

## Osteoporosis: from nutrition to exercise



November is Osteoporosis Month! A dramatic 1 in 5 women and 1 in 3 of men will experience a fracture related to osteoporosis during their lifetime. Osteoporosis is a bone disease in which the amount and quality of the bone is reduced. This condition commonly leads to fractures in hips, spine, wrists, and shoulders. Until a fracture occurs, you may not even know you have bone loss. Surprisingly, women and men may begin to lose bone density in their mid-30's. As women approach menopause, they lose bone density at a greater rate, from 2-3% per year due to hormonal changes. Optimal bone health at any stage through the lifespan is of key importance and an early focus on fracture prevention is an excellent approach. Calcium and vitamin D, as part of a healthy diet, are essential for bone health. Adequate calcium intake keeps your bones strong and healthy, while vitamin D helps to absorb the calcium.

You can meet your daily calcium requirement from food. Some calcium-rich foods are milk, spinach, tofu, and canned sardines. In some cases, supplements may be necessary. If you need calcium supplements, look for the elemental calcium content in each tablet because this is the calcium that is available to the body. Osteoporosis Canada recommends vitamin D supplementation for adults year round. The best source is vitamin D3.

What is your Recommended Calcium Intake?

Age	Men (mg/day)	Women (mg/day)
19-50y	1000	1000 (includes pregnant & breastfeeding women)
51-70y	1000	1200
>71 y	1200	1200
Pregnant & breastfeeding		1000

Source: <https://www.dietitians.ca/Downloads/Factsheets/Food-Sources-of-Calcium.aspx>

Here is a handy list to help you choose foods containing calcium which will help you meet your calcium requirement.

Food	Serving Size	Calcium (mg)
<b>VEGETABLES /FRUITS</b>		
Spinach, cooked	1 cup	258
Collard greens, cooked	1 cup	284
Kale, frozen, cooked	1 cup	190
Bok choy, boiled	1 cup	167
Figs, dried	1 cup	255
<b>DAIRY</b>		
Milk	1 cup	309

Gruyere, swiss, goat, low-fat cheddar, mozzarella	½ cup	396-506
Cheddar, Colby, gouda, mozzarella, blue	½ cup	252-366
Ricotta	½ cup	269-356
Cottage cheese	½ cup	73-133
Greek yogurt , plain	175g	180-212
Yogurt, plain	175g	263-275
<b>NON-DAIRY</b>		
Kefir	1 cup	267
Rice beverage, <b>enriched</b>	1 cup	319
Almond beverage, <b>enriched</b>	1 cup	312
Soy beverage, <b>enriched</b>	1 cup	321-324
<b>MEAT &amp; ALTERNATIVES</b>		
Tofu, prepared with calcium sulfate	¾ cup (150g)	302-525
Black beans, canned	¾ cup	89-105
Beans (white, navy), canned or cooked	¾ cup	93-141
Almonds, dry roasted, unblanched	½ cup	186
<b>FISH</b>		
Sardines, Atlantic, canned in oil with bones	75g (2 ½ oz)	286
Salmon (pink/humpback/red/sockeye), canned with bones	75g (2 ½ oz)	179-212
Mackerel, canned	75g (2 ½ oz)	181

Source: Dietitians of Canada ( <https://www.dietitians.ca/Downloads/Factsheets/Food-Sources-of-Calcium.aspx> ); Canadian Nutrient Profile <https://food-nutrition.canada.ca/cnf-fce/index-eng.jsp>; United States Department of Agriculture <https://ndb.nal.usda.gov/ndb/foods/show/2965?manu=&fgcd>

Exercise also plays a role in keeping your bones healthy. Exercise can help to improve bone mineral density and decrease the risk of fractures in post-menopausal women. Strengthening, balance training and improved aerobic function can help decrease risk of falls. Progressive strength training can increase bone mineral density for the legs. The bone mineral density for the spine has been shown to improve with a combination of aerobics, strength training and walking. Physical activities like dancing, or Tai Chi, that involve balance and coordination may also reduce falls and fractures.

Both nutrition and exercise are paramount to healthy bones. Let's stop the bone loss!!! To find out more about Osteoporosis Month:

<https://osteoporosis.ca/news-events/event-calendar/november-osteoporosis-month/>