Eating Guidelines to Prevent Osteoporosis
It's Never Too Late!

What is Osteoporosis?

Osteoporosis is a disease that develops over time. It is often called "the silent thief" because osteoporosis gradually steals your bone density without any signs or symptoms. In fact, "osteo" means bone, and "porosis" means porous (thin and weak). Instead of being strong and dense, the bones are fragile, making them easier to break when you fall. 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**: Our bones naturally get thinner as we grow older.
- **Family history**: If someone in your family had a fracture caused by osteoporosis (especially if your mom had a hip fracture due to osteoporosis), then there's a higher chance that you'll develop osteoporosis too.
- **Early menopause**: Estrogen helps to keep women's bones healthy; at menopause, estrogen levels drop and women start to lose bone density faster.
- **Low calcium intake**: Without enough calcium, our bones don't get a chance to be as strong as they can.
- **Low bone mineral density**: An X-ray showing that your bones are losing mineral content is a major risk factor for osteoporosis.
- **Weight**: Do you weigh less than 125 lbs (57 kg); are you at least 10 lbs (4.5 kg) lighter now than you were at age 25?; if you
answered yes to either question, you can be at a higher risk for developing osteoporosis.

To see a complete list of risk factors, visit the Osteoporosis Society of Canada website  [www.osteoporosis.ca](http://www.osteoporosis.ca) The good news is that it is never too late to keep your bones strong and healthy!

**Steps you can take**

Eating a healthy diet can help keep your bones as strong as possible and lower your chances of developing osteoporosis. Start by following "Eating Well with Canada's Food Guide" [www.healthcanada.gc.ca/foodguide](http://www.healthcanada.gc.ca/foodguide). Focus on getting enough calcium and vitamin D every day, and follow these tips.

1. **Get Enough Calcium**

   **Why:** Calcium is a mineral that helps to build and maintain strong bones and teeth. Almost all of the calcium in our body is found in the 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:**

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

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This information is not meant to replace advice from your medical doctor or individual counseling with a registered dietitian. It is intended for educational and informational purposes only.
*This includes calcium from food and supplements

**Best Food Sources:** milk, cheese, yogurt, fortified soy beverage, kefir, and calcium-fortified orange juice. Beans, tofu, nuts, fish, veggies and fruit contain calcium too! The "Food Sources of Calcium" fact sheet has a more complete list of foods and their calcium content.

**Tip:** To get enough calcium, adults aged 51 and older need 3 servings from the Milk and Alternatives food group every day; kids aged 9-18 need 3-4 servings a day.

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

**Supplements:** Take a calcium supplement if you're not getting enough calcium from food. 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.

If you eat magnesium rich foods (such as whole grains breads and cereals, beans, nuts, peanut butter and green vegetables), then there is no need to take a calcium supplement with added magnesium or magnesium supplements on their own.

### 2. Get Enough Vitamin D

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

**How Much:**

<table>
<thead>
<tr>
<th>Age in years</th>
<th>Aim for an intake of international units (IU)/day*</th>
<th>Stay below* IU/day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men and Women 19-50</td>
<td>600</td>
<td>4000</td>
</tr>
<tr>
<td>Men and Women 51-70</td>
<td>600</td>
<td>4000</td>
</tr>
</tbody>
</table>

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**Best Food Sources:** fish, milk, fortified soy beverage, egg yolks and dried shiitake mushrooms. See the "Food Sources of Vitamin D" fact sheet which includes a complete list of vitamin D containing foods.

**Supplements:** If you are not getting enough vitamin D from food, then take a vitamin D supplement.

**Tip:** Everyone should drink at least 2 cups (500 mL) of milk or fortified soy beverage every day to get enough vitamin D. If you are over the age of 50, you'll also need 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 retains. Keep your caffeine intake to a maximum of 400 mg a day. That's the amount found in about 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 our factsheet "Food Sources of Caffeine" for a complete list.

### 4. Limit alcohol
Consistently drinking more than 2 drinks a day can raise your chances of developing osteoporosis.

### 5. Watch sodium
Eating too much sodium can reduce your bone density. Read food labels and try to keep your sodium intake to no more than 2300 mg a day. See the factsheet "Low Sodium (Salt) Food Choices" for more tips.

### 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 "Canadian Physical Activity Guidelines for Adults 18-64 Years" [www.csep.ca/CMFiles/Guidelines/CSEP-InfoSheets-adults-ENG.pdf](http://www.csep.ca/CMFiles/Guidelines/CSEP-InfoSheets-adults-ENG.pdf) for ideas on how to get started and stay fit.

**Special Considerations**

**Age 50** : Go to the Osteoporosis Canada website and look at the major and minor risk factors for osteoporosis. If you are over the age of 50 and have at least one of the major risk factors or two or more of the minor risk factors, then talk to your doctor about getting a bone mineral density test to check for osteoporosis.

When you are over 50, you may also need to take vitamin B12 supplements. Vitamin B12 helps with bone formation but older adults usually have low levels of this vitamin. You need 2.4 micrograms (mcg) of vitamin B12 every day. See the "Food Sources of Vitamin B12" factsheet for a complete list of food sources. The amount of vitamin B12 found in a daily multivitamin will usually meet your needs.

**Smoking** : At any age, smoking can increase bone loss. If you smoke, try to quit. These programs can help:

- Ontario Smokers' Helpline or toll free 1-877-513-5333
- Health Canada's On the Road to Quitting Program
- Quit Smoking Guides - One Step at a Time by Canadian Cancer Society

**Celiac or inflammatory bowel disease (IBD)**: If you have celiac disease or inflammatory bowel disease (IBD), 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. 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 now can help prevent osteoporosis later. Encourage children and teens to drink calcium-rich beverages such as milk and fortified soy beverage instead of soft drinks or fruit-flavoured drinks. By age 16, girls will reach their peak bone density, and for boys this happens at age 20.
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.