

Alberta Healthy Living Program (Diversity, Mandarin, and Cantonese)

Introduction on healthy bones:

Building and keeping strong, healthy bones continues throughout your life. Bones have many important roles in the body. They support your body, protect organs, help muscles work, and store calcium.

What is osteoporosis?

Osteoporosis is a disease that takes years to develop without any warning symptoms. Simply put it, osteoporosis is a silent disease, and it can strike at any age.

Bone mineral is gradually lost, making the bones weaker and more prone to breaking, which is the first warning sign of osteoporosis.

Over 2.3 million Canadians are living with osteoporosis.

What causes osteoporosis?

There is no single cause of osteoporosis to have been identified. However, there are risk factors for low bone density which increase our risk of future fractures and falls.

Risk factors:

- if either parent has had a hip fracture,
- having had a prior fracture with minimal trauma,
- long-term (more than 3 months) use of glucocorticoid therapy such as prednisone,
- rheumatoid arthritis,
- current smoker,
- history of falls in the past 12 months,
- high alcohol intake (3 or more drinks per day) and
- weight loss greater than 10% since age 25.

Women are especially at risk because of the important role that estrogen plays in keeping their bones healthy. Rapid bone loss at a rate of two to five percent a year can occur for the first five to 10 years after menopause.

Do men get osteoporosis?

Yes. Although osteoporosis is more common in women, at least 1 in 8 men over 50 years old also has osteoporosis. In Canada, statistics has shown that 20 to 30% of osteoporotic fracture occur in men.

I often heard about osteoporosis and osteoarthritis. Are they the same medical condition?

Osteoporosis and osteoarthritis are not the same medical conditions, they are frequently confused because the names are similar.

Osteoporosis is a bone disease. It does not develop overnight. Women and men alike begin to lose bone in their mid-30s.

Osteoarthritis is a disease of joints and surrounding tissue. For example, rheumatoid arthritis is an inflammatory disease of the lining of joints, which is another common form of arthritis.

Osteoarthritis most often affects the hips, knees, fingers, feet, or spine. It can be painful. It can also be caused by heredity, obesity and overuse or injury of joints.

Are there suggestions to keep my bones stay strong and healthy?

- (1) Nutrition, especially calcium plays an important role in preventing osteoporosis. Calcium is important to building strong, healthy bones and your body needs vitamin D to absorb calcium. Hence both calcium and vitamin D work together to help build strong, healthy bones.

For older adults, studies have shown that adequate calcium and vitamin D intake can slow bone loss and lower the risk of fracture.

Protein is another important nutrient for building and repairing body tissues, including bones.

- (2) Be active every day.

- Adults: aim for at least 150 minutes of activity each week.
- Children: aim for at least 60 minutes of activity each day.

Do activities to strengthen your muscles and bones at least 2 to 3 days each week. Include a variety of physical activities such as walking, jogging, running, jumping rope, lifting weights, climbing stairs, dancing.

How much calcium and vitamin D do I need?

The amount of calcium you need each day depends on your age and if you are male or female, while the amount of vitamin D depends on your age.

Fortified food is the best source of calcium and vitamin D.

Health Canada recommends:

- Women and Men ages 19 – 50 years need 1000mg of calcium each day.
- Men between ages 51 – 70 years need 1000mg of calcium each day.
- Women over 50 and Men over 70 years need 1200mg calcium each day.

Which foods contain calcium?

Dairy products such as milk, yogurt, cheese.

For those who are lactose intolerant or who have a milk allergy, options such as calcium-fortified soy, almond and rice beverages, and canned salmon or sardines, tofu (made with calcium), bok choy, Chinese cabbage, spinach, seaweed are great calcium-rich alternatives.

However, it is important to note that the calcium in soy beverage is absorbed at the rate of 75% of milk and to benefit from the calcium in canned salmon, the bones must be consumed.

Your body also uses vitamin D to help your muscles absorb calcium and work well.

Which foods contain vitamin D?

Vitamin D is found in foods such as salmon, tuna, and mackerel. These are some of the best foods to eat when you are trying to get more vitamin D. Other foods that have vitamin D, but in small amounts, include cheese, egg yolks, and beef liver. You can also get vitamin D from fortified foods such as milk, yogurts, soft margarines, and soy beverages.

