## **Nutrition for Bone Healing**

Osteoporosis is a disease of progressive bone loss associated with an increased risk of fractures. It literally means "porous bone." The disease often develops unnoticed over many years, with no symptoms or discomfort, until a fracture occurs. One of the first places one may see the effects of osteoporosis is in the feet. A <u>stress fracture</u> in the foot is often the first sign.

## Include adequate amounts of protein, calcium and vitamin D in your diet.

Whatever your age or health status, you need protein and calcium to keep your bones healthy. **You should get a protein source 3X each day (breakfast, lunch and dinner)**. Increasing your intake of protein, calcium and vitamin D can help heal a broken bone and/or decrease your risk of future fracture.

Calcium continues to be an essential nutrient after growth because the body loses calcium every day. Although calcium can't prevent gradual bone loss after menopause, it continues to play an essential role in maintaining bone quality. How much calcium you need will vary depending on your age and other factors. The National Academy of Sciences makes the following recommendations regarding daily intake of calcium:

- Males and females 9 to 18 years: 1,300 mg per day
- Women and men 19 to 50 years: 1,000 mg per day
- Pregnant or nursing women up to age 18: 1,300 mg per day
- Pregnant or nursing women 19 to 50 years: 1,000 mg per day
- Women and men over 50: 1,200 mg per day

Dairy products, including yogurt and cheese, are excellent sources of **protein and calcium**. An eight-ounce glass of milk contains about 300 mg of calcium. Other calcium-rich foods include sardines with bones and green leafy vegetables, including broccoli and collard greens. Dietary supplements can help because it is difficult to consume adequate amounts from food alone. Talk to your doctor before taking a calcium supplement.

**Vitamin D** helps your body absorb calcium. The recommendation for vitamin D is 400 IU to 1,000 IU daily. Supplemented dairy products are an excellent source of vitamin D; a cup of milk contains 100 IU. Vitamin supplements can be taken if your diet doesn't contain enough of this nutrient. Sunshine is a natural source of Vitamin D and **15-20 minutes of sunshine daily** will boost your Vitamin D levels.

Your doctor may recommend up to 5000u Vitamin D3 daily during periods of bone healing (available over-the-counter at your pharmacy).

## **Exercise regularly**

Like muscles, bones need exercise to stay strong. No matter what your age, **exercise** can help you minimize bone loss while providing many additional health benefits. Doctors believe that a program of moderate, regular exercise (three to four times a week) is effective for the prevention and management of osteoporosis. **Weight bearing exercises** such as walking, jogging, hiking, climbing stairs, dancing, treadmill exercises, and weightlifting are probably best.

Falls account for 50 percent of fractures, so even if you have low bone density you can **prevent fractures if you avoid falls**. Programs that emphasize **balance training**, especially Tai Chi, yoga and the Feldenkrais Method, should be emphasized. Consult your doctor before beginning any exercise program.

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