Osteoporosis: A debilitating disease that can be prevented and treated.

The Surgeon General reported that the prevalence of osteoporosis and low bone mass is expected to increase mostly because of the aging of the population. By 2020, one in two Americans over age 50 is expected to have or be at risk of developing osteoporosis of the hip.

Bone Basics:

• Bone health is critically important to our overall health and quality of life.
• Our bones provide structural support for muscles, protect vital organs, and store calcium which is essential for bone density and strength.
• Bone is not a hard and lifeless structure; it actually is a complex, living tissue.
• Because bones are constantly changing, they can heal and may be affected by diet and exercise.
Peak Bone Mass

Peak bone mass refers to the genetic potential for bone density.

Bone growth:

• During youth, bones grow in length and density. During the teen years, maximum height is reached, but bones continue to grow more dense until about age 30 when peak bone mass is attained. Then as a part of the natural aging process, your bones begin to break down faster than new bone can be formed.
• It is important to reach peak bone mass in order to maintain bone health throughout life.
• A person with high bone mass as a young adult will be more likely to have a higher bone mass later in life.
• Inadequate calcium consumption and physical activity early on could result in a failure to achieve peak bone mass in adulthood.
• The critical years for building bone mass are from youth to about age 30.
What is Osteoporosis?

Learn how to protect yourself NOW!

• A preventable disease: bones become porous and fragile due to low bone mass and density.

• Increases susceptibility to fractures: especially of the hip, spine, and wrist.

• Causes impairment: impacts ability to walk unassisted and may cause prolonged / permanent disability.

• Spinal or vertebral fractures: causes loss of height, severe back pain, and deformity.
Gender-Related Differences in Bone Loss

The age at which bone loss begins and the rate at which it occurs vary greatly between men and women.

- **Men** begin to lose bone mass around age 65. Their bone mineral content is about 10% lower than the peak value.
- Osteoporosis in men remains under diagnosed, underreported, and inadequately researched.
- In **women**, bone loss may begin as early as age 30 to 35. The rate of bone loss greatly increases after menopause. Overall bone mineral content is about 15% to 20% lower than the peak value by age 65.
Common Myths

Test your knowledge by reading the below Myths and Facts.

Myth: Osteoporosis is an inevitable part of aging.
Fact: It can be avoided if you follow prevention steps.

Myth: Only older women get osteoporosis.
Fact: Women and men can develop it at any age; twenty percent of those with osteoporosis are men.

Myth: Osteoporosis is not very common.
Fact: Half of women over age 50 will suffer at least one fracture due to osteoporosis.
Risk Factors

Often a “silent disease” - symptoms are not always apparent. Diagnosis often occurs once a fracture exists.

Risk factors include:

- Current low bone density
- Family history of osteoporosis
- History of fracture after age 50
- Female
- Caucasian or Asian
- Thin/small-framed
- Physical inactivity
- Cigarette smoking
- Excessive alcohol intake
- Low lifetime calcium intake
- Vitamin D deficiency
- Estrogen deficiency (a result of menopause)
- Premature or surgically induced menopause
- Low testosterone levels (males)
- Chronic steroid use (especially for males under the age of 70 years)
Prevention Tips

By the mid 20’s, the average adult has acquired 98% of total bone mass. The best defense against osteoporosis later in life is to ensure strong bones are built early in life!

Enhance YOUR bone health:

• Eat a balanced diet rich in calcium & Vitamin D
• Participate in weight-bearing and resistance training exercises
• Avoid smoking and excessive alcohol intake
• Talk to your physician about your current bone health and risk factors
• Have your bone density tested