

Boning Up

Exercise Helps Maintain and Restore Bone Density

by Katy Santiago



Ten million Americans suffer with osteoporosis and another 34 million have low bone mass and high risk for osteoporosis, according to the National Osteoporosis Foundation. For anyone who has been diagnosed with osteoporosis or osteopenia (low bone density for our age, but not low enough to be a risk factor for fracture), it is important to know that most likely, the bones' ability to develop has not been affected. We have simply stopped "loading" them.

The good news is that it's unlikely that bone density is low throughout our

body, and we can begin simple weight-bearing exercises at any time. This signals the bone to start growing.

Ribs, wrists, hips and the spine are the most common places prone to bone loss. The main reason is simply underuse. Contemporary habits in our culture often don't load these joints to their fullest potential.

Let's take hips as an example of a potential trouble zone. Hips are designed to rotate and have a wide range of motion. If we sit more than six hours a day, they don't get much movement.

This sends our body the message that it doesn't have to maintain as much density as if the hips were moving in all the patterns in which they were designed to move.

Even if we have been exercising regularly, but are still troubled by low bone density, applying the following tips will help.

Find new ways and different directions to move.

Choose exercises that work the body in different directions than usual. If most workouts consist of walking, try a changeup.

Getting off a treadmill is one way to work new muscles. Dance classes introduce new steps that challenge joints in novel ways. Just walking sideways for one minute in each direction each day challenges hip muscles.

Know the difference between using weights and weight-bearing exercise.

Even some exercise professionals confuse these concepts. While using weights can be part of any exercise program, it is weight-bearing exercise that delivers healthier bones.

Using weights can mean any type of resistance exercise—from weight machines, circuit equipment and hand-held weights to body resistance exercise, like pushups or yogic arm-balance poses. Because the skeleton's job is to bear the entire weight of the body, lifting three-, five-, or even

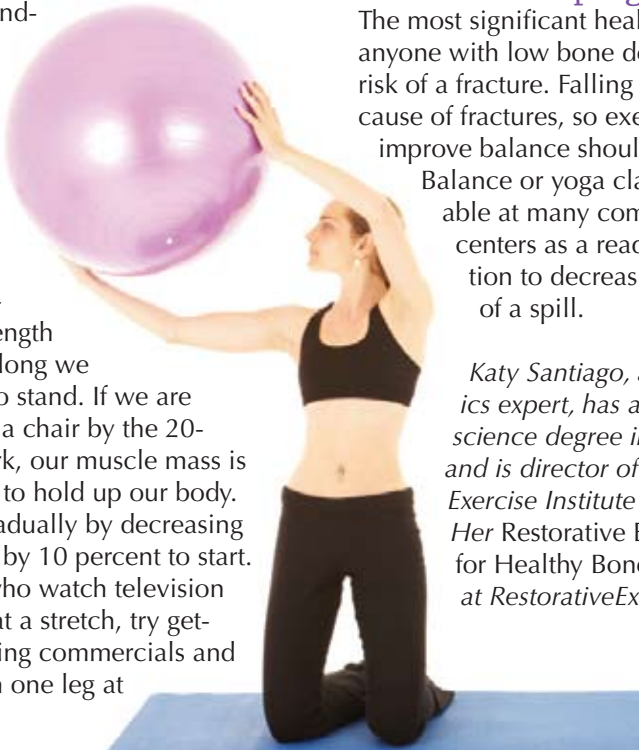
20-pound weights is not as beneficial to bone health as being naturally strong enough to carry your own body mass.

Weight-bearing specifically refers to how much body weight we are holding up while exercising. Thus, walking is more weight-bearing than bicycling, while swimming is the least weight-bearing, because water's natural buoyancy does most of the work.

Favor activities that get us on our feet to load up bones.

Ditch the exercise bike and go for a walk. Walk the golf course instead of getting a cart. If work requires sitting, take standing breaks, a nice change during long phone calls. Why not create a standing work center for a home or office computer?

A good way to test our weight-bearing strength is see how long we can stand to stand. If we are looking for a chair by the 20-minute mark, our muscle mass is insufficient to hold up our body. Improve gradually by decreasing sitting time by 10 percent to start. For those who watch television two hours at a stretch, try getting up during commercials and standing on one leg at a time.



Think heel-toe to heal too.

It's wise to opt for flats or negative-heeled footwear. Even one-inch high heels and cushioned sports shoes dampen the vibrations that naturally build bone density in the hips and spine.

How we walk also can signal problems that may be contributing to bone loss. Tight calf muscles, for example, change how a person's heels strike the ground while walking; this decreases the vibrations moving up the leg, meant to keep the bones of the hip joints and femurs strong.

Design a truly well-balanced program.

The most significant health risk for anyone with low bone density is the risk of a fracture. Falling is a common cause of fractures, so exercises that improve balance should top the list.

Balance or yoga classes are available at many community fitness centers as a ready-made solution to decreasing risks of a spill.

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