

# Osteoporosis

By Steve Seater, CNC, CPT

[www.totalwellnessconcepts.com](http://www.totalwellnessconcepts.com)

Osteoporosis is a debilitating, costly and difficult to treat loss of bone density most often seen in white females, especially those with thin, small frames. Osteoporosis is responsible for more than 1.5 million fractures annually in the US. The condition occurs in both sexes as they age, but is much more prevalent in women. Known risk factors other than being white and female with small bones are as follows: A family history of osteoporosis, premature menopause, postmenopausal, history of anorexia or bulimia, prolonged amenorrhea, low calcium diet, lack of exercise, cigarette smoking, prolonged use of certain drugs, heavy alcohol use, and excessive caffeine consumption.

## **Detection of Osteoporosis:**

Osteoporosis generally has no symptoms, although loss of height and pain are often involved if fractures occur. It is best detected by bone densitometry. The best densitometry technique seems to be dual energy X-ray absorptiometry (DEXA)

## **Therapeutic Considerations:**

The primary underlying cause of osteoporosis is hormone imbalances that affect the bone-forming cells. Conventional physicians treat osteoporosis with various pharmaceuticals, but their favorite treatment for women is via hormone replacement therapy consisting of synthetic estrogen, called Premarin, derived from horse urine. Studies show that synthetic estrogen therapy does increase bone mass and decrease fractures, but synthetic estrogen therapy has significant risks associated with it, including increased risk of breast and uterine cancer. It was thought that if synthetic progesterone was given with Premarin in a cyclic fashion the cancer risk would be diminished. Subsequent studies have proven this assumption untrue. Other side effects include vaginal bleeding, breast tenderness, and deep vein thrombosis.

Many alternative physicians have turned to bio-identical hormones, i.e., the natural forms of estrogen and progesterone found in a woman's body. Of course, these natural products can't be patented so there is little incentive to conduct clinical trials to ascertain their effectiveness. However, Dr. John Lee in California has documented increased bone density in women using natural progesterone cream. Other physicians such as Jonathan Wright, MD and Julian Whitaker, MD have obtained good results with bio-identical hormone therapy for women. It may take some shopping around to find a physician who prescribes bio-identical hormones. One place to try is Medaus Pharmacy, which specializes in compounding bio-identical hormones. They may be reached by calling 1800-526-9183.

Men should consider DHEA and possibly testosterone replacement. The former is a nonprescription steroid available in most vitamin shops. The latter requires a prescription from a physician. Both should be taken under a doctor's supervision.

## **Lifestyle Factors:**

Diet and other lifestyle factors are of major importance in preventing and treating osteoporosis. A vegetarian or low meat diet is associated with a lower risk of osteoporosis, this is especially true

as people age. Refined sugar in the diet also causes bone loss and should be eliminated. Soft drinks, the favorite beverage of Americans, are loaded with phosphates and are a major factor in causing osteoporosis and should be shunned. All caffeine containing drinks should be eliminated as should all tobacco products. Alcohol should be limited to no more than one drink a day.

Eat lots of green leafy vegetables such as kale, spinach, collard greens, broccoli, parsley, etc. for their high vitamin and mineral content. Also incorporate lots of whole grain cereals and breads in the diet, along with peas and other legumes to obtain high levels of vitamin K and boron. Eat plenty of soy products such as tofu and miso, or drink soy milk every day. Soy contains the isoflavones genistein and daidzin which bind to estrogen receptors and may protect against estrogen-related cancers. A six month study at the University of Illinois showed a significant increase in bone mass in postmenopausal women taking soy daily.

Anyone with osteoporosis, or who wants to prevent it, will benefit from the following nutritional supplements: A high potency multiple vitamin and mineral formula; calcium: 800 -1,200 mg/day; vitamin D: 400 IU/day; Magnesium: 400-800 mg/day, and Boron: (as sodium tetrahydraborate): 3 -5mg/day. All these supplements are available in most health food and vitamin stores.

The importance of exercise cannot be overstated. Exercise builds bone mass and prevents sarcopenia (muscle wasting). Both aerobic and progressive resistance exercise (weight training) are recommended. Physical inactivity has repeatedly been shown to reduce skeletal bone mass and is a contributing factor to developing osteoporosis.

*These nutritional suggestions are not intended to treat or cure disease and or be used as a substitute for sound medical advice. This information should be used in conjunction with the services of a trained, licensed health care practitioner. If you are under a doctor's care, seek advice before taking supplements or starting an exercise program.*

#### References:

Burgoyne-Young, Patricia, et al. *Disease Prevention and Treatment*, 4<sup>th</sup> ed., pp. 1161-1172, Life Extension Foundation, 2003.

Pizzorno, Joseph E., Murray, Michael T. *Textbook of Natural Medicine*, pp. 1453-1461, Churchill Livingston, 1999.

Silverman, Harold M. *The Pill Book*, 11<sup>th</sup> ed., pp. 445-452, CMD Publishing, 2004

Yoke, Mary, Gladwin, Laura A., *A Guide to Personal Fitness Training*, pp. 5 & 103, Aerobic and Fitness Association of America, 2001.

