

# EXERCISE

## AND REDUCING RISK FOR OSTEOPOROSIS

by Cindy Pavell M.S.

### What is osteoporosis?

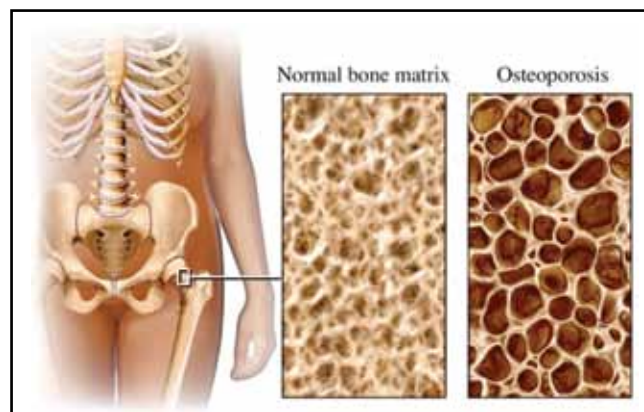
Did you know that 44 million people have osteoporosis? (*Cleveland Clinic*). Osteoporosis gradually deteriorates your bones. It is a disease of which you may not be aware, since bone is lost without any signs, until a bone breaks and you fall.

"The word osteoporosis literally means "porous bones." It occurs when bones lose an excessive amount of their protein and mineral content, particularly calcium. Over time, bone mass, and therefore bone strength, is decreased. As a result, bones become fragile and break easily. Even a sneeze or a sudden movement may be enough to break a bone in someone with severe osteoporosis." (*Medical-dictionary.com*).

### What are the risk factors for osteoporosis?

- Gender – Women are higher risk than men
- Age – Older people at higher risk
- Body size – Petite women are at greater risk
- Ethnicity – White and Asian women at highest risk
- Genetics – If family members have had it, you are at greater risk
- Medication – "Long-term use of corticosteroid medications, such as prednisone and cortisone, interferes with the bone-rebuilding process" (*Mayo Clinic*).
- Smoking
- Inactivity
- Anorexia
- Alcohol – Too much can cause bone loss
- Sex hormones – Low estrogen levels in women and low testosterone levels in men increase risk
- Calcium and Vitamin D intake – Low intake makes you more prone to bone loss.
  - Recommended calcium intake for ages 9-18  
1,300 mg/day; vitamin D 600 IU/day.
  - Recommended calcium intake for ages 19-50  
1,000 mg/day; vitamin D 600 IU/day.
  - Recommended calcium intake for ages 51-70  
1,200 mg/day (males 1,000); vitamin D 600 IU/day
  - Recommended calcium intake for 71+  
1,200 mg/day; vitamin D 800 IU/day.

### What does it look like?



### How does exercise impact osteoporosis?

Exercise increases your bone density. If you were an exerciser as a child you helped greatly to increase the health of your bones. The bulk of your bone production happens by the age of 35.

Your bones require the proper amount of "overload" in order for the bone to respond; this is key to increasing density and strength.

According to the National Osteoporosis Foundation, the best exercises for building and maintaining bone density are:

- Weight-bearing exercise, such as walking - that makes you work against gravity while staying upright. High impact (jumping rope, plyometrics) is best for building bone for those who do not currently have osteoporosis.
- Muscle-strengthening exercise, such as weight-lifting - that makes you work against gravity in a standing, sitting, or prone position. These exercises should be done 2-3 days per week using the overload principle.

Choose an activity you enjoy! Dancing, hiking, tennis, walking, team sports are several options. Our bodies and our bones NEED movement to stay healthy!! Your health is worth the time and effort!

author: **Cindy Pavell, M.S.** is a health educator and fitness specialist since 1988, Cindy welcomes any questions, suggestions for topics, and/or feedback.