

Understanding Osteoporosis

Osteoporosis is a disease of the bones. Bones become brittle and porous and break easily, sometimes from only minor injury.

Eight million American women and 2 million American men have osteoporosis, and significant risk occurs despite age, gender and ethnic background.

Is osteoporosis more common today? It would seem so. For one thing, we are living longer. Although all ages are at risk, aging is a factor in the development of the disease.

Our obsession with dieting, as well as poor dietary habits, contribute to our eliminating nutritious, calcium-rich foods to save on calories.

In addition, our sedentary, inactive lifestyles and lack of regular exercise further add to the problem of porous, frail bones.

Today, we know more about osteoporosis, its causes and how to diagnosis it. Although there is no cure, there are treatments and interventions that prevent the onset of the disease and keep our bones healthy.

Symptoms and Risk Factors

Bone loss occurs without any significant symptoms. Symptoms may not be readily apparent until, quite dramatically, a bone breaks suddenly from a minor bump. Some of the risk factors involved include:

- family history of the disease;
- post-menopausal women who have low estrogen levels;
- poor dietary habits;
- advanced age;
- low testosterone levels in men;
- sedentary, inactive lifestyles; and
- excessive smoking and alcohol use.

Detection

A bone density test is a simple, safe, painless test for osteoporosis that is quick and can be done in a doctor's office. This test can detect the disease before a fracture occurs, and it allows preventive measures to be taken. An annual visit to the doctor's office can aid in early diagnosis.

Prevention

Diet — Making our bones strong begins in early childhood and continues throughout adolescence until about the age of 30. Maximizing this bone-building process early in life will help to postpone the onset of osteoporosis in people who are susceptible to it. Good nutrition, a balanced diet and adequate calories and nutrients are essential for bone growth at all ages. Calcium and vitamin D are vital for both prevention and treatment. Both minerals build and

replenish bones. Calcium can be derived from milk products, fish, shellfish, oysters and from dark green vegetables such as broccoli, but not spinach — it contains oxalic acid and blocks absorption of calcium. It is crucial to determine how much calcium you get in your diet before you start any supplements, since many foods are fortified with calcium already.

Physical activity — Keep active at all ages to strengthen your bones and keep your body flexible. Before you begin any exercise program, check with your doctor. Walking, stair climbing and weight lifting are good exercises to start with.

Treatment

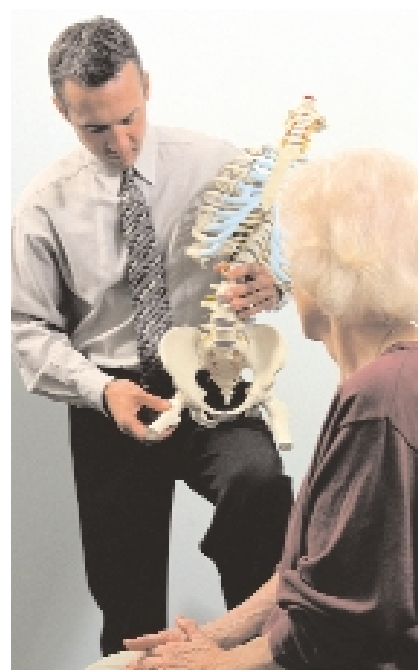
In addition to a healthy diet, physical activity and mineral supplements such as calcium and vitamin D, estrogen and other hormonal supplements may be prescribed for post-menopausal women. As women age, the hormone estrogen (and in men testosterone, to a lesser extent) diminishes in production. Estrogen is necessary for the absorption of calcium. Supplementing estrogen after menopause helps to delay the onset of osteoporosis, if you are susceptible to it. Non-hormonal drugs are also available and approved by the FDA for use in the treatment of the disease. You and your health care provider can decide what is best for you.

Further information on osteoporosis may be obtained from the National Osteoporosis Foundation, 1232 22nd St. NW, Washington, DC, by calling 202-223-2226, or going to the Web site at <http://www.nof.org/>

Resources

National Institute of Health Consensus Statement Online. (2000, March 27-29). *Osteoporosis, Prevention, Diagnosis, and Therapy*, 17(1), 1-6. Retrieved May 5, 2002 from the World Wide Web: http://consensus.nih.gov/cons/111/111_statement.htm

National Institutes of Health. (2001, August). National Institutes of Health Osteoporosis and Related Bone Disease, National Resource Center, *Fact sheets*. Washington, DC: NIH. Accessed May 14, 2002 from the World Wide Web: <http://www.osteo.org/docs/18.586613702.html>



The purpose of this patient education handout is to further explain or remind you about a medical condition. This handout is a general guide only. If you have specific questions, be sure to discuss them with your health care provider. This handout may be reproduced for distribution to patients.

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