

A LINE ON LIFE

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Dealing with Osteoporosis *

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Most people realize they have osteoporosis only after they have a fracture. **Osteoporosis** is the loss of bone mass where even mild physical stress can cause a fracture. A 30% loss in bone density is the criterion for defining osteoporosis. With women, typically after menopause, bones break down faster than they can be generated. When menopause occurs, estrogen production drops, and there is an acceleration of bone loss. By their seventies, one-third of women have it. By age 80, 67% of women have the disease.

Osteoporosis also strikes men. However, men have greater bone mass and slower bone loss. Their incidence of osteoporosis is between one-third and one-half of that found with women.

Fractures from osteoporosis can be devastating. In the spine, they cause chronic pain, besides shortening the torso and causing a hump in the back. Hip fractures cause blood clots and other complications. Annually, these complications kill as many women as breast cancer does.

The most reliable test to measure bone density in the spine and hip is **Dual Energy X-ray Absorptiometry (DEXA)**. Using a negligible amount of radiation, the test takes 10-15 minutes and costs \$100-200.

There are many factors that increase the risk of developing osteoporosis. **Major medical risk factors** include the following:

- Endocrine disorders like type I diabetes or an overactive adrenal or thyroid gland.
- Rheumatoid arthritis.
- Digestive disorders that decrease calcium absorption, like inflammatory bowel disease.
- Estrogen deficiency in pre-menopausal women, often caused by eating disorders.
- Testosterone deficiency in men.
- Extended use of drugs that can thin bones, like steroids and anticonvulsants.

Beside medical risk factors, there are **other major risk factors**.

- Osteoporosis in female relatives – mother, grandmother or sister.
- Onset of menopause before age 45.
- Heavy alcohol consumption.
- Cigarette smoking over many years.

This does not even include minor risk factors, like being thin or being white or Asian. Other risk factors include little weight-bearing exercise and consuming much less than 1000 mg of calcium daily for years before menopause.

Although some bone loss is inevitable with aging, you can still minimize your risk of osteoporosis. It helps to build bone mass early in life and minimize bone loss later. Here are some hints to help you.

(Don't be surprised if some of suggestions apply to all-around good health.)

- **Get plenty of calcium and vitamin D.** Between 25-64 years, you need 1000 mg of calcium daily. For postmenopausal women and older adults, 1500 mg is recommended. Vitamin D facilitates calcium absorption. If you don't drink fortified milk, eat fatty fish or get out in the sun, you need 400 International Units (IU) of vitamin D daily. People over 70 would need 800 IU.
- **Get plenty of exercise.** (Doesn't that sound familiar?) Weight-bearing exercise fortifies bones. However, strength training helps most.
- **Don't drink heavily.** Although you don't need to abstain from alcoholic beverages, excessive use of alcohol not only increases chances of falling, but it reduces bone density.
- **Don't smoke.** Beside other negative effects on your health, smoking hastens the start of menopause. If you are taking estrogen, smoking reduces the positive effects of the hormone.
- **Avoid radical diets.** Excessive weight loss reduces estrogen secretion and can contribute to thinning of bones. Even when taking estrogen, crash diets reduce its effectiveness.
- **Cut back on caffeine.** High caffeine intake reduces the absorption of calcium, which can contribute to loss of bone density.
- **Monitor your medications.** Some drugs can thin your bones, while others can cause dizziness and falls. It helps to periodically review *all* your medications with your doctor.
- **Postmenopausal women should consider estrogen supplements.** Estrogen replacement therapy can prevent bone loss and thicken the bones. It also has some positive side effects, like reducing risk of heart disease. On the other hand, menstrual bleeding may begin again, and there is a slight increase in the risk of breast and ovarian cancer. Each woman has to weigh the benefits of estrogen against its negative side effects. There are other medications to prevent loss of bone density, but these need to be discussed with your physician.

If you want more information, you can call the National Osteoporosis Foundation at **1-800-223-9994** for educational material. They can also be reached via the Internet at <http://www.nof.org>.

* Adapted from "Osteoporosis: New gains on bone loss," *Consumer Reports on Health*, December, 1996, pages 133, 135-136. Subscriptions to *Consumer Reports on Health* can be obtained by writing to *Consumer Reports on Health*, Subscriptions Department, P.O. Box 56360, Boulder, CO 80323-6360.