

# An Overview of Osteoporosis

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## OSTEOPOROSIS

### BONES CHANGE AND GROW

Bones are living structures that change and grow. This process is called as remodelling.

### OSTEOPOROSIS AND BROKEN BONES

Osteoporosis is a condition which is characterized by decrease in bone density. In this condition bones become weak and susceptibility to fracture. A normal & health bone composed of protein, calcium, and collagen which give strength to bones. Fractured bones are caused by osteoporosis and located in the hip, spine, and wrist. The fracture can be in the form of collapsing or in the form of cracking.

### CAUSES OF OSTEOPOROSIS

- Gender (Mostly women develops this condition)
- Thin and small body frame
- Severe, chronic pain
- Depression
- Loss of height
- Stooped posture
- Restricted mobility
- Family history of osteoporosis
- Excessive alcohol consumption
- Diet low in calcium
- Lack of exercise
- Estrogen levels low in women

It is a common disorder condition in observed in women and it can be prevented. Adoption of life style can keep bones strong and healthy.

Have a healthy diet rich in calcium and vitamin D, exercise regularly, and reduce smoking and alcohol consumption, practice excessive drinking.

These preventative measures are not a guarantee against osteoporosis, but these help to maintain strong, and healthy bones.

The first indication to have osteoporosis is a fracture in the most of the people. These fractures may cause loss of height, and may observe hunching in spine.

When your diet lacks calcium and your body requires it for normal functioning (calcium is also involved in blood clotting and cell signalling), the nutrient is removed from its storage place in the bones. Over time, this results in weaker, more porous bones. Regular exercises are helpful for bones to strengthen by walking, jogging, tennis, and other activities which force the body to work against gravity.

The interior of the bone contain tissue, tissue contains small holes within it. But, bone with osteoporosis will have much more holes. (Porosis means porous.) The amount of bone tissue is known as bone mass. In childhood and adolescence age, more bone is deposited than withdrawn enabling the body's bones (skeleton) to grow in size and density. 90% of peak bone mass is acquired by the age of 18 in girls and the age of 20 in boy's later body continues to accumulate bone tissue in slower rate. Peak bone mass is achieved when the bones have reached their maximum strength and density. The process will complete around by age 30. When bone tissue is lost body can replace it in early stage and the osteoporosis condition will reset. Menopause is a period of rapid bone loss and leading factor in the development of the disease in women, and they lose up to 20% of their bone density at this time.

Everyone may not experience obvious symptoms of disease. The other risk factors include early menopause (estrogen has bone protecting benefits), a history of corticosteroid use for several months at a time or having parents who suffered hip fractures since genetics plays a role.

As we are growing older, the risk for fractures increases. These fractures, may occur in the wrists, hips, and spine (spinal fractures are known as vertebral compression fractures), are painful and may not support to walk or balance properly. This is one of the major chances to increases number of fractures. Estimation 1 out of 2 women will suffer from osteoporotic fracture in their lifetime. For reasons not known, race and gender are risk factors for osteoporosis. Caucasian and Asian women—particularly post-menopausal women—are at highest risk in developing the disease. African American and Hispanic females overall have better bone density than other ethnic groups. These differences can be seen during childhood and adolescence. Men can also be affected but at much lower rates than women.

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