

BONE HEALTH – What every woman should know

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What is Osteoporosis?

“Osteo” means *bone* and “porosis” means porous. Throughout your life, your bones go through bone-building cycles, in which old bone is broken down and new bone is formed. Bone density decreases when an imbalance in this cycle causes more bone to break down than is replaced. When you have lost 20% of your bone mass, you have osteoporosis.

Osteoporosis is often called a “silent disease” because there are no symptoms, so you can’t feel your bones becoming weak. Sometimes women will not know they have thinning bones until a bone breaks.

Your Bones Are Actually Alive

Between the ages of 25 and 35, bone mass usually peaks, but after the age of 35, women can lose bone – a loss that tends to accelerate after menopause. The good news is that it’s possible to reverse bone loss and make your bones stronger.

Age 35 to Menopause – Bone mass slowly declines. Gradually, your body starts to lose more bone than it makes.

At Menopause – The female hormone estrogen helps women maintain bone strength, but levels decline at menopause. As estrogen decreases, bones may become thinner and weaker.

Later in Life – Your body may still continue to lose bone, increasing your risk for fracture. Once too much of it is lost, you have osteoporosis.

Understanding Your Risk Factors

Because bone loss usually occurs without symptoms, it’s important to understand the factors that can contribute to thinning bones. The National Osteoporosis Foundation has a list of common risk factors for women.

Risk Factors for Osteoporosis and Osteoporotic Fracture

- Caucasian (white) or Asian descent. (Although these races are at a higher risk, all races and ethnic groups are at risk for low bone mass and osteoporosis)
- Family history of osteoporosis.

- Broken bones from a minor injury.
- A thin or petite build.
- Certain medicines, such as steroids (for asthma or arthritis) or too much thyroid hormone.
- Smoking.
- Having several caffeinated drinks or alcoholic beverages a day.
- Too little calcium or vitamin D.
- Infrequent exercise.

Even if you don't have these risk factors, you may still develop bone loss and osteoporosis. Fortunately, there is a simple test called a bone mineral density (BMD) test that will help you find out if you have thinning bones.

The BMD Test. Simple. Quick. Painless.

A bone mineral density (BMD) test will tell you and your doctor whether you have low bone mass or osteoporosis. Compared to many tests women take, a BMD test is simple – most of the time, you won't even have to undress. And the test is usually over in a matter of minutes.

How the testing is done? - Some tests use sound waves. Others use small amounts of radiation to determine the thickness or density of bones. Bone density tests are safe, painless, and easy. Your doctor can answer questions you have about the BMD test.

Two types of BMD tests. Peripheral machines measure such sites as your finger, wrist, or heel. Central machines measure your hip, spine, or total body. Both tests are simple and painless.

Who Should Get Tested?

The National Osteoporosis Foundation offers the following recommendations for those who should receive a BMD test:

- All women over age 65 – (If you are over age 65 and qualify, Medicare may cover the cost of your bone density test).
- Postmenopausal women with fracture.
- Women who are considering therapy for osteoporosis, if a BMD test would facilitate the decision.
- Women who have been on hormone replacement therapy for prolonged periods of time.

Your T-score

What it means:

0 to – 1.0	Bone mass is normal
- 1.0	Bone mass is 10% below normal
- 1.5	Bone mass is 15% below normal
- 2.0	Bone mass is 20% below normal

You are considered osteoporotic if your bone mass is at least 20% below normal. That's why it's important to talk to your doctor about your T-score.

Take Good Care of Your Bones

If you've been diagnosed with thinning bones, it's important to pay special attention to your diet, calcium, vitamin D intake, and exercise. Although these alone may not prevent or reverse the process of thinning bones, they are important steps to help maintain overall bone health.

Calcium and Vitamin D

Calcium helps keep your bones strong, and vitamin D helps you absorb the calcium. If you're past menopause, or over age 65, you'll need to take in 1,500 milligrams of calcium a day. If you're taking estrogen, you'll need 1,000 milligrams of calcium a day.

Calcium Tips

- Avoid eating too many foods with a lot of protein or salt. Large amounts of these foods can make your body lose calcium.
- If dairy products upset your stomach, try other foods rich in calcium like broccoli or tofu.
- Look for foods that have added calcium, such as orange juice, cereal, or bread.
- Your body needs vitamin D to help absorb calcium. Make sure you're getting 400-800 IU (International Units) of vitamin D daily.

Exercise: Physical Activity Contributes to Bone Health

Just like muscle, bone is living tissue that responds to exercise by becoming stronger. On the other hand, a lack of physical exercise, especially as you get older, may contribute to lower bone mass.

Two types of exercises are important for building and maintaining bone mass:

- Weight-bearing exercises such as jogging, walking, dancing, or those in which your bones and muscles work against gravity.

- Resistance exercises, such as weight training, help maintain bones by strengthening the muscles around them.

The amount and type of activity you do plays a part in keeping your bones healthy and strong. Vary your activities so you exercise all parts of your body. And as always, talk to your doctor before starting any exercise program.

Living With Osteoporosis

If You've been diagnosed with osteoporosis or thinning bones, keep these tips in mind –

- Choose a healthy lifestyle – Diet and exercise are important factors in the health of your bones. Smoking and drinking too much alcohol or caffeine can contribute to bone loss. If you are experiencing bone loss, you may want to reduce or stop these habits.
- Know the effects of medication – Some medicines can contribute to bone loss, such as hydrocortisone and prednisone (used for such conditions as arthritis, asthma, and certain skin disorders). If you take these medicines, ask your doctor about bone-related side effects.
- Monitor your progress – your doctor will determine if follow-up BMD tests can help keep track of your bone health.
- Commit to taking of diet, exercise, and prescription therapy that can help keep your bones healthy and reverse bone loss.

What About Men?

Osteoporosis is not strictly a women's disease, though it is less common in men. Men naturally have larger, stronger bones than women, and their bone loss generally starts later life.

Today, 2 million men in the United States have osteoporosis, and another 12 million are at risk

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Source - Merck & Co., Inc. – 2003.