



Building Healthy Bones with Nutrition

Osteoporosis is the thinning of our bones as we age leading to fragility, loss of height from vertebral compression fractures and hip fractures. Bones are not static; they rely on a process involving a delicate balance of bone formation and breakdown to maintain a healthy state.

The process is in favor of bone formation up until the age of 30 to 40. After this point, the process tips in favor of bone breakdown, usually accelerating at menopause and andropause (male menopause). This is due to the decline of estrogen, progesterone and other hormones.

Risks for osteoporosis increase with age, sedentary lifestyle, smoking, alcohol use and a family history of osteoporosis. Illnesses like thyroid disease, diabetes, adrenal impairment, kidney disease, and rheumatoid arthritis also contribute to the risk. Additionally, medications such as prednisone, warfarin and anti-seizure medication add to this risk as well.

Current treatment involves bone density testing (DEXA scan), which looks at density of bone but not fragility. When thinning of the bones is detected, the common treatment is to prescribe medications such as Fosamax, Boniva or Actonel that work by inhibiting the osteoclast cells that normally gobble up old bone while leaving the osteoblast cells alone to do their job of making new bone. Treatment also includes supplementation with Calcium Citrate and Vitamin D.

What results is a gradual build up of bone density, as old bone does not break down as intended. These drugs stay in the bone for many, many years – thus the need for only once monthly or yearly dosing frequency. What is the alternative?

Our goal at Dr. Dan's is to rebuild existing living bone while normal remodeling (osteoblast building and osteoclast breaking down) of the bone continues uninterrupted. This results in increased bone density and increased tensile strength. To achieve this, we recommend specific essential nutrients and live active enzymes necessary for stimulating healthy bone growth.

It is common practice that a bone density test is done every 1-2 years. I recommend performing a bone density test prior to treatment and another at the normally scheduled time to determine if significant change has occurred as a result of treatment.

If patients have been taking bone medications prior to treatment, I also recommend performing a urine test prior to treatment and six months later to determine changes in bone medication levels.