

Fit Facts™

FROM THE AMERICAN COUNCIL ON EXERCISE®

Prevent Osteoporosis Now

Today is the day to begin preventing osteoporosis, an age-related disorder in which bones become gradually thinner, more porous and less able to support the body.

This condition affects both men and women, but women usually suffer more severely because bone loss accelerates rapidly after menopause. By the time a woman reaches the age of 70, she may have lost as much as 30 percent of her bone density.

Prevention is the Key

The following lifestyle-related factors may lead to the development of osteoporosis:

- lack of exercise
- calcium and vitamin D deficiency
- prolonged use of drugs, alcohol, caffeine, high-phosphate soft drinks
- smoking

The good news is that osteoporosis may be prevented by a combination of exercise and good nutrition.

Get Plenty of Exercise

Weightbearing exercises can help prevent bone loss and may encourage bone growth. Specific exercises to twist, bend, stretch and compress bones are needed to strengthen the common sites at risk: the upper arm at the shoulder, the forearm at the wrist, the thigh bone at the hip, and the spine. This process is known as “bone loading.”

Before beginning any exercise program, always consult your physician. If you're given the go-ahead, start slowly and build up over time. An ideal program should include bone-specific, aerobic weightbearing exercise three

days per week. Weightbearing exercise includes such activities as walking and cross-country skiing.

Include a variety of exercises that will stimulate as many different bones as possible. Add upper-body muscle strength and endurance training two days per week.

Stick with your program and work up to at least 20 to 30 minutes of physical activity a day, on most, preferably all, days of the week. Also, think about ways to increase your daily activity, such as taking the stairs or gardening.

Eat for Stronger Bones

You can bolster your bone strength by eating a high-calcium, high-fiber, low-fat diet.

Keeping Bones Healthy at Every Age				
	Calcium (mg/day)	Vitamin D (IU/day)	Physical Activity	Bone Density Testing
Infants				
0—6 months	210	200	Interactive play	As clinically indicated in high-risk patients.
6—12 months	270			
Children and Adolescents				
1—3 years	500	200	Moderate to vigorous activity at least 60 minutes per day. Emphasizes weight-bearing activity.	As clinically indicated in high-risk patients.
4—8 years	800			
9—18 years	1300			
Adults				
18—50 years	1000	200	Moderate activity at least 30 minutes per day, on most, preferably all, days of the week. Emphasize weight-bearing activity. Fall prevention programs, modified for the frail elderly and spine fracture patients.	As clinically indicated in high-risk patients.
51—70 years	1200	400		Bone density testing by DXA in all women over age 65; consider in women under 65 with risk factor. No consensus on men.
>70 years	1200	600		
Source: Adapted from U.S. Department of Health and Human Services. <i>Bone Health and Osteoporosis: A Report of the Surgeon General</i> . Rockville, Md.: U.S. Department of Health and Human Services, Office of the Surgeon General, 2004.				

Did you know that two-thirds of your bone is composed of calcium? The accompanying chart lists the recommended dietary allowances (in milligrams per day) for calcium and vitamin D for various individuals.

You need vitamin D to help metabolize calcium. The best source of vitamin D is the sun, but fortified milk products offer the same benefit without the risk of skin damage.

You can also get a good dose of calcium from the following sources:

- nuts, seeds, beans and peas
- fish with bones
- green vegetables

Bones to Last a Lifetime

Bone-loading exercise and a balanced diet are important components for preventing osteoporosis. By taking care of your bones

now, they will stay strong enough to carry you safely through a lifetime of health and activity.

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