrate are the two most common types. Calcium carbonate supplements are best absorbed when taken with meals. Calcium citrate supplements can be taken any time of the day. Don't get more than 500-600 mg of calcium at a time from supplements.

2. Get Enough Vitamin D

Why: Vitamin D helps your body use and absorb calcium.

How Much Vitamin D:

Age in years	Aim for an intake of international (IU)/day*	Stay below* IU/day
Men and Women 19-50	600	4000
Men and Women 51-70	600	4000
Men and Women 71 and older	800	4000
Pregnant and Breastfeeding Women 19 and older	600	4000

*This includes vitamin D from food and supplements

Best Food Sources:

- Fish
- Milk
- Eggs yolks
- Fortified soy beverage
- Margarine



See the "Food Sources of Vitamin D" fact sheet in the Additional Resources for a list of foods and their vitamin D content.

Tip: Everyone should drink at least 2 cups (500 mL) of milk or fortified soy beverage every day to help get enough vitamin D. If you are over the age of 50 or not getting enough vitamin D from food, it is also recommended to take a 400 IU vitamin D supplement every day.

3. Go Easy on Caffeine

Too much caffeine can decrease the amount of calcium your body stores. Limit caffeine to 400 mg a day. That's the amount found in four regular-sized (8 oz) cups (not mugs) of coffee. Remember that colas and energy drinks also contain a lot of caffeine. Regular tea contains much less caffeine than coffee. See the Additional Resources for the caffeine content in foods and drinks.

4. Drink alcohol sensibly

Drinking too much alcohol on a regular basis can raise your chance of developing osteoporosis. Men should have no more than 3 drinks per day. Women should have no more than 2 drinks a day. More than this on a regular basis can raise your chances of developing osteoporosis. One drink is:

- 142 mL (5 oz) glass of 12% wine
- 341 mL (12 oz) bottle of 5% beer, or
- 43 mL (1 ½ oz) shot of 40% spirits.

5. Watch out for high sodium foods

Eating too much sodium can reduce your bone density. Read food labels and try to keep your sodium intake to less than 2300 mg a day. See the Additional Resources section for more tips on lowering sodium intake.

6. Keep active

A healthy diet with enough calcium and vitamin D, plus regular physical activity will help you build strong bones and may reduce your risk of developing osteoporosis. Keep active by doing weight-bearing activities such as walking, hiking, dancing, jogging, stair climbing and racquet sports. See the "Canadian Physical Activity Guidelines" in the Additional Resources section for ideas on how to get started and stay active.



Special Considerations

Age 50+: If you are over 50 years old and have at least one other risk factor, talk to your doctor about getting a bone mineral density test to check for osteoporosis. Visit the Osteoporosis Canada website (www.osteoporosis.ca) to learn more about these risk factors.

Vitamin B12: Low levels of Vitamin B12 may increase the risk of osteoporosis. Aim for 2.4 micrograms (mcg) of vitamin B12 every day from animal products, supplements and fortified foods, especially if you are over 50 years of age. The amount of vitamin B12 in a daily multivitamin will usually meet your needs. See the Additional Resources section for food sources of Vitamin B12.

Smoking: At any age, smoking can increase bone loss. If you smoke, try to quit. This program can help: Health Canada's, "On the Road to Quitting Program"
www.hc-sc.gc.ca/hc-ps/tobac-tabac/quit-cesser/now-maintenant/road-voie/index-eng.php

Celiac or inflammatory bowel disease: If you have celiac disease or inflammatory bowel disease, you have a higher chance of developing osteoporosis. Follow your prescribed diet (e.g. a gluten free diet), avoid smoking and be sure to get enough calcium and vitamin D in your diet. If you don't think you're getting enough calcium or vitamin D, talk to your dietitian or doctor.

Children and teens: Getting enough calcium and vitamin D when bones are growing can help prevent osteoporosis later in life. Children and teens need to drink calcium-rich beverages such as milk and fortified soy beverage and limit their intake of soft drinks or fruit-flavoured drinks.

Medications: The long-term use of some medications such as prednisone, heparin and anticonvulsants may put you at a higher risk for developing osteoporosis. There are also certain medications that can help slow down bone loss. Talk to your doctor about the best way to use these medications.



Additional Resources

- EatRight Ontario fact sheets:
 - Food Sources of Calcium
www.onpen.ca/Docviewer.asp?id=7480
 - Food Sources of Vitamin D
www.onpen.ca/Docviewer.asp?id=7860
 - Low Sodium (Salt) Food Choices
www.onpen.ca/Docviewer.asp?id=7545
 - Food Sources of Caffeine
www.onpen.ca/Docviewer.asp?id=8786
 - Food Sources of Vitamin B12
www.onpen.ca/Docviewer.asp?id=7755
- Canadian Physical Activity Guidelines:
www.csep.ca/CMFiles/Guidelines/CSEP-InfoSheets-adults-ENG.pdf



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