

## **Statistics**

- Causes approximately 1.5 million fractures annually.
- Direct care expenditures for osteoporosis fractures range from \$12.2 billion to \$17.9 billion annually.
- By 2020, roughly 14 million people over the age of 50 will develop osteoporosis and another 47 million people may have low bone mass.

## **Risks**

High Risks include:

- People who are White or Asian
- Post-menopausal women with a family history of the disease.
- Small framed and thin women.
- Usages of certain drugs, such as high-dose steroids and anticonvulsants.
- Lack of Vitamin D.
- Excess amount of parathyroid hormone, which can contribute to weak bones.
- History of eating disorders.
- Smoking and drinking excessively.

## **Exercises**

- People with osteoporosis should only lift 80% of their resistance maximum, in order to protect total excursion on bones.
- The exercise goal is to achieve 2 to 3 sets of 6 to 8 repetitions at least twice weekly.
- Walking does not increase muscle mass or bone density as much as resistance training.
- Weight-bearing exercises also help prevent falls by improving coordination and building muscle mass.
- Avoid stationary bikes because leaning forward puts the spine at risk for fractures.

## **Vitamins**

- Calcium and Vitamin D are less likely to decrease the risk of fracture by 20-25%.
- Calcium is found in foods such as almonds, spinach, milk products and certain fortified foods such as orange juice and certain cereals.
- The National Academy of Sciences recommends men and women over the age of 50 take 400 IU of Vitamin D a day, and those over 70 years of age should take 600 IU of Vitamin D a day.
- Recommended calcium intake is based on age and gender.