



Menopause & Bone Loss

HOW ARE BONE LOSS AND MENOPAUSE RELATED?

Throughout life your body keeps a balance between the loss of bone and the creation of new bone. You reach your highest bone mass (size and density) at about age 30. Then, sometime between age 30 and 35, your body begins to lose bone faster than it can be replaced.

Menopause—the time when menstrual periods end, which usually happens in your late forties or early fifties—dramatically speeds up bone loss. After menopause your ovaries stop producing the hormone estrogen, which helps to keep your bones strong. Even during perimenopause (the period of 2 to 8 years before menopause), when your periods start to become irregular, your estrogen levels may start to drop off and you could start to lose bone more rapidly.

Over time, this bone loss can lead to osteopenia (low bone mass) or even osteoporosis, a condition in which bones become weak and are more likely to break (fracture).

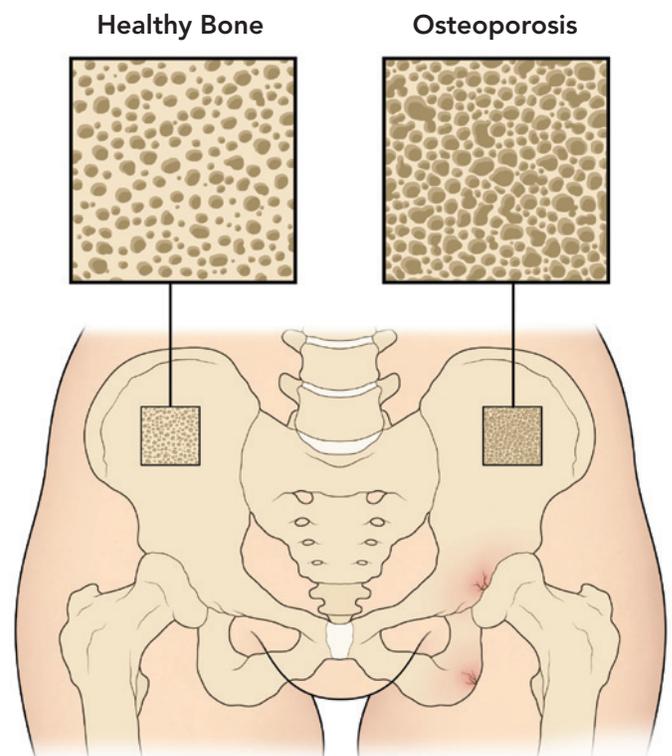
DID YOU KNOW?

Menopause can increase bone loss, but you can do things to help keep your bones strong. The sooner you take steps to prevent bone loss, the lower your risk of osteoporosis later in life.

WHO IS AT RISK FOR BONE LOSS?

Your risk of bone loss is higher if you have a family history of osteoporosis, or if you are

- White or Asian
- Thin or have a small frame
- Taking steroid medications (such as prednisone or cortisone)
- Eating a diet low in calcium and vitamin D
- Getting little or no exercise
- Smoking cigarettes
- Drinking too much alcohol



If you are skipping menstrual periods, have had both ovaries surgically removed, or are postmenopausal (the time after menopause; especially past the age of 65), you are also at risk for bone loss.

HOW DO YOU KNOW IF YOU HAVE BONE LOSS?

To measure the strength of your bones, your doctor may do a bone density test (DEXA scan). This test gives exact measurements of the density (or thickness) of the bone in the spine, hip, and sometimes forearm.

HOW DO YOU MINIMIZE AND TREAT BONE LOSS?

Diet and lifestyle can help prevent and treat bone loss. Successful treatment of osteoporosis, however, usually involves a combination of dietary supplements, lifestyle changes, and medication.

- **Calcium.** All women beginning at about age 30 or 35 should get 1,200 mg of calcium each day. At age 50 (when menopause typically begins), women should get 1,200 to 1,500 mg of calcium each day. To get enough calcium, you should eat a well-balanced diet, including dairy products rich in calcium, and take a daily calcium supplement if necessary.
- **Vitamin D.** Your body needs vitamin D to absorb calcium and move it into bone. Sunlight produces vitamin D in the skin. The main food sources are milk and cereals enriched with vitamin D, egg yolks, salt-water fish, and liver. Some calcium supplements and most multivitamin tablets contain vitamin D. Adults under the age of 50 should get 800 IU (international units) of vitamin D each day. Adults over the age of 50 need 800 to 1,000 IU daily.
- **Exercise.** Bones remain stronger if you use them in daily weight-bearing activities such as walking or lifting weights. Lack of exercise increases the speed of bone loss after menopause. At least 20 minutes a day of exercise can reduce bone loss.

WHO SHOULD BE TESTED FOR BONE LOSS?

- All women age 65 or older (even if you don't have risk factors)
- All postmenopausal women under age 65 who have one or more risk factors (other than being white or Asian)
- All postmenopausal women who have had a fracture

- **Medications.** Several medicines can help prevent or even reverse osteoporosis. These medicines can be used in addition to calcium, vitamin D supplements, and exercise:
 - Bisphosphonates (alendronate, risedronate, ibandronate, and zoledronic acid)
 - Raloxifene
 - Hormone therapy (estrogen only, or, if you have a uterus, combined estrogen plus progestin) in some women for short intervals
 - Human parathyroid hormone (teriparatide) for severe osteoporosis
 - Calcitonin

All of these medicines are effective, but they may have side effects. Your doctor will work with you to find the best treatment option for you.

Questions to ask your doctor

- Am I at risk for osteoporosis?
- How often should I have a bone density test?
- Should I take calcium and vitamin D supplements? How much do I need?
- Do I need medication for my bone loss?
- What else can I do to keep my bones strong?
- Should I see an endocrinologist?

RESOURCES

- Find-an-Endocrinologist: www.hormone.org or call 1-800-HORMONE (1-800-467-6663)
- The National Institutes of Health Osteoporosis and Related Bone Diseases National Resource Center: www.niams.nih.gov/Health_Info/Bone/Osteoporosis/overview.asp
- MedlinePlus (National Institutes of Health): www.nlm.nih.gov/medlineplus/osteoporosis.html
- National Osteoporosis Foundation: www.nof.org
- Mayo Clinic: www.mayoclinic.com/health/osteoporosis/DS00128

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The Hormone Health Network offers free, online resources based on the most advanced clinical and scientific knowledge from The Endocrine Society (www.endo-society.org). The Network's goal is to move patients from educated to engaged, from informed to active partners in their health care. This fact sheet is also available in Spanish at www.hormone.org/Spanish.

