

Understanding The Basics of Bone Health

Q: Is osteoporosis just an 'old people's' disease?

A: No. Today we know that steps to improve bone health should start at an early age. Weak bones can affect individuals of all ages. Whether you're in your 20s, 40s or 70s, it's not too early or too late to make changes in your diet, exercise program and lifestyle to strengthen your bones.

It's true that weaker bones *are* more common in older people--but certain factors that lead to weaker bones are important at all ages, and even younger people can suffer from broken bones related to osteoporosis.

Most people have never asked their health care provider about their bone mineral density (BMD) level. Something called your "T-score" reveals whether your bones are weak or strong, and what the chances are for breaking one of them. Brittle bones are not a natural part of aging. According to the U.S. Bone and Joints Initiative, if Americans don't take action, by the year 2020, half of all persons older than age 50 will be at risk for fractures related to osteoporosis and low-bone mass. Osteoporosis affects men and women of all races and ages.

Here are some warning signs of osteoporosis:

- **A Broken Bone:** A broken bone (fracture) as an adult does not always mean you have osteoporosis - but it could be a warning sign that your bones are weak, especially if the break is from normal activities or during a minor fall.
- **Back Pain or Spinal Deformities:** Back pain that will not quit could be a sign that you have a spinal fracture. This occurs when bones in your back become so weak that they fracture and collapse.
- **Loss of Height:** A fractured bone in your spine could collapse onto itself causing you to shrink. Multiple fractures can cause the spine to form a curve causing the disfigurement known as a "dowager's hump."

There are two things that you can do to improve your bone health and make your bones stronger:

1) get enough physical activity daily, and

2) take in enough calcium and vitamin D

Exercise: Build into your daily schedule exercise of at least 30 minutes for adults. The best types of exercises for healthy bones are weight-bearing and strength-building activities, like jogging, tennis and walking. These activities force muscles and bones to work against gravity and they put stress on the limbs. Weight-lifting or calisthenics are strength-building exercises which lead to stronger muscles and bones. Tai Chi exercises are good because they can help improve your balance, and decrease your risk of falling. But before starting an exercise program, or if you already have osteoporosis, show your doctor a description of the program. If you have low bone mass, you may need to skip certain exercises to avoid problems, like breaking a bone.

Calcium: is a building block of bone. Men and women over age 50 and postmenopausal women also need a higher intake of calcium. They need about 1,200 to 1,500 mg of calcium daily. Milk and dairy products are high in calcium; as are leafy green vegetables, soybeans and salmon. If you have problems digesting lactose, you can talk to your doctor about taking a calcium supplement.

Vitamin D: helps your body absorb calcium from your gastrointestinal tract. It can be synthesized in skin from exposure to the sun, and is found in fortified dairy products, egg yolks, fish (such as salmon, mackerel and tuna), liver or in supplements. Your doctor can recommend an appropriate dosage for you.

A simple, painless BMD test - which takes less than 20 minutes - is a good place to start. If you have low bone mass but no fractures, you and your physician can put together a treatment plan to stop further bone loss and prevent fractures. If you have had one or more fractures due to osteoporosis, your physician or healthcare professional will work with you to prevent further breaks, reduce pain, improve your bone health, keep you active and enhance your quality of life. For more background, go to the U.S. Bone and Joints Initiative: :

<http://www.usbji.org/programs/public-education-programs/fit-to-t/what-you-need-to-know-about-your-bone-health>