How much vitamin D do I need each day?

The amount of vitamin D you need depends on your age. Health Canada recommends:

Ages 51 – 70 need 600IU of vitamin D each day.

Ages over 70 need 800IU of vitamin D each day.

If you are a man or woman over 50 years old, it is recommended that you take a daily vitamin D supplement of 400 IU in addition to eating foods that contain vitamin D.

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Alberta Health Services recommend that all Albertans take a vitamin D supplement everyday, year-round. Vitamin D supplements come in two forms: vitamin D2 or vitamin D3. Choose D2 if you are looking for a vegan form of vitamin D.

Vitamin D supplement, it is recommended not to take more than 2000IU each day, unless your physician tells you to take more.

Can I get vitamin D from sunlight?

Yes. Sunlight and vitamin D. Vitamin D is a unique vitamin. This is because your body can make it when it is exposed to sunlight. However, many factors can reduce how much vitamin D your body makes, including: season, time of day, cloud cover, sunscreen use, amount of skin exposed to sunlight, your age (you make less vitamin D as you get older), skin tone.

These factors can apply to many people living in Canada. This is why we recommend vitamin D from foods and/or a supplement every day.

If I do not get enough calcium and vitamin D from my diet, do I need to take a supplement?

In general, if you eat a balanced diet following Canada's Food Guide and do not have a specific medical condition, you do not need to take a supplement.

If you find it difficult to meet your calcium and vitamin D needs from food alone due to various reasons. I would suggest you speak to a dietitian or your physician to find out if you would benefit from a calcium and/or vitamin D supplement and how much to take. Your health care provider may also recommend a supplement based on your specific needs, medical history and any medical conditions you may have.

What types of calcium supplements are there?

There are two main types of calcium supplements:

- Calcium carbonate supplements: These are taken with meals because they are best absorbed with food.
- Calcium citrate supplements: These can be taken at any time.

Take a calcium supplement in a dose of 500mg or less at one time. This will help you to absorb calcium more efficiently. You may need to take calcium supplement 2 or more times in a day, in order, to meet your total daily requirements. Be sure not to take more calcium than you need, more is not better.

Calcium is also found in most multivitamin and mineral supplements. I would suggest you speak to your health care team, and to recommend the type of calcium supplement based on your specific needs and health conditions.

How do I know if my calcium and vitamin D supplements are safe?

- (1) Is there a Natural Product Number (NPN) on the package of the supplements?

An NPN is an 8-digit number found on some supplement packages sold in Canada. Health Canada indicate products with an NPN are safe and effective if you follow the instructions / directions on the label. But these products may still have side effects when mixed with other medicines or alcohol.

- (2) Have you read the fine print on the package of the supplements?

Many supplements have extra ingredients added to the supplement. If you have a food allergy or intolerance to certain ingredients, it is important to check the ingredient list to make sure it is safe for you to take. Even though over the counter supplements are not prescription, they should still be treated as such. Speak with your pharmacist first before taking any supplement.

Is there a difference between natural and laboratory (synthetic) made vitamins?

There is no difference between a vitamin made in a laboratory (synthetic) vs one in its natural form. Once ingested into the body, these vitamins are used in the same way and for the same functions.

Do you have any additional information which I should watch for before I purchase a supplement?

1. No supplement has been proved to *cure* diseases such as cancer, [diabetes](#), [heart disease](#), or digestive problems. Always stay cautious of supplements that promise quick and dramatic results.
2. A generic brand (or store brand) often works just as well as a name-brand supplement. Look for generic brands that contain the same amount of vitamins and minerals as the name brand.

How can Alberta Healthy Living Program help support the Chinese in the community?

- We have Registered Dietitian speaking both Mandarin and Cantonese who can offer one-on-one advice via phone, Zoom or in person meeting.
- These services have no charge and are covered by Alberta Health. You do not need a referral from a health care provider - you can just call to book appointment.
- All our programs and services can be accessed through one toll-free number: 1-844-527-1160.
- Better choices, better health (BCBH) for chronic disease management and BCBH-chronic pain that are offered in Cantonese, and they can register for this 6-week program (one 2.5-hour session per week) by calling one toll-free: 1-844-527-1160.