

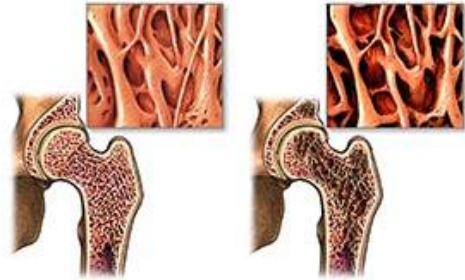
Osteoporosis

What is osteoporosis?

Osteoporosis is a long-term medical condition that causes your bones to become weak, brittle, and more likely to fracture. Osteoporosis occurs when your body absorbs more bone than it makes. It is also caused by a lack of calcium and estrogen (female hormone).

What increases my risk for osteoporosis?

- Age older than 35
- Low estrogen levels
- Female gender
- Alcohol, tobacco, or caffeine
- Lack of calcium and vitamin D in your foods
- Lack of exercise
- Some illnesses, such as thyroid diseases, bone cancer, and long-term lung diseases
- Certain medicines, such as steroids, anticonvulsants, and blood-thinners



What are the signs and symptoms of osteoporosis?

You may not have any signs or symptoms. You may break a bone after a muscle strain, bump, or fall. A break usually occurs in the hip, spine, or wrist. A collapsed vertebra (bone in your spine) may cause severe back pain or loss of height from bent posture.

How is osteoporosis diagnosed?

- **Blood and urine tests** measure your calcium, vitamin D, and estrogen levels.
- **An x-ray** may show a fracture or collapsed vertebra.
- **A bone density test** compares your bone thickness with what is expected for someone of your age, gender, and ethnicity.
- **A CT scan**, or CAT scan, is a type of x-ray that uses a computer to take pictures of your bones. The pictures may show thinned bones or a fracture. You may be given contrast dye to help your bones show up better in the pictures. Tell the caregiver if you have ever had an allergic reaction to contrast dye.

How is osteoporosis treated?

Medicines may be given to prevent bone loss, build new bone, and increase estrogen. These medicines help prevent fractures and may be given as a pill or injection.

There are many proven treatments that can help improve Bone Mineral Density and reduce your risk of fractures. Common treatments for men include:

- **Bisphosphonates:** alendronate, risedronate

- **Intravenous bisphosphonates:** ibandronate, pamidronate, zoledronic acid

Other treatment types include:

- **Denosumab:** human monoclonal antibody
- **Teriparatide:** an anabolic agent
- Strontium ranelate

Testosterone therapy for osteoporosis is effective in men with androgen deficiency. Not all medications are approved in all countries.

Make sure you comply with your prescribed treatment regimen and if you're concerned about any side effects, speak to your Healthcare Professional. Because the benefits of treatment are not always evident, many patients stop taking their medication – don't let that happen to you. By continuing on treatment you can protect your bones and avoid damaging and potentially life-threatening fractures.

How can I help prevent bone loss?

- **Eat healthy foods that are high in calcium.** This helps keep your bones strong. Good sources of calcium are milk, cheese, broccoli, tofu, almonds, and canned salmon and sardines.

Make dairy foods your friend:

- 1 yoghurt or a glass of milk ca. ¼ of your daily calcium requirements
 - 1 large milkshake ca. of your daily calcium requirement
 - Cheeses are rich in calcium – especially parmesan, cheddar and mozzarella
 - A bowl of cereal with milk is a good breakfast option
 - Boost your intake by choosing Caffè Latte instead of regular coffee
- **Increase your vitamin D intake.** Vitamin D is in fish oils, some vegetables, and fortified milk, cereal, and bread. Vitamin D is also formed in the skin when it is exposed to the sun.
 - **Drink liquids as directed.** Ask your caregiver how much liquid to drink each day and which liquids are best for you. Do not have alcohol or caffeine. They decrease bone mineral density, which can weaken your bones.
 - **Exercise.** Exercise can help build and strengthen bone. Regular weight-bearing and muscle-strengthening exercises are beneficial at all ages and important for maintaining strong bones and muscles. Examples include jogging, hiking, brisk walking, stair climbing, 50 jumps or rope skipping. Weight bearing exercises should be performed for at least 30 minutes, 3-5 days per week.
 - **Do not smoke.** If you smoke, it is never too late to quit. Smoking can increase your risk for osteoporosis.
 - Maintain a healthy weight. If you are underweight (BMI <20) you are at increased risk of fracture

When should I contact my caregiver?

- You have pain when you do your daily activities.
- You have questions or concerns about your condition or care.

When should I seek immediate care?

- You have severe pain in your chest, back, bones, muscles, or joints.
- You have increasing pain after a fall.

Reference:

1. Micromedex's Care Note Systems
2. <http://www.worldosteoporosisday.org/5-steps-better-bone-health>