



Exercising with Osteoporosis: Protect Your Bones While Improving Fitness

Women are advised to do weight-bearing exercise to keep their bones strong, but if you have osteoporosis, you may be afraid to exercise, since you are at greater risk of bone fractures.

Don't worry. "Appropriate regular exercise won't hurt you; in fact, it can help you maintain the bone you have and strengthen the muscles around the bone. If your muscles can support you, your bones will be under less pressure, and they won't have to work as hard," says Anna Ribaudó, DPT, an advanced clinician in the Integrative Care Center at the Weill Cornell-affiliated Hospital for Special Surgery.



Know your bone density. Before starting any exercise program for osteoporosis, talk with your doctor," advises Ribaudó. "You may need tests, including a bone density measurement and/or a fitness assessment." A bone density test will tell you which part of your body is most affected by bone loss. This will help guide your fitness program.

"If, for example, you know that your spine is more affected than your wrist, you'll want to be more cautious with sit-ups or exercises such as touching your toes that

involve bending over at the waist," Ribaudó explains. "By contrast, if your wrist is more affected, you'll probably want to be more cautious with exercises like pushups."

Strength, flexibility, stability, balance. To build strength and stamina and optimize your ability to function, your workout routine should include strength training—especially for the back—with free weights, weight machines, or resistance bands; weight-bearing activities such as walking, hiking, or dancing; flexibility exercises to

improve range of motion; and stability and balance exercises (standing on one leg, for example) to help you avoid a fall that can lead to a fracture, Ribaudó says.

"Exercises that improve overall posture by strengthening the muscles of your upper back between your shoulder blades are especially important." You also need to stretch and strengthen the muscles around your spine, and your abdominals, gluteal muscles, hamstrings, quadriceps, and calves.

Ribaudó advises working with a physical therapist, personal trainer, or other experienced fitness professional to learn how to do

exercises properly before trying them on your own.

"Walking as little as three to five miles a week can help build bone. But for overall health, most experts recommend that you do at least a half hour of moderate exercise five times a week—although 45 minutes to an hour five times weekly is better," Ribaudó says. Flexibility, balance and weight-bearing exercises can be done daily. Warm up before you stretch, and avoid stretches that cause you to flex your spine or bend at the waist.

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Do full-body weight training on alternate days, or do weight training on consecutive days, working different muscle groups (e.g., upper or lower body) on each day.

Finally, avoid high-impact exercises, like high-intensity aerobics and jumping rope, that involve

running and jumping that can compress the spine and lower extremities and can lead to fractures in weakened bones. Also refrain from sports that involve twisting, such as golf or tennis. 🏏

FOOD SOURCES OF VITAMIN D		
Food	Serving Size	Vitamin D (IUs)
Salmon, sockeye, cooked	3 oz	794
Tuna, light, canned in water	3 oz	154
Sardines, canned in oil	3 oz	164
Pacific rockfish, cooked	3 oz	262
Herring	3 oz	96
Flounder or sole, cooked	3 oz	103

FOOD SOURCES OF CALCIUM		
Food	Serving Size	Calcium (mg)
Yogurt, plain, low-fat	1 cup	415
Sardines, canned in oil, with edible bones	3 oz	324
Cheddar cheese	1 ½ oz	306
Milk, nonfat	1 cup	302
Spinach, cooked	1 cup	291
Cottage cheese, low-fat	1 cup	206
Salmon, canned, with edible bones	3 oz	181
Chinese cabbage (bok choy), cooked	1 cup	158

WHAT YOU CAN DO

To keep your bones healthy:

- Get adequate calcium (1,200 milligrams) and vitamin D (600 International Units [IU] for people ages 50-70; 800 IU for those over age 70) daily.
- Exercise regularly, at least 30 minutes a day, five days a week.
- Attain and maintain a normal weight and body mass index for your height to avoid overloading your joints.
- If you smoke, quit.