

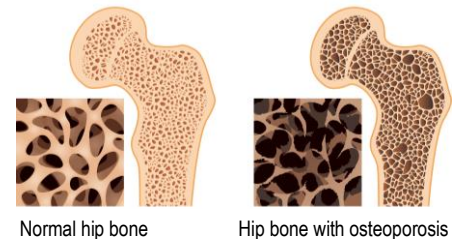
Osteoporosis vs. Osteoarthritis



Sometimes patients mix up *osteoporosis* with *osteoarthritis*, when in fact they are two different conditions. Here are some Q&As about these two conditions to highlight their similarities and differences. Click and follow various links provided throughout this PDF in blue font, to learn more from other reputable sources.

What is osteoporosis and osteoarthritis?

Osteoporosis results from gradual loss of the material that makes up the bones. This material is mainly composed of minerals (e.g., calcium, phosphorus, etc.) and proteins (e.g., collagen). When bones lose this material, such as with aging, they become less dense and more fragile. At first, the gradual bone loss may not cause any problems, and eventually it can make bones so fragile that they break even during a minor injury.



Osteoarthritis involves gradual wearing away of the tissue that covers the ends of the bones, where they meet at a joint. This layer is known as cartilage, and it protects the bones as we move our joints. The wearing-away of the cartilage injures the bones and causes inflammation. At first, this leads to occasional pain, stiffness and swelling in the affected joints, and eventually these symptoms can worsen and become more constant.



Why do osteoporosis and osteoarthritis tend to get confused?

Both conditions have the same prefix in their name – “oste” – which means “bone”, but they have a different root in their name: “porosis” which means “porous”, and “arthritis” which means “joint inflammation”. Both conditions affect the bone, but as explained above, in different ways. Finally, both are common age-related conditions that some people experience simultaneously and sometimes mix them up. However, many people experience only one condition or neither condition.

Do osteoporosis and osteoarthritis have different symptoms?

Osteoporosis is sometimes called the “silent thief”, because the loss of the material that makes up the bones initially happens without noticeable symptoms. However, once a significant amount of bone material is lost, bones become obviously fragile and prone to sustaining osteoporotic fracture(s). As such, it is often not until an osteoporotic fracture happens that a person becomes aware of having osteoporosis. Because of its silent nature and because bone loss increases with aging, regular [bone density testing](#) is recommended after age 65 to help monitor osteoporosis before and after it develops.

Osteoarthritis does not cause fractures and it is not a ‘silent thief’. It is typically accompanied by noticeable symptoms that include joint pain, stiffness and swelling. Initially, these symptoms may be occasional, and can be mistaken for overuse or sports injuries. However, as the cartilage continues to get worn-away, these symptoms become more frequent and severe. The joints most commonly affected by osteoarthritis include the hips, knees, hands, and spine joints.

What's an osteoporotic fracture?

Osteoporotic happen due to a minor injury, such as tripping while walking or falling from a chair.

Only a serious injury should cause a fracture, but because of the bone loss that makes bones fragile, osteoporotic fractures can happen due to a minor injury.

Some of the most common osteoporotic fractures are hip, spine, wrist, arm and rib fractures.

Osteoporotic fractures are the hallmark of osteoporosis.



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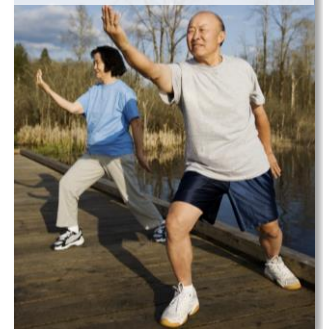
Can osteoporosis and osteoarthritis be prevented?

Both, osteoporosis and osteoarthritis are age-related conditions that result from physical and hormonal changes that occur with aging. As such, they may not be fully preventable. However, the **progression of osteoporosis and osteoarthritis can be slowed down by looking after the bones and joints**. Slowing down the progression is important for helping prevent the more serious outcomes of osteoporosis – i.e., hip and spinal fractures – and osteoarthritis – i.e., severe, constant pain.

To look after your bones, consider the following strategies: getting adequate daily intakes of [vitamin D](#) and [calcium](#); participating in [regular weight-bearing and balance exercises](#); getting educated about [falls prevention](#); eliminating unhealthy behaviours that can increase bone loss, like smoking and excessive alcohol consumption; and gaining body weight, if you are underweight.

To look after your joints, consider the following [strategies](#): losing body weight, if you are overweight; participating in [regular](#) exercise that improves flexibility and strengthens the surrounding muscles of the joint; and using assisted devices (cane, walker), orthoses (orthotics, splints, braces) and hot/cold therapy.

Tai chi is a good exercise choice for people with osteoporosis or osteoarthritis



How can doctors help manage osteoporosis and osteoarthritis?

Doctors can guide patients as to how to best look after their bones and joints through the strategies outlined above. Doctors can also prescribe medications or other treatments to help manage [osteoporosis](#) or [osteoarthritis](#). However, **the key to an effective management of either one of these conditions lies in getting it detected early**.

Osteoporosis management: To detect osteoporosis early on, a [bone density test](#) can be ordered by a family doctor for anyone aged 65 and older or anyone aged 50-64 who have [risk factors for osteoporosis](#). The bone density test helps determine how much bone loss has occurred and how fragile are someone's bones. If the bone loss is caught early on, the family doctor can help look after the bones through the strategies outlined above. If too much bone loss has occurred, the family doctor can prescribe osteoporosis medications, which help reduce an individual's chance of sustaining osteoporotic fracture(s) by 25-50%, by slowing down the bone loss. If an osteoporotic fracture has occurred, [orthopedic specialists](#) can help with fracture healing and [osteoporosis specialists](#) can help with managing osteoporosis and preventing subsequent fractures.

Osteoarthritis management: To detect osteoarthritis early on, the family doctor will review your history, do a physical exam and may order [imaging tests](#) to determine whether the joint pain is due to osteoarthritis or not. However, it is up to the patient to approach the family doctor early on, when the joint pain starts happening. Once osteoarthritis is confirmed, the family doctor can help look after the joints through the strategies outlined above. The family doctor can also recommend taking over-the-counter pills or creams to reduce joint inflammation and pain. In more advanced stages, an [arthritis](#) specialist may be needed, who can: recommend assisted devices; prescribe stronger pain medications; give cortisone or lubrication injections to relieve joint pain; or order a joint replacement surgery to replace the damaged cartilage with plastic or metal parts.

