

What is Osteoporosis and how can I prevent it?

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Osteoporosis or loss of bone density is often called the “silent disease” as early stages show no symptoms. Weakened bones are susceptible to dangerous fractures that decrease mobility and increase the risk of complication such as blood clots.

Throughout our lives, bone remodeling is a continuous cycle of breaking down old brittle bone and building new strong bone. Diet, mineral intake, hormonal fluctuations (menstrual irregularities, absence of menses or menopause) and exercise are factors that affect this process.

Nutrients needed for bone formation must be replenished by dietary intake. Calcium and magnesium are partners in bone mineralization and need Vitamin D for absorption.

Vitamin C, copper and manganese are essential to produce collagen protein for bones, ligaments, tendons and connective tissue. Boron and strontium help in preventing bone breakdown and increasing calcium deposition respectively.

In response to exercise and gravity, osteoblasts deposit mineral salts in bone. A sedentary lifestyle decreases this stimulation and contributes to bone breakdown.

Excessive protein (especially animal protein), low vegetable intake and stress contribute to tissue acidity. Calcium and other minerals are pulled from bone to buffer excess cellular acidity, further depleting bone density.

Preserving bone density requires the pro-active approach of a healthy lifestyle.

Diet: Eliminate foods that increase acidity -- excess protein, canned foods, soft drinks and concentrated sugars. Choose more fish, tofu, legumes and nuts as protein sources, include lots of fruits and vegetables to provide alkalizing minerals, and drink filtered water to flush acidic wastes through the kidneys. Drink vegetable juices and herbal teas instead of caffeinated beverages to prevent calcium urinary loss that is caused by coffee, black tea, chocolate and pop.

Digestion: The stomach produces hydrochloric acid which is needed to absorb calcium from foods. Herbal bitters, apple cider vinegar, lemon juice help increase stomach acid while lowering tissue acidity elsewhere. Healthy bowel flora increase calcium absorption and high fiber foods increase the growth of bowel flora.

Exercise and De-Stress: Be ACTIVE! Aim for 30 minutes of daily aerobic activity and strength training 3 times per week. Relaxation techniques produce a more alkaline internal environment.

Lab Tests: A *bone density scan* provides a baseline to initially assess bone density with monitoring scans recommended every 2-4 years. *NTX analysis* determines the rate of bone loss by testing urine for the protein released when bone breaks down. NTX is useful for early detection of bone loss and for monitoring the effectiveness of treatment programs. *Hair Mineral Analysis (HMA)* measures levels of the important bone-building minerals. Repeat HMA monitors how well a preventative program of dietary changes, mineral intake, stress reduction and organ support is doing.