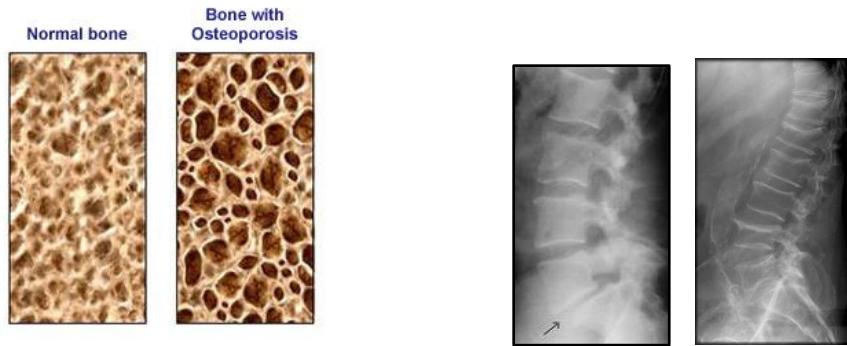


Weak, Thin Bones (Osteoporosis)?

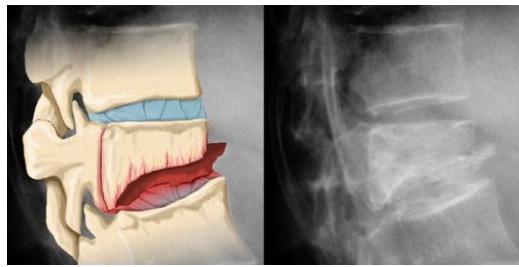
10 million Americans have osteoporosis and 34 million more have low bone mass, called osteopenia, according to the [National Osteoporosis Foundation](#). Bones are NOT dead sticks holding you up. Bones continually change throughout your life, with some bone cells dissolving and new bone cells growing back in a process called remodeling. With this lifelong turnover of bone cells, you replace most of your skeleton every 10 years!



Some pictures! For people with osteoporosis, bone loss outpaces the growth of new bone. Remember [Wolff's law](#)? (please review December 2012 blog on bone spurs). The idea of "if you don't use it, you lose it" applies to bone! If the loading on a bone decreases, the bone will become weaker due to lack of proper turnover, with decreased bony stimulus the [remodeling of bone](#) slows and new bone is not formed at the proper rate, so there is a net loss of bone mass.

Consequently bones become porous, brittle, and prone to fracture, (see picture comparison on upper left). Now look at an X-ray of the spine with normal bone density, (x-ray on left), and you see a dense matrix of bone cells or a whiter vertebral body. The arrow in the x-ray on the left is pointing to a degenerated disc, notice the decreased disc height and signs of degeneration (please review December 2012 blog on bone spurs).

Now look at the spinal x-ray on the right with osteoporosis, and you see mostly air (blackness or darkening). The bony matrix has mostly dissolved, you only see a thin white outline of each vertebra.



With the bone thinning you are at a higher risk of a [compression fracture](#), (see below).

Why does the bone thin? There are many reasons this can occur. Here is a list the primary culprits: [low estrogen levels in women](#), low testosterone in men, lack of calcium, lack of Vitamin D, sedentary lifestyle, smoking, and medications.

What to do?

Bone density: First get your [bone density](#) checked. Always think of prevention versus waiting for this to happen and then trying to correct the problem.

Stretching/exercise: Bones demand to be stressed to stay healthy. So daily activity, weight lifting, stretching, outdoor activities, all will help decrease your risk.

Proper nutrition: Make sure you get your proper amount of [Vitamin D](#) and [Calcium](#).

Chiropractic adjustments: Again routine care is the best way to maintain proper joint motion allowing. Proper joint motion will increase the effectiveness of the exercise and nutrition.