

# Bone Health

## for Adults Over 50

*Eat Healthy and Be Active to Keep Bones Strong*



**Why is bone health important?** Bones that are healthy contain enough minerals, especially calcium, to make them strong and reduce the risk of breaking. If our bones are in poor health we may develop osteoporosis, a disease in which our bones become thin and brittle due to calcium loss. A person with osteoporosis has a greater risk for bone breaks, especially in the wrist, spine and hip.

### **Am I at risk for bone loss?**

Your risk increases if you:

- Are over 50
- Had early menopause (before age 45)
- Are past menopause
- Have a family history of osteoporosis
- Are inactive
- Are a smoker

**What is calcium?** Calcium is a mineral we need to get from foods and/or supplements to make healthy bones. Calcium is stored in our bones, which makes them strong. When we do not have enough calcium for all of its functions our bodies will take it from our bones, increasing our risk of bone breaks.

### **How do I reduce my risk for bone loss?**

- Eat healthy. Follow Canada's Food Guide to get enough important nutrients for bone health.
- Get enough calcium and vitamin D through your diet and/or supplements.
- Limit your intake of caffeine to less than four cups of coffee or cola per day.
- Limit your intake of alcohol to less than two drinks per day.
- Avoid salted and processed foods.
- Be active. Weight-bearing and muscle strengthening activity is best for keeping bones strong. Walk or dance your way to healthy bones.
- Quit smoking.

**What is vitamin D?** Vitamin D is a fat-soluble vitamin that is needed for our bodies to better absorb and use calcium. Sunlight activates a chemical reaction in our skin that allows us to make vitamin D<sub>3</sub>, but we also get it from foods and/or supplements.

## What can I do to get enough calcium and vitamin D to meet my needs over age 50?

### How much calcium do I need? 1,500 mg/day (recommended by Osteoporosis Canada)

Calcium in non-dairy food sources is less easily absorbed by our bodies. Try to get most of your calcium from dairy sources and get enough vitamin D to help your body absorb more calcium from your diet.

| Food Sources of Calcium          |          |               |   |          |            |
|----------------------------------|----------|---------------|---|----------|------------|
| Dairy Sources of Calcium         | Serving* | Calcium**     | Non-Dairy Sources of Calcium                            | Serving* | Calcium**  |
| Hard cheese (e.g. cheddar)       | 1 1/2 oz | 250-360 mg*** | Tofu (with calcium sulphate)                            | 3/4 cup  | 235-350 mg |
| Milk: 2%, 1% or skim             | 1 cup    | 300 mg        | Calcium-fortified beverages: soy, rice, or orange juice | 1 cup    | 300 mg     |
| Skim milk powder                 | 1/3 cup  | 300 mg        | Mackerel, salmon, sardines (fish with bones)            | 2 1/2 oz | 160-285 mg |
| Yogurt: Plain/flavoured          | 3/4 cup  | 240-320 mg    | Broccoli, bok choy, kale (cooked)                       | 1/2 cup  | 35-85 mg   |
| Cottage cheese                   | 1 cup    | 150 mg        | Beans, cooked: kidney, navy, pinto, garbanzo            | 1/2 cup  | 25-65 mg   |
| Pudding/custard (made with milk) | 1/2 cup  | 160 mg        | Almonds   | 1/4 cup  | 95 mg      |

\* Eating Well with Canada's Food Guide, 2007 – all serving sizes equal one Food Guide Serving

\*\* Canadian Nutrient File, version 2007b. (rounded values), Health Canada

\*\*\* mg = milligrams

**Do I need a calcium supplement?** If you are not eating enough dairy products or calcium-rich foods you may need to take a calcium supplement. Look for a supplement containing calcium citrate or calcium carbonate, which are easiest for your body to absorb.

On the label look for the amount of **elemental** calcium, to find out how much actual calcium you are getting from each tablet. To help with absorption avoid taking more than 500 mg of elemental calcium at one time. Also avoid taking supplements made with dolomite or bone meal because they may contain toxic metals. Look for a DIN (drug identification number) or NPN (natural product number), which means the product has been reviewed by Health Canada for safety and quality.



## What can I do to get enough calcium and vitamin D to meet my needs over age 50?

**How much vitamin D do I need? 800 IU/day** (recommended by Osteoporosis Canada)

| Food Sources of Vitamin D                    |          |               |   |          |             |
|--|----------|---------------|---|----------|-------------|
| Natural Sources of Vitamin D                 | Serving* | Vitamin D**   | Fortified Sources of Vitamin D                            | Serving* | Vitamin D** |
| Mackerel, salmon, sardines (cold water fish) | 2 1/2 oz | 200-580 IU*** | Milk  | 1 cup    | 100 IU      |
|  |          |               | Vitamin D-fortified beverages: soy, rice, or orange juice | 1 cup    | 100 IU      |
|  |          |               | Skim milk powder  | 1/3 cup  | 100 IU      |
|  |          |               | Margarine   | 2 tsp    | 55 IU       |

\* Eating Well with Canada's Food Guide, 2007 – all serving sizes equal one Food Guide Serving

\*\* Canadian Nutrient File (rounded values), Health Canada

\*\*\* IU = international units

**Can I get all my vitamin D just from the sun?** No. During the winter in Canada the sun is not strong enough for our bodies to make enough vitamin D. In the summer sunscreen is needed to protect our skin and reduce our risk for skin cancer. We must get additional vitamin D from our diet and/or supplements. This is especially important for people with darker skin and the elderly.



Vitamin D is found naturally in some foods, while it is added (fortified) by the manufacturer in other foods. For example, in Canada, milk is fortified with vitamin D while cheese and butter are not.



Check the Nutrition Facts label on foods (such as yogurt) to find out if they contain added vitamin D.

**Do I need a vitamin D supplement?** Yes. Canada's Food Guide recommends that adults over 50 take a vitamin D<sub>3</sub> supplement of 400 IU every day in addition to the vitamin D received from food sources. The recommended 400 IU supplement (as vitamin D<sub>3</sub>) is based on a diet that includes two cups of milk per day as well as other dietary sources of vitamin D. Your supplement needs for vitamin D may vary according to your diet and/or body needs. If your risk for bone loss is high, get individual advice from a health professional to decide the right dosage for you.



## Where can I get more information?

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

Call EatRight Ontario Dietitians at 1-877-510-5102  
or visit [www.ontario.ca/eatright](http://www.ontario.ca/eatright) and click on "Ask A Dietitian"  
Ontario Ministry of Health Promotion: [www.healthyonario.com](http://www.healthyonario.com)  
Health Canada: [www.healthycanadians.ca](http://www.healthycanadians.ca)

or call Region of Waterloo Public Health  
519-883-2256  
TTY: 519-883-2427  
[www.region.waterloo.on.ca/ph](http://www.region.waterloo.on.ca/ph)



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