Exercise and Nutrition Rx



Preventing and Reversing Osteoporosis

by Dan DeFigio, American Council on Exercise Faculty

By now, physicians realize that it takes more than calcium supplements for their patients to combat osteoporosis. A good calcium/magnesium/vitamin D mix, along with prescription bisphosphonate drugs, may slow the loss of bone over time, but in order to re-grow bone tissue, it is clear that more needs to be done. An effective osteoporosis prevention or reversal program should include the following elements:

Resistance Exercise. In case you didn't know, walking is not considered a weight-bearing exercise! In order to stimulate the osteoblasts to grow new bone tissue, the skeleton must be loaded in multiple directions. There are a half-dozen fundamental types of strength-training movements (typically performed with dumbbells) that will accomplish this. In addition to a weight training program that loads the skeleton, we will sometimes implement impact training (if appropriate) with our osteoporosis patients – ground reaction forces from higher-impact movements (such as hopping, or jumping jacks) greatly increase bone density.^{8,9}

Whole-Body Vibration. Performing standard exercise movements on a mechanical vibration platform has been proven to increase bone density more than the exercises alone. ^{1,2,3,4,5,6} We have been using WBV with our clients for over three years now, with excellent results.

Detailed Nutrition Counseling. As you know, calcium pills don't work by themselves. And the oxalates in common foods such as coffee, chocolate, soy, and spinach will impair calcium absorption. Don't forget that antacids and PPI medications will prevent a large portion of calcium carbonate's bioavailability. An effective nutrition supplementation program for osteoporosis should include additional forms of calcium (like citrate and gluconate), along with other required nutrients for bone formation -- magnesium, vitamin D, boron, vitamins K1 and K2, strontium, potassium, and others. Multi-nutrient synergy is essential for bone growth! We also work to reduce the osteoporosis patient's typical chronic acidosis, because this condition rapidly depletes the body's calcium stores. 10,11,12,13

Balance Training. Exercise is good for more than stimulating bone growth. A properly implemented exercise plan will include types of exercises that improve balance, mobility, and posture too. Balance exercise should be recommended to reduce the likelihood of falling.⁷

To learn more about Basics and Beyond's osteoporosis prevention and reversal program, telephone (615) 395-2500, or visit gettingfit.com.

Research Cited

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