



# Louisiana's Future: Families and Children

## Bone Up on Diet and Osteoporosis

# FNP

## Fact Sheet

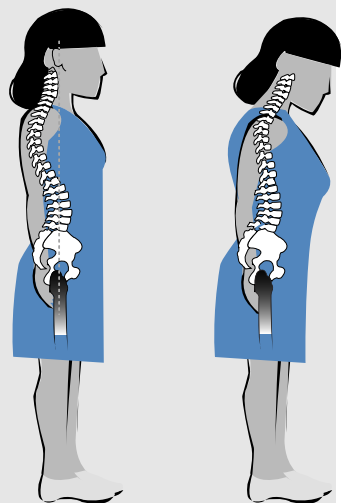
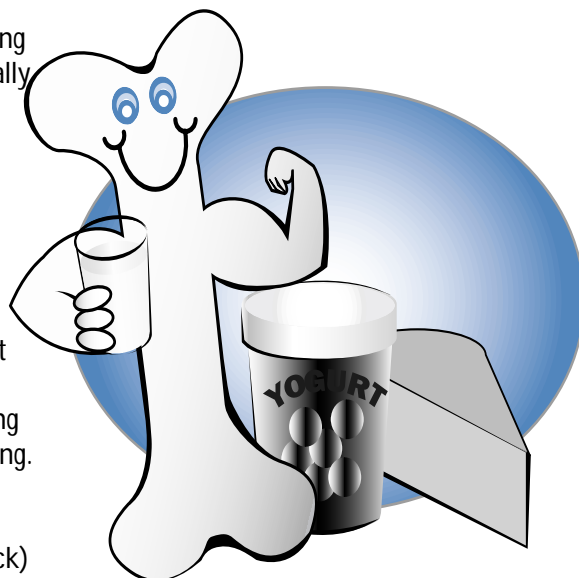
Osteoporosis is a painful, disfiguring disease in which bone density gradually decreases, causing weak bones that break and fracture easily. It doesn't usually kill. It sends people to nursing homes or necessitates expensive home care.

Osteoporosis, like hypertension, is a "silent" disease. Calcium can drain out of bones for years without a person being aware anything is wrong. The infamous "dowager's" hump (a deformed, curved back)

and shorter stature are signs, but often a broken hip, wrist or spine first makes a person aware of what is happening. One of every two women and one in eight men older than 50 will suffer an osteoporosis-related fracture.

Bones are living, changing tissue. Throughout life, bone is being removed and rebuilt. During adolescent and early adult years, more new bone is formed than is broken down. Later, particularly after menopause, more bone is lost than replaced.

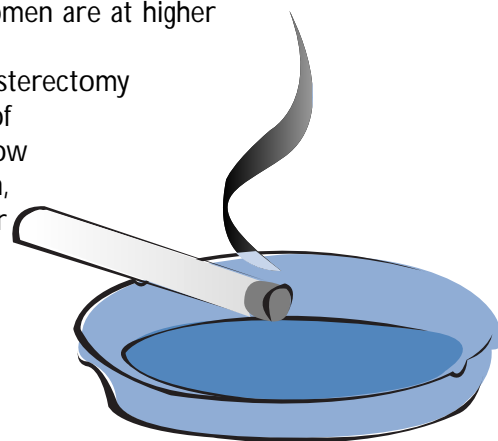
All women 50 years and older should have a bone scan to determine risk for osteoporosis.



### Risk Factors

#### Some you cannot change....

- Age - Risk increases as you age.
- Gender - Females are at higher risk because they have less bone mass and because of changes involved in menopause.
- Race - Caucasian or Asian woman at higher risk.
- Body size - Small-boned and thin women are at higher risk.
- Low estrogen level - Menopause, hysterectomy and excessive dieting increase risk of developing osteoporosis. Whereas low estrogen levels are a risk for women, low testosterone levels are a risk for men.
- Family history - Susceptibility to fracture may be hereditary.



# Bone Up on Diet and Osteoporosis

## Others you can change....

- Diet low in calcium and vitamin D
- Inadequate exercise, specifically weight-bearing exercise
- Smoking
- Drinking too much alcohol
- Prolonged use of some medications - Certain drugs, including corticosteroids, excessive thyroid medications, barbiturates and anticonvulsants increase risk



## What You Can Do

The most important things you can do to prevent or reduce symptoms of osteoporosis are:

### Diet

Remember that calcium counts. Bones cannot be built and maintained without the right balance of nutrients. Two nutrients that are most likely to be low are calcium and vitamin D. Include two or three servings a day of calcium-rich foods such as milk, yogurt, cheese, broccoli, collard greens, sardines with bone, tofu or calcium-fortified foods such as orange juice with added calcium. Phosphorous, magnesium and other trace minerals also are important in maintaining bone health, so follow the Food Guide Pyramid and Dietary Guidelines for Americans.

New recommendations for calcium are 1,300 mg of calcium a day for teens, 1,000 mg daily for adults 19 through 50 and 1,200 milligrams of calcium for adults 51 and over. Some experts recommend that postmenopausal women not on estrogen

replacement therapy should

consume 1,500 mg of calcium daily. One 8-ounce glass of milk has about 300 mg of calcium. Skim milk has slightly more calcium than whole milk.

Some foods we eat can decrease the availability of calcium. If you drink a lot of soft drinks that are high in phosphorous, they upset the calcium/phosphorous ratio. When soft drinks replace milk in the diet, they can result in bone loss.



