



## Patient Information

# Lifelong Strategies to Prevent Osteoporosis

An estimated 10 million U.S. residents have osteoporosis, a disease characterized by low bone mass and weakening bone tissue that leads to fragile bones and an increased risk of fractures (especially the hip, spine and wrist).

Eight million of these are women and 2 million are men. The disease is just as painful for men as it is for women.

What's more, almost 34 million Americans have low bone mass, which means they are at an increased risk for osteoporosis. Other risk factors for the disease include a history of fractures after age 50, being thin or having a small frame, a family history of osteoporosis, estrogen deficiency (menopause), low lifetime calcium intake, vitamin D deficiency, an inactive lifestyle, current cigarette smoking, and excessive use of alcohol.

### Calcium and Vitamin D

Insufficient calcium in your diet can contribute to the development of osteoporosis, since calcium plays an important role in maintaining bone. Calcium is also needed for blood to clot and for proper functioning of the heart, muscles and nerves. Adults need between 1,000 and 1,300 milligrams per day, depending on age.

You can increase calcium in your diet by eating calcium-rich foods such as low-fat milk, cheese and broccoli. Some foods even have added calcium, such as orange juice, cereals and breakfast bars.

If you are not getting enough calcium through your diet, your NP may suggest taking a calcium supplement. Although these supplements are available without a prescription, making a choice can be confusing since there are so many options. Your NP can help you figure out which calcium supplement is right for you.

It is also important to get enough vitamin D, which is necessary for the body to absorb calcium. If you don't have enough vitamin D, your body will start to absorb calcium from your bones instead of from the food you eat.

There are two ways to get vitamin D. First, vitamin D is made in the skin after direct exposure to sunlight. The amount produced depends on factors such as the time of day, season and skin color. Typically, 10 to 15 minutes of sun exposure on the hands, arms and

face two to three times a week is enough.

You can also increase your vitamin D intake by eating foods fortified with vitamin D, such as dairy products, egg yolks, saltwater fish and liver.

### Exercise

If you don't place demands on your bones, they will not get stronger. So a person who does not exercise may have a lower bone mass or density, particularly as he or she ages.

Two types of exercise are important for building and maintaining bone mass and density. Weight-bearing exercises require your bones and muscles to work against gravity. Examples are any exercise in which your feet and legs are bearing your weight, such as jogging, walking and soccer.

Resistance exercises are the second type. These use muscle strength to improve muscle mass and strengthen bone, as with free weights and weight machines.

Be careful when exercising if you are frail, have had a fracture or fall frequently. Check with your NP before you begin an exercise regimen.

### Bone Mineral Density Tests

Your NP may want you to get a bone mineral density test, which is the only way to determine whether you have osteoporosis and can also determine your risk of fracture in the future. Early diagnosis of osteoporosis is important, since the disease can develop for years without you knowing. You don't want to wait until you get a fracture to find out you have osteoporosis.

There are different methods to measure bone mineral density. All the tests are painless and safe. The bone density in your spine, hip or wrist is measured and compared with two different standards to identify your risk of fracture. Generally speaking, the lower your bone density, the higher your risk for fracture.

### Medication

There is no cure for osteoporosis, but some medications may help prevent or treat the disease. Talk to your NP to find out if any of these medications are right for you.

*Some information adapted from The National Osteoporosis Foundation. Available online at [www.nof.org](http://www.nof.org).*

### Additional Notes:

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