



FREQUENTLY ASKED QUESTIONS

FAQ048

WOMEN'S HEALTH

Osteoporosis

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What is osteoporosis?

Osteoporosis is a condition in which the bones become thin, brittle, and weak. These changes can increase the risk of fractures. Fractures can lead to disability. Fractures caused by osteoporosis have been linked to an increased risk of death.

Is osteoporosis more common in women or in men?

Osteoporosis occurs five times more often in women than in men.

What are some risk factors for osteoporosis?

The following factors cause or contribute to osteoporosis and fractures:

- Certain medications
- Diseases such as **inflammatory bowel disease**, **rheumatoid arthritis (RA)**, and **lupus**
- Low **calcium** intake
- Vitamin D insufficiency
- Excess vitamin A
- High caffeine intake

- High salt intake
- Aluminum (in antacids)
- Alcohol (three or more drinks per day)
- Not getting enough physical activity or being immobile
- Smoking (including secondhand smoke)
- Falling
- Being thin

What is the link between osteoporosis and menopause?

Estrogen, a female **hormone**, protects against bone loss. After **menopause**, the **ovaries** produce very little estrogen. This decrease in estrogen triggers a period of rapid bone loss in women that starts 1 year before the final menstrual period and lasts for about 3 years. The natural effects of aging on bones may contribute to this bone loss as well.

What are some symptoms of osteoporosis?

Osteoporosis may not cause any symptoms for decades. However, some signs and symptoms do occur as the disease progresses. As the spinal bones (**vertebrae**) weaken, they can fracture. Fracture in the front part of the spinal bones can result in loss of height or a slight curving of the spine. This type of spinal fracture often causes no pain. Sometimes, fractures of the spine can cause pain that travels from the back to the sides of the body.

What is a bone mineral density test?

In a bone mineral density (BMD) test, bone density is measured at the heel, spine, hip, hand, or wrist. Several types of BMD tests are available. The most common method for measuring BMD is a DEXA scan.

Who should have a bone mineral density test?

All women aged 65 years or older should have a BMD test. Women who are younger than 65 years and past menopause should have a BMD test if they have had a bone fracture because of fragile bones or have other risk factors for osteoporosis, such as rheumatoid arthritis, smoking, alcoholism, a history of hip fracture in a parent, or a body weight less than 127 pounds.

How is a DEXA scan done?

During a DEXA scan, you lie down for 3–10 minutes while a machine scans your body. With this test you are exposed to a small amount of radiation—less than the amount in a normal chest X-ray.

What do DEXA scan results mean?

After the test, a T-score is given for each site measured. A negative score means that you have thinner bones than an average 30-year-old woman. A positive score means that you have stronger bones than an average 30-year-old woman. If the T-score at any site is -1 to -2.5, you have a low BMD and are at increased risk of osteoporosis. A score of -2.5 or lower means that you have osteoporosis. Treatment usually is recommended to prevent fractures.

How often should I have a bone mineral density test?

How often you should have your BMD measured depends on your age and results of your previous DEXA scan. Women 65 years and older with normal bone mass or mild bone loss can have a test every 15 years. More frequent testing is recommended for women in this age group with T-scores between -1.5 and -2.49.

What is FRAX?

FRAX is a tool used to estimate fracture risk. This computer program helps predict the risk of having a fracture within the next 10 years in women aged 40 years and older who are not taking prescription osteoporosis drugs.

How does FRAX estimate fracture risk?

FRAX takes into account your age, sex, **body mass index (BMI)**, smoking, alcohol intake, and other risk factors for osteoporosis. Treatment is recommended if FRAX shows that you have a 3% risk of hip fracture; a 20% risk of a major osteoporotic fracture (fracture of the forearm, shoulder, or spine); or both. FRAX also is used to decide whether women younger than 65 years should have a DEXA test.

What treatment is available for osteoporosis?

Various medications are used to treat osteoporosis and help reduce the risk of fractures. Some can be used for prevention.

How can osteoporosis be prevented?

Lifestyle plays a key role in preventing osteoporosis. Exercise, a healthy diet, and not smoking can help keep your bones strong and healthy throughout your life.

When is the best time to start taking care of my bones in order to prevent osteoporosis?

It is never too early to start thinking about bone health. Focus on building and keeping as much bone as you can through exercise, good nutrition, and staying healthy.

How can exercise help prevent osteoporosis?

Exercise increases bone mass before menopause and slows bone loss after menopause. Bone is living tissue and exercise makes it grow stronger. The Centers for Disease Control and Prevention recommend that healthy adults get 150 minutes of exercise a week, which works out to be about 30 minutes on most days of the week.

What types of exercises help prevent osteoporosis and bone fracture?

Weight-bearing exercises can help keep bones strong. Weight-bearing exercises are activities that are performed while standing and that require your muscles and bones to work against gravity. An example is brisk walking. Non-weight-bearing exercises, such as Tai Chi, Yoga, and Pilates, can build endurance and improve balance and posture, thereby reducing your risk of falls. Strength training also is good for bones. In this type of exercise, muscles and bones are strengthened by resisting against weight, such as your own body, an exercise band, or handheld weights.

How do calcium and vitamin D help build healthy bones?

Calcium is important to building and maintaining healthy bones. Vitamin D helps the body absorb calcium. Many people do not get enough calcium from food. To increase your daily levels of calcium, eat a variety of calcium-rich foods. Good sources of calcium include dark, leafy greens, like spinach, kale, and collards; dairy foods, such as yogurt, milk, and cheese; and canned fish with soft bones, including salmon and sardines. You can increase your intake of vitamin D by eating foods fortified with vitamin D (orange juice, cereal, and milk). You also can get vitamin D by being in the sun for 15 minutes a few days a week.

Glossary

Body Mass Index (BMI): A number calculated from height and weight. BMI is used to determine whether a person is underweight, normal weight, overweight, or obese.

Calcium: A mineral stored in bone that gives it hardness.

Hormone: A substance made in the body that controls the function of cells or organs.

Inflammatory Bowel Disease: The name for a group of diseases that cause inflammation of the intestines. Examples include Crohn's disease and ulcerative colitis.

Lupus: An autoimmune disorder that causes changes in the joints, skin, kidneys, lungs, heart, or brain.

Menopause: The time when a woman's menstrual periods stop permanently. Menopause is confirmed after 1 year of no periods.

Osteoporosis: A condition of thin bones that could allow them to break more easily.

Ovaries: Organs in women that contain the eggs necessary to get pregnant and make important hormones, such as estrogen, progesterone, and testosterone.

Rheumatoid Arthritis (RA): A chronic disease that causes pain, swelling, redness, and irritation of the joints and changes in the muscles and bones. The condition can become more severe with time.

Vertebrae: Bones of the spine.

If you have further questions, contact your obstetrician–gynecologist.

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