

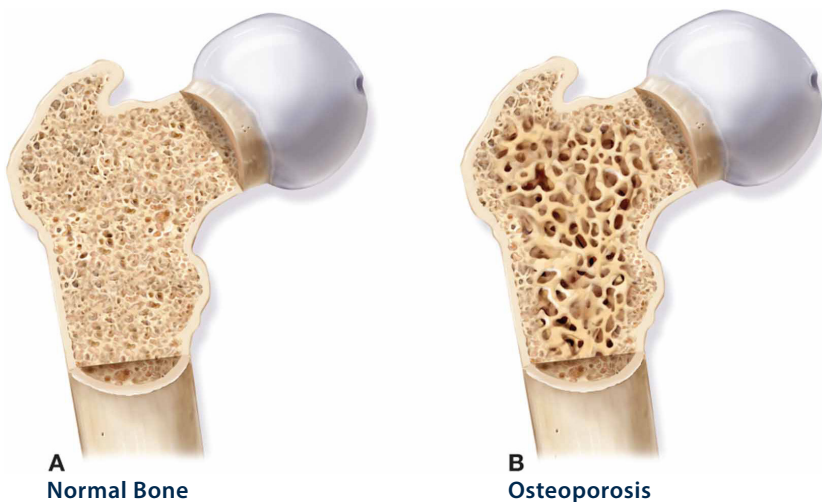
## What You Should Know

# OSTEOPOROSIS

## What is Osteoporosis?

Osteoporosis is a disease that weakens bones. As it progresses, the bones become brittle and can break, even without an injury. These broken bones, or fractures, usually occur in the hip, spine or wrist. However, any bone can be affected and can result in disabilities and even death.

Osteoporosis is often known as the “silent disease” because the weakening of the bones occurs without the person knowing it. Since there’s no cure for osteoporosis, it’s important to keep your bones strong.



### Risk Factors

What are the risks of developing osteoporosis and who is at risk?

- Post menopausal women
- Those with a family history of the disease
- Small body frame
- A diet low in calcium
- Low testosterone levels in men
- Smoking
- Alcohol
- Inactivity with decreased weight bearing
- Advanced age

<http://biology-forums.com>

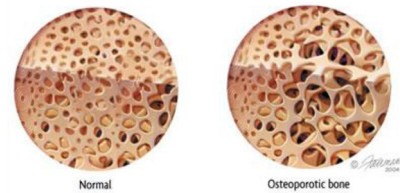
## How osteoporosis is diagnosed?

Your primary healthcare provider may ask you about your risk factors for osteoporosis and for falls, help you understand the risk of breaking bones, and may send you to have a bone scan. This scan is called a bone mineral density test (BMD). BMD (the amount of bone you have in a given area) is measured at different parts of your body.

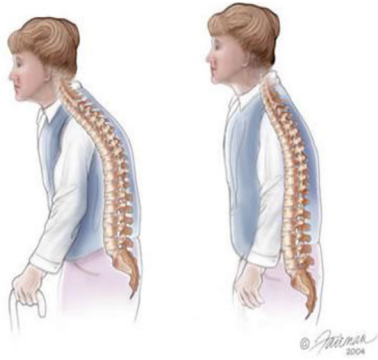
Often the measurements are at the spine and hip, including a part of the hip called the femoral neck, at the top of the thighbone (femur). Dual energy X-ray absorptiometry (referred to as DXA or DEXA and pronounced “dex-uh”) is the best current test to measure BMD.

The DEXA scan is quick and painless. It is similar to an X-ray but uses much less radiation. However, pregnant women should not have this test to avoid the risk of harming the fetus. Not everyone needs a BMD as a standard test. Your primary healthcare provider will decide if treatment is needed and, if so, what the best treatment is for you.

# OSTEOPOROSIS



Osteoporosis is a condition of weak bones, which results from a loss of bone mass and a change in bone structure. The picture at left is normal bone, and the one at right shows osteoporotic bone.



As the bones of the spine (vertebrae) weaken in osteoporosis, fractures can occur, causing the bones to collapse and get shorter. This can lead to a loss of height and a forward curving of the spine (left picture).

## How do I know if I am likely to get a fracture?

There is a new Fracture Risk Assessment Tool (FRAX) for testing your fracture risk. FRAX was created by the World Health Organization to evaluate a patient's 10-year probability of hip and other fractures (spine, forearm, hip, or shoulder fracture). In the past, doctors could only estimate a 5-year fracture risk. You can take the test online at [www.shef.ac.uk/FRAX](http://www.shef.ac.uk/FRAX). Choose "Calculation Tool" and

select the appropriate category for you. Please note that this tool is valid only for postmenopausal women age 40 and older who are not currently taking a prescription medication for osteoporosis.

Taking multiple risk factors into account allows the FRAX formula to make a better estimate of your risk for fracture than previous methods.

## OTC Supplements

If you have osteoporosis, your health care provider will advise the following:

**Calcium.** Make sure you are getting enough calcium in your diet or you might need to consider taking supplements. The National Osteoporosis Foundation recommends 1,000 milligrams (shortened as mg) per day for most adults and 1,200 mg per day for women over age 50 or men over age 70.

**Vitamin D.** Get adequate amounts of vitamin D, which is important to help your body absorb calcium from foods you eat. The recommended daily dose is 400–800 International Units (called IU) for adults younger than age 50, and 800–1,000 IU for those age 50 and older. (These are the current guidelines from the National Osteoporosis Foundation.) You may need a different dose depending on your blood level of vitamin D.

## Treatment

Making certain changes to your lifestyle may be all that is needed if you are at low risk for osteoporotic fracture. Adding osteoporosis medications is recommended if you have had a vertebral or hip fracture, have bone mineral density levels that indicate osteoporosis, or have FRAX scores that indicate a 20% risk of fracture in the next 10 years. You can talk to your health care provider about whether or not you fall into these categories and about the different medication options.

## Physical activity

Get exercise most days, especially weight-bearing exercise, such as walking.

## Prescribed Medications

As osteoporosis worsens, your physician may prescribe medications that prevent and/or treat osteoporosis. Currently, five drugs have been approved by the FDA for this purpose. To find out if you might benefit from taking one of these medications, ask your doctor.

## More Information

### The North American Menopause Society

- [www.menopause.org/edumaterials.aspx](http://www.menopause.org/edumaterials.aspx)

### CDC sites

- <http://www.cdc.gov/nccdphp/sgr/sgr.htm>
- <http://www.cdc.gov/powerfulbones/>
- <http://www.cdc.gov/powerfulbones/parents>
- [http://www.cdc.gov/nccdphp/dnpa/physical/growing\\_stronger](http://www.cdc.gov/nccdphp/dnpa/physical/growing_stronger)

### International Osteoporosis Foundation

- [www.iofbonehealth.org](http://www.iofbonehealth.org)

### IBMS BoneKEy®

- [www.bonekey-ibms.org](http://www.bonekey-ibms.org)

### National Osteoporosis Foundation

- [www.nof.org](http://www.nof.org)
- [www.osteoporosis.ca](http://www.osteoporosis.ca)

### Best Bones Forever

- [www.bestbonesforever.gov](http://www.bestbonesforever.gov)