



香港紅十字會  
HONG KONG RED CROSS

# Osteoporosis



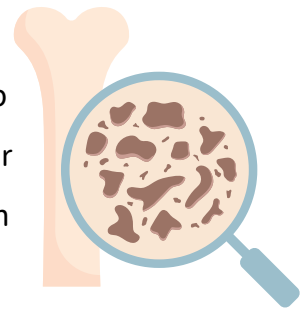
五星健康五星家  
社區健康教育計劃  
20週年紀念  
Five Stars Health, Five Stars Home  
Community Health Education Project  
20th Anniversary 2003 - 2023

Osteoporosis is a “silent” disease because you typically do not have symptoms, is a metabolic disease of bone. Osteoporosis occurs when too much bone mass is lost and changes occur in the structure of bone tissue. The affected bones become thinner, and are more likely to break (fractures) which may result in pain and other complications, including loss of independence in self care.

Because osteoporosis is more common in women than men, many men think they are not at risk for the disease. However, both older men and women from all backgrounds are at risk for osteoporosis.

## Symptoms

If the osteoporosis-related fracture occurs, there may be localized pain over the fracture sites. Common sites of osteoporotic fracture include thigh bone near the hip joint, spine (vertebrae) and forearm near the wrist. While hip fracture may occur after minor fall, spine can fracture without any trauma. The vertebral fracture can result in a hunched-back and a decrease in body height, and sometimes back pain.



## High-Risk Groups

1. Elders

2. Female

- Osteoporosis is more common in women than in men, particularly in postmenopausal women due to estrogen deficiency.

3. Persons of small frame

4. Having a family history

5. Diseases, such as

- Estrogen deficiency, e.g. early menopause as a result of ovarian failure after chemotherapy, radiotherapy or surgical removal of ovaries
- Testosterone deficiency
- Endocrine diseases such as hyperthyroidism

6. Medications such as long-term use of high-dose steroid

7. Unhealthy lifestyle, for example

- Smoking
- Inadequate calcium/ vitamin D intake
- Excessive caffeine intake
- Consuming too much salty food
- Doing little or no weight-bearing exercise
- Excessive alcohol consumption

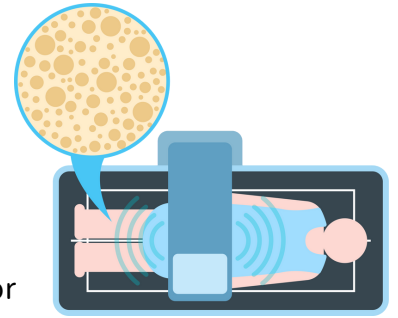


# Diagnosis & Treatment

The common methods of measuring bone density:

Dual Energy X-ray Absorptiometry (DEXA): for diagnosis and monitoring of treatment effect. Quantitative Ultrasound (QUS): for screening purpose, not suitable for diagnosis.

Those who are at risk may consult doctor for a test.



Depending on individual conditions, doctors will prescribe medications for osteoporosis. Osteoporosis can occur at any age, although the risk for developing the disease increases as you get older. Everyone should pay attention to home safety and road safety.

## Prevention

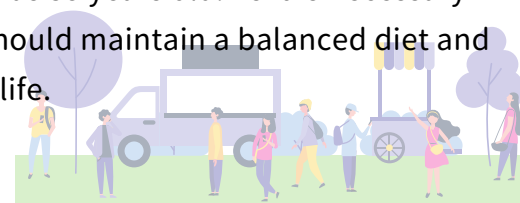
Adequate calcium and vitamin D intake, together with weight-bearing exercise are essential for normal bone growth.

1. Perform weight-bearing exercises, e.g. walking or dancing.
2. Don't smoke and don't drink too much. Reduce drinks that contain caffeine.
3. Balanced diet, eat calcium-rich foods, for example
  - Dairy products such as milk, and yogurt (low-fat milk and skimmed milk contain less saturated fat and are healthier choices)
  - Seafood eaten with bones or shells, such as whitebait, dried silver fish and dried shrimp
  - Soya bean products such as tofu, fortified soy milk, beancurd stick and sheet
  - Dark green leafy vegetables, e.g. white cabbage, broccoli and Chinese flowering cabbage
  - Nuts, e.g. almond and sesame



4. Perform outdoor activities to absorb sunlight which will help the body to produce more vitamin D in order to enhance the absorption of calcium (Beware of sunburn).

Bone metabolism is a continuing process and bone loss starts as early as 35 years old. As it is necessary to build strong and healthy bones starting at an early age, everyone should maintain a balanced diet and perform regular exercise over a lifetime to avoid osteoporosis later in life.



### References:

Elderly Health Service,  
Department of Health  
National Institute of Arthritis,  
Musculoskeletal and Skin Diseases (US)

The above information  
is for reference only.

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