

Osteoporosis

Osteoporosis is

- A disease where thinning of the bone cortex leads to fragile bones, which results in increased risk for fractures
- In the population of >65yo in Hong Kong, 1 in 2 women and 1 in 5 men will have fracture due to osteoporosis
- Common fractures include hip fractures, spinal compression fractures, wrist and upper arm fractures
- Spinal compression fractures can lead to pain, decrease in height and hunch backs
- Patients following fracture of the hip often require walking aids for a few months during recovery. Nearly half of the patients would need long-term walking aids or result in immobility.

Risk factors for Osteoporosis:

1. Asian women, especially post menopausal
2. Family histories of osteoporosis
3. Slim and low in weight
4. Lack of calcium intake and exercise
5. Smoking and alcohol intake
6. Long term medication such as steroids

Prevention of Osteoporosis:

1. Calcium
 - There should be adequate calcium intake and storage to result in good bone strength
 - o 9-18 years old: 1300 mg/day
 - o 19-50 years old: 1000 mg/day
 - o >50 years old: 1200 mg/day
 - o Pregnant or breast feeding: 1300 mg/day
 - Food that has high calcium content include:
 - o Dairy products (yoghurt, cheese, milk) – 1 cup of milk has about 300mg of calcium
 - o Bean products (tofu, soya milk etc)
 - o Sardines, green leafy vegetables
2. Vitamin D
 - Helps the body to absorb Calcium
 - 15minutes under the sun each day will provide adequate vitamin D
3. Weight bearing exercises
 - Such as walking, hill climbing, dancing, step classes
 - 30minutes, 3 to 4 times per week
 - Exercises that helps balancing will also help to decrease falls and subsequent fractures
4. Cut down on cigarettes, alcohol and coffee

How to diagnose and treat osteoporosis?

Checking the bone density is a good method to assess bone strength, with DEXA as the most accurate way of measurement.

The best way is of course to prevent osteoporosis. However, if osteoporosis is already diagnosed, then, there are medications that can help with the disease. As the various medications suits people of different age, sex, medical history and family history, seeking the advice of your Family Doctor is recommended.