

# Osteoporosis and Low Bone Mass

## What Is the Difference and What Can I Do?

### Do you know that building strong bones is a lifestyle commitment?

**The more you know about diet, exercise, and your family genes, the stronger your bones can become.**

- Bone is a living tissue that breaks down and rebuilds itself.
- Calcium makes bone dense (hard and strong).
- Some families have denser bones than others. Your family genes help determine your peak bone mass, which is the greatest amount of bone you will ever have.
- Up until young adulthood, you form new bone faster than you lose old bone. By 25 years, you reach peak bone mass.
- Achieving a greater peak bone mass will increase the “bank” of calcium that your body may draw on throughout your life. If your body uses more calcium than what is available in your bones, your bone density may shrink and your bones may become thinner and weaker. This is why it’s important for children to be active and to eat healthy foods to develop strong bones.

### What is the difference between osteoporosis and low bone mass?

- Osteoporosis is a bone-thinning disease. It causes your bones to become thin and weak. They are at greater risk for breaking. A broken bone may happen even from falling from a standing position.
- Osteopenia (low bone mass) is not a disease. A person may have low bone mass at any age but not develop osteoporosis. However, if a person has low bone mass and continues to lose bone density, this may lead to osteoporosis. A combination of low bone mass and a risk factor for fracture may increase your risk for broken bones, too.
- Osteoporosis and broken bones do not need to be a normal part of aging. You can help have stronger bones later in life by eating healthy and staying physically fit especially up to age 25. While bone loss is expected as we age, the rate of loss varies among people. Bone loss can be impacted by family genes and lifestyle choices.

### How is osteoporosis and low bone mass diagnosed?

**You cannot see or feel your bones thinning or growing weaker. Health care providers use a Bone Mineral Density (BMD) test to evaluate if you have osteoporosis and bone density issues. The BMD test determines the calcium and phosphorus in your bones. The BMD test is recommended if:**

- Women or men who have broken bones, with or without trauma after age 50
- All women 65 and older
- All men 70 and older
- Women younger than 65 who have reached menopause and have risk factors for osteoporosis
- Men age 50 to 69 with risk factors for osteoporosis

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## **BMD testing uses a low dose X-ray of the hip and spine. The X-ray is quick, painless and measures the density or thickness of your bones.**

BMD testing provides a T-score that compares your bone density to the average bone density of young healthy adults of same age and gender.

<b>T-score</b>	<b>Interpretation</b>
>-1.0	Normal Bone Density
Between -1.0 and -2.5	Low Bone Mass (Osteopenia)
-2.5 and below	Osteoporosis

## **How can I have strong bones if I have low bone mass or osteoporosis?**

### **You can make lifestyle choices that promote strong bones at any age:**

- Eat a nutrient-rich diet. Nutrient-rich foods are low in sugar, sodium, starches, and bad fats. Healthy food choices include: fruits and vegetables, lean meat, fish, whole grains, dairy, legumes, nuts, and seeds.
- Try and get your calcium through foods. Add a supplement only if necessary.
- Get the recommended amount of vitamin D. For many people, this often requires a supplement.
- Be physically active every day. Consider regular exercise, such as strength training, yoga, walking, recreational sports, and dancing.
- Don't smoke and quit if you do.
- Limit drinking alcohol.
- Improve your strength, flexibility, and balance to prevent falls.
- Make your home safe to prevent falls. Consider removing scatter rugs and installing grip bars in the shower.
- Discuss your bone health with your health care provider.

### **Are there medications and treatments for osteoporosis or low bone mass?**

- If your BMD test confirms you have osteoporosis, your health care provider may prescribe a medication. Low bone mass needs to be watched, but often does not need to be treated. If you have low bone mass along with a bone fracture or any significant risk for osteoporosis, your health care provider may recommend a medication.
- Many FDA-approved medications may reduce bone loss and fracture, as well as increase bone density. Discuss all of the potential benefits and risks before taking any osteoporosis medication with your health care provider.
- Repeating the BMD tests may be one way to monitor how your bones have responded to treatment. Your health care provider may also use blood tests to monitor the effectiveness of the treatments.