Osteoporosis in Aging

Protect Your Bones with Exercise

As we get older, we begin to lose more bone than we build. The tiny holes within bones get bigger, and the solid outer layer becomes thinner. In other words, our bones get less dense. Hard bones turn spongy, and spongy bones turn spongier. If this loss of bone density goes too far, it’s called osteoporosis. Over 10 million people nationwide are estimated to have osteoporosis.

It’s normal for bones to break in bad accidents. But if your bones are dense enough, they should be able to stand up to most falls. Bones weakened by osteoporosis, though, are more likely to break.

“It’s just like any other engineering material,” says Dr. Joan McGowan, a National Institutes of Health (NIH) expert on osteoporosis. If you fall and slam your weight onto a fragile bone, it reaches a point where the structures aren’t adequate to support the weight you’re putting on them. If the bone breaks, it’s a major hint that an older person has osteoporosis.

Broken bones can lead to serious problems for seniors. The hip is a common site for osteoporosis, and hip fractures can lead to a downward spiral of disability and loss of independence. Osteoporosis is also common in the wrist and the spine.

The hormone estrogen helps to make and rebuild bones. A woman’s estrogen levels drop after menopause, and bone loss speeds up. That’s why osteoporosis is most common among older women. But men get osteoporosis, too.

Experts suggest that women start getting screened for osteoporosis at age 65. Women younger than age 65 who are at high risk for fractures should also be screened. Men should discuss screening recommendations with their health care providers.

Screening is done with a bone mineral density test at the hip and spine. The most common test is known as DXA, for dual-energy X-ray absorptiometry. It’s painless, like having an X-ray. Your results are often reported as a T-score, which compares your bone density to that of a healthy young woman. A T-score of −2.5 or lower indicates osteoporosis.
Lower Your Risk

There’s a lot you can do to lower your risk of osteoporosis. Getting plenty of calcium, vitamin D, and exercise is a good start.

Calcium is a mineral that helps bones stay strong. It can come from the foods you eat—including milk and milk products, dark green leafy vegetables like kale and collard greens—or from dietary supplements. Women over age 50 need 1,200 mg of calcium a day. Men need 1,000 mg a day from ages 51 to 70 and 1,200 mg a day after that.

Vitamin D helps your body absorb calcium. As you grow older, your body needs more vitamin D, which is made by your skin when you’re in the sun. You can also get vitamin D from dietary supplements and from certain foods, such as milk, eggs, fatty fish, and fortified cereals. Talk with your health care provider to make sure you’re getting a healthy amount of vitamin D. Problems can arise if you’re getting too little or too much.

Exercise, especially weight-bearing exercise, helps bones, too. Weight-bearing exercises include jogging, walking, tennis, and dancing. The pull of muscles is a reminder to the cells in your bones that they need to keep the tissue dense.

Smoking, in contrast, weakens bones. Heavy drinking does too—and makes people more likely to fall. Certain drugs may also increase the risk of osteoporosis. Having family members with osteoporosis can raise your risk for the condition as well.

The good news is, even if you already have osteoporosis, it’s not too late to start taking care of your bones. Since your bones are rebuilding themselves all the time, you can help push the balance toward more bone growth by giving them exercise, calcium, and vitamin D.

Several medications can also help fight bone loss. The most widely used are bisphosphonates. These drugs are generally prescribed to people diagnosed with osteoporosis after a DXA test, or to those who’ve had a fracture that suggests their bones are too weak. Bisphosphonates have been tested more thoroughly in women, but are approved for men too.

Prevent Falls To Protect Bones

TO PREVENT FALLS AT HOME:

- Keep rooms free of clutter, especially on floors.
- Don’t walk in socks, stockings, or slippers.
- Be sure rugs have skid-proof backs or are tacked to the floor.
- Keep a flashlight next to your bed to guide you in the dark.

EXERCISES TO IMPROVE BALANCE:

- Stand on one leg at a time for a minute. Slowly increase the time. Try to balance with your eyes closed or without holding on.
- Stand on your toes for a count of 10, and then rock back on your heels for a count of 10.
- Move your hips in a big circle to the left, and then to the right. Do not move your shoulders or feet. Repeat 5 times.