



## I - Preventing Osteoporosis

---

Building strong bones, especially before the age of 35, can be the best defense against developing osteoporosis, and a healthy lifestyle can be critically important for keeping bones strong. So to help prevent osteoporosis:

- Eat a balanced diet rich in calcium
  - Exercise regularly, especially weight-bearing activities
  - Don't smoke
  - Limit alcohol intake
  - Talk to your doctor if you have a family history of osteoporosis or no longer have the protective benefit of estrogen due to natural or surgically-induced menopause
- 

### Optimal calcium Intake (OCI) Guidelines

Calcium is an essential nutrient to obtaining peak bone mass in the first two to three decades of life and to reducing the rate of bone loss associated with aging.

The National Institutes of Health (NIH) Consensus Development Conference on Optimal Calcium Intake, held June 6-8, 1994, in Washington, D.C., recommends the following daily **OCI** to replace current Recommended Daily Allowances (RDA) for Calcium.

#### Age OCI from the NIH conference OCI from current RDA

Birth-6 mos.	400 mg.	400 mg.
6 mos.-1 year	600 mg.	600 mg.
1-10 years	800 mg.	800 mg.
Teenagers	1,200-1,500 mg.	1,200 mg.

#### Women

25-50 years	1000 mg.	800 mg.
over 50 w/estrogen	1000 mg.	800 mg.
Over 50 w/o estrogen	1,500 mg.	800 mg.

Pregnant & nursing Additional 400 mg. 1,200 mg.

**Men**

25-50 years 800 mg. 800 mg.  
51-65 years 1,000 mg. 800 mg.  
over **65** years **1, 500** mg. 800 mg.

### **How to Get it**

Dairy products are amongst the best sources of calcium. One 8 oz. glass of low-fat milk contains 300 mg. of calcium; however, calcium supplements taken several times throughout the day may be required to obtain optimum (OCI) calcium intake.

---

## **II - Answers to Frequently Asked Questions About Osteoporosis**

### **1. What is Osteoporosis?**

Osteoporosis, or porous bone, is a disease characterized by low bone mass and structural deterioration of bone tissue, leading to bone fragility and an increased susceptibility to fractures of the hip, spine, and wrist.

### **2. How big a problem is it?**

Twenty-five million Americans are affected by Osteoporosis, making it a major public health problem.

80% of those affected by **Osteoporosis are women.**

One out of every two women and one in five men have an Osteoporosis-related fracture.

By age **75**, one third of all men will be affected by osteoporosis.

While osteoporosis is **often** thought of as an older person's disease, it can strike at any age.

Osteoporosis is responsible for 1.5 million **fractures** annually, **including**

- more than 300,000 hip **fractures**
- 500,000 vertebral fractures
- 200,000 wrist **fractures**
- more than 300,000 fractures at other sites

### 3. How much money is this costing us?

In 1987, the estimated national direct expenditures (hospitals and nursing homes) and indirect expenditures (lost earnings) for osteoporosis and associated fractures was \$10 billion (\$27 **million** each day) - and the cost is rising.

### 4. What are the symptoms?

Osteoporosis is **often** called the "silent disease" because bone loss occurs without symptoms. People may not know that they have osteoporosis until their bones become so weak that a sudden strain, bump, or fall **causes a fracture** or a vertebra to collapse.

Collapsed vertebrae may **initially** be felt or seen in the form of severe back pain, loss of height, or **spinal** deformities such as stooped posture or dowager's hump.

### 5. Who's at risk?

Certain people are more likely to develop Osteoporosis than others. Factors that increase the likelihood of developing Osteoporosis are called "risk factors." The following risk factors have been identified:

- Menopause before age 45
- A **family** history of fractures in elderly women
- Use of certain medications, such as **corticosteroids** and anti-convulsants
- Chronically **low** calcium intake
- Thin **and/or** **small** bones
- Caucasian or Asian
- An inactive lifestyle
- Cigarette smoking
- Excessive use of **alcohol**
- Advanced age

Women have **approximately** 10 to 25 percent less total bone mass at

maturity than men, making them more susceptible to osteoporosis. However, five million American men are affected by Osteoporosis and one out of five men will develop fractures.

White women 60 years of age or older have at least twice the incidence of fractures as African-American women. However, one out of five African-American women are at risk of developing osteoporosis.

## **6. How is bone density measured?**

Specialized tests called bone density tests can measure bone density in various sites of the body. With the information obtained from these bone mass measurements, physicians can assess an individual's bone density and predict the likelihood of fractures.

## **7. What can be done to prevent Osteoporosis?**

Building strong bones, especially before the age of 35, can be the best defense against developing osteoporosis, and a healthy lifestyle can be critically important for keeping bones strong. So to help prevent osteoporosis:

- Eat a balanced diet rich in calcium
- Exercise regularly, especially weight-bearing activities
- Don't smoke
- Limit alcohol intake

Talk to your doctor if you have a family history of osteoporosis or no longer have the protective benefit of estrogen due to natural or surgically-induced menopause

## **8. About bone fractures..,**

The most typical sites of fractures related to Osteoporosis are the hip, spine, wrist, and ribs although the disease can affect any bone in the body.

Forty percent of all women will have at least one spinal fracture by the time they reach age 80.

Spinal Osteoporosis is eight times more likely to afflict women than men.

The rate of hip fractures is two to three times higher in women than men.

A women's risk of hip fracture is equal to her combined risk of breast, uterine, and ovarian cancer.

In 1988, about 250,000 Americans age 45 and over were admitted to hospitals with hip fractures. Osteoporosis was the underlying cause of

many of these injuries.

Individuals suffering hip fractures have a 5 to 20 percent greater risk of dying within the first year following that injury than others in their age group.

Among those who were living independently prior to a hip fracture, 15 to 25 percent are still in long-term care institutions a year after injury.

## 9. How is Osteoporosis treated?

Although there is no cure for Osteoporosis, there are treatments available to help stop further bone loss and fractures:

Studies have shown that estrogen can prevent the loss of bone mass in post menopausal women.

Another treatment used by both women and men for Osteoporosis is Calcitonin. This drug has been shown to slow bone breakdown and also can reduce the pain associated with Osteoporotic fractures.

Treatments under investigation include bisphosphonates, nasal spray Calcitonin, Sodium Fluoride, vitamin D, and “anti-Estrogens.”

Medical experts agree that Osteoporosis is highly preventable. However, if the toll of Osteoporosis is to be reduced, the commitment to Osteoporosis research must be significantly increased. It is reasonable to project that with increased research, the future for definitive treatment and prevention of osteoporosis is very bright.

The National Osteoporosis Foundation is the nation's leading resource for patients, healthcare professionals, and organizations seeking up-to-date, medically sound information on the causes, prevention, diagnosis, and treatment of Osteoporosis.

---

[Home](#) | [About FORE](#) | [Events Calendar](#) | [BMD Testing Schedule](#)  
([Osteoporosis Prevention & FAQ](#)) | [Publications](#) | [Physicians Corner](#) | [Contact Us](#)

Foundation For Osteoporosis Research & Education - (888) 266-3015 or (510) 832-2663  
Last Updated: March 26, 1998