



Colorado Center for
BONE RESEARCH

FREQUENTLY ASKED QUESTIONS ABOUT OSTEOPOROSIS:

WHAT IS OSTEOPOROSIS? Literally, “porous bones.” Osteoporosis is the most common bone disease in humans. Its characteristics include low bone mass, decreased bone strength, and an increased risk of fracture (broken bone). The clinical diagnosis of osteoporosis is when an individual falls from a standing height and sustains a fracture.

The World Health Organization definition of osteoporosis is when bone mineral density (BMD) is less than or equal to -2.5 standard deviations or greater at the hip or spine using dual x-ray absorptiometry (DXA), based on a young normal population. This value is termed a T-score. Osteopenia is defined as “low bone mass”, in which the T-score is between -1.0 and -2.5.

WHO WILL GET OSTEOPOROSIS? Osteoporosis affects both sexes and all races. The National Osteoporosis Foundation estimates that over 10 million Americans have osteoporosis. Post-menopausal women, and men age 70 or older, should be evaluated for osteoporosis, as well as other people with risk factors.

WHY SHOULD I BE CONCERNED ABOUT OSTEOPOROSIS? A common complication of osteoporosis is a fracture (broken bone), usually of a vertebra in the spine, or of the hip, or wrist. Fractures can contribute to chronic pain, lifestyle changes, depression, and changed social roles within the family. Having sustained an osteoporotic fracture also puts a person at increased risk for future fractures. Osteoporotic hip fractures cause almost as many deaths in the US as motor vehicle accidents.

Some risk factors, such as age, are unable to be changed. A person achieves their highest bone mass between the ages of 18 and 25. This “peak bone mass” level will depend on a number of factors, such as genetics, nutrition, activity level, and general health during growth. With menopause and advancing age, bones become more fragile.

WHAT CAN I DO TO PROTECT MY BONES? Get enough Vitamin D. This vitamin helps to maintain normal levels of calcium and phosphorus, which are essential to building bone. The body’s major source of Vitamin D is Vitamin D3, which is synthesized when

our skin is exposed to sunlight. People living in northern climates far from the equator receive less sunshine, and aging skin becomes less efficient at vitamin synthesis. The body is able to store some Vitamin D to be released in the winter months. Both Vitamin D2 and D3 are also found in foods. Doctors Miller and Baim recommend 1,000 to 2,000 IU's of Vitamin D per day for adults over age 50.

Take in enough Calcium – 1500 to 2000 mg of Calcium per day if you are over age 50. Calcium is found in dairy products (milk, yogurt, cheese), fortified orange juice, green leafy vegetables, and nuts such as pistachios, macadamia nuts, and pecans. Many breakfast cereals are also calcium-fortified.