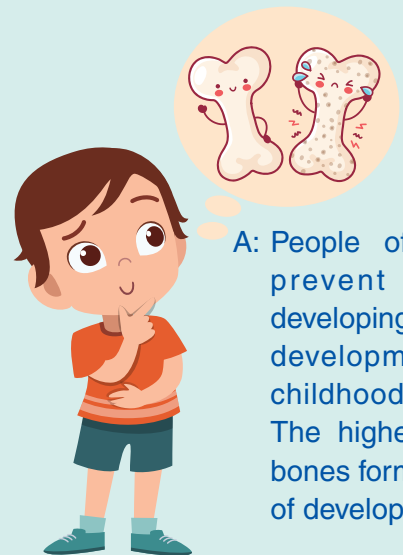


Myths of calcium

Q: I do not like dairy products. Can I take calcium supplements as an alternative?

A: Both dairy products and calcium supplements provide calcium. However, dairy products contain vitamin D, protein, carbohydrates and other minerals in addition to calcium. According to “The Chinese Dietary Reference intakes”, daily calcium intake for those aged 7-18 should not exceed 2000mg per day. Excessive calcium intake may lead to the formation of kidney stones and hinder iron and zinc absorption. Therefore, calcium supplements can be taken only under doctor’s advice.



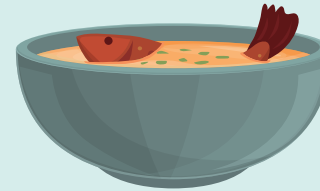
Q: Do children need to prevent osteoporosis?

A: People of all ages need to prevent themselves from developing osteoporosis. Bone development occurs during childhood and adolescence. The higher the density of the bones formed, the lower the risk of developing osteoporosis.

Q: Once osteoporosis is diagnosed, is calcium intake no more important?

A: No matter you have osteoporosis or not, calcium intake and regular exercise are important to prevent osteoporosis flare-up and bone fracture.

Q: Can pork bone soup and fish soup supplement calcium?



A: Calcium in pork bones and fish bones cannot dissolve in water easily. Therefore, the calcium content of pork bone soup and fish soup is actually very low.

Q: Can adequate dietary calcium intake and regular exercise completely prevent us from bone fracture?

A: Many complications of osteoporosis like bone fractures are related to accidents and injuries. Therefore, home safety and accident prevention are also important to avoid falls and slips.

Q: Does osteoporosis occur only in the elderly?

A: Osteoporosis is not a condition that occurs only in the elderly. Actually, both male and female adults also have the risk of developing osteoporosis.

Prevention is better than cure. Having adequate calcium intake since childhood can help the development of healthy bones and prevent osteoporosis effectively.



Facts About CALCIUM



Osteoporosis is a kind of metabolic bone disease. Bone density of affected persons would decrease with time and bones become weak. This would lead to bone fractures easily.

As the population ages, there is an increasing occurrence of osteoporosis in Hong Kong. Adequate calcium intake is important during childhood and adolescence to strengthen bones and reduce the risk of osteoporosis in the future.

Essential facts

- 99% of calcium in our body is stored in bones and teeth, while the remaining 1 % is stored in blood to help blood coagulation and cardiac (heart) muscle contraction.
- When the calcium level in blood is low, calcium is released from bones to maintain blood calcium level. If calcium is continually released, there will be an excessive loss of calcium and a decrease in bone density, making the bones become weak and fragile. Therefore, calcium intake is vital to prevent osteoporosis.

Where can we obtain calcium from our diet?

- Milk and dairy products like cheese and yoghurt are rich in calcium.
 - The calcium content of whole milk is similar to that of skim milk, but the fat content of whole milk is relatively higher. Low fat or skim milk is advised for those who want to keep fit.
- Dark green leafy vegetables, fish eaten with bones, firm tofu, calcium-fortified soy milk and nuts are also rich in calcium.
- Beans are high in calcium and magnesium. Calcium and magnesium are the nutrients which help build healthy bones.

Foods rich in calcium

Food type	Amount	Calcium (mg)
Dairy products		
Skim milk	1 cup (240ml)	299
Low fat yoghurt (<i>unflavoured</i>)	1 container (100g)	235
Low fat cheese (<i>Cheddar</i>)	1 slice (28g)	116
Vegetables		
Bok choy (<i>cooked</i>)	1 cup (170g)	158
Broccoli (<i>cooked</i>)	1 cup (156g)	62
Collard (<i>cooked, chopped</i>)	1 cup (190g)	266
Chinese kale (<i>cooked</i>)	1 cup (88g)	93
Fish		
Canned sardines in tomato sauce (<i>with bones</i>)	100g	240
Beans/bean products		
Soya bean (<i>cooked</i>)	1 cup (172g)	175
Red kidney bean (<i>cooked</i>)	1 cup (177g)	50
Firm tofu	100g	320
Edamame (<i>Frozen, prepared</i>)	1 cup (155g)	98
Soy milk	1 cup (240ml)	56
Nuts		
Almond (<i>roasted</i>)	1 oz (28g)	74
Sesame (<i>roasted</i>)	1 oz (28g)	277
Pistachio (<i>roasted</i>)	1 oz (28g)	31
Peanut (<i>roasted</i>)	1 oz (28g)	15
Cashew nut (<i>roasted</i>)	1 oz (28g)	12

Remark : 1 cup = 240 ml

Reference : Centre for Food Safety, Nutrient Information Inquiry System



Daily calcium requirement

The recommended daily calcium requirement is as follows:

Age	Daily requirement (mg)
4-6	800
7-10	1000
11-13	1200
14-17	1000
18-49	800

Reference: The Chinese Dietary Reference intakes (2013)

Tips for developing strong bones

In order to strengthen the bones, a healthy lifestyle should be adopted since childhood.

- Balanced diet
 - Sufficient calcium and vitamin D intake. Vitamin D helps calcium absorption. Foods rich in vitamin D include egg yolk, salmon and milk with added Vitamin D.
 - Avoid excessive salt (sodium) intake to reduce calcium loss.
 - Avoid excessive caffeinated drinks e.g. coffee, tea, energy drinks, etc.
 - Oxalate containing foods or drinks, e.g. tea, cocoa, etc. in diet form a complex with calcium which may decrease calcium absorption.
- Do regular exercise
 - Do more weight-bearing exercise e.g. walking, jogging, stair climbing, tennis, dancing, etc.
 - Do outdoor sports under the sun to let the body produce vitamin D which helps calcium absorption
- Avoid smoking and alcohol consumption