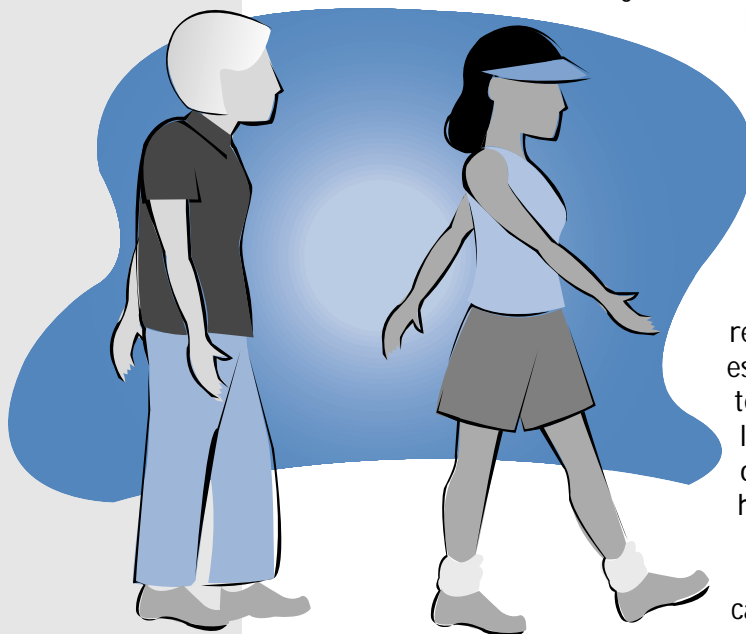
## Daily Calcium Needs

If you are...	Milligrams needed...
9-18	1,300
19-50	1,000
51+	1,200
51+ no HRT	1,500

# Bone Up on Diet and Osteoporosis

## Exercise

Weight-bearing exercises cause muscles to work against gravity to help maintain bone strength. Walking, gardening, dancing, swimming and bicycling are beneficial to strengthen muscles, improve flexibility and improve your balance.



## Medications & Supplements

### *Hormone Replacement Therapy (HRT)*

The hormones estrogen and testosterone help protect women and men from osteoporosis and heart disease. Unless women are at high risk for breast cancer, their doctors will probably recommend hormone replacement therapy, such as low-dose estrogen. Older men may need low-dose testosterone if their hormone levels are low. For most older adults, the risk of osteoporosis and heart attack is much higher than that of breast cancer.

### *Nutrient Supplements*

Calcium and vitamin D supplements can help. Supplements need to be considered drugs, because excessive

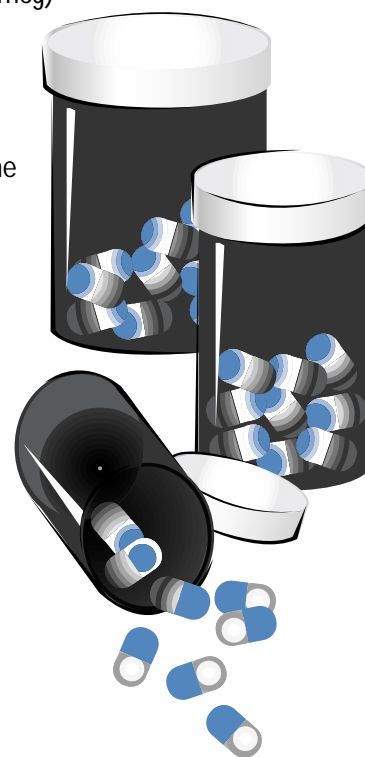
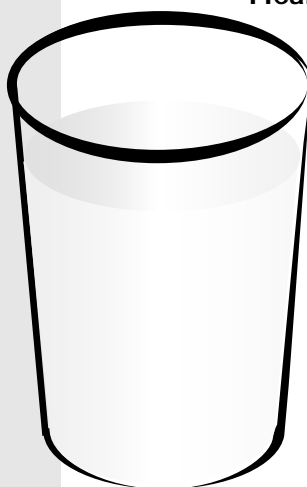
amounts can be harmful. The Tolerable Upper Intake Level for calcium is 2,500 mg (2.5 grams); for vitamin D, it is 2,000 IU (50 mcg) daily. Check labels to see exactly how much calcium and vitamin D are present.

### *Other Medications*

In addition to hormone replacement therapy, there are new medications that can help slow the progression of osteoporosis or even increase density of bone. Alendronate, raloxifene and calcitonin are some examples. Talk to your doctor about what is right for you.

## Healthy Lifestyle

Both smoking and excessive use of alcohol inhibit your body's ability to absorb calcium. Don't smoke or use alcohol in excessive amounts.



# Bone Up on Diet and Osteoporosis

Treating osteoporosis and protecting your bones is more than just taking calcium supplements and preventing falls. The whole diet is important, but calcium and vitamin D are particularly critical. The other two most important bone protectors are weight-bearing exercise and proper hormone levels, especially estrogen for women. In addition, maintain a healthy lifestyle. That means no smoking or excessive use of alcohol.



Visit Our Website:  
[www.lsuagcenter.com](http://www.lsuagcenter.com)

#### References:

- Bielamowicz, Mary Kinney and Dymple Cooksey.  
*Osteoporosis Prevention/Eating with your Bones in Mind.*  
Texas Agricultural Extension Service.

- Clark Ph.D., Mary P. *Bone Bank Deposits and Withdrawals.* Kansas State University. August, 1998.

Primary author: Donna Montgomery, MS,  
Consumer Foods and Nutrition Specialist  
Evva L. Z. Wilson, PhD, Specialist, FNP Curriculum  
Coordinator

Project partially funded by the United States  
Department of Agriculture, Food and Nutrition  
Service, through the Louisiana Department of Social  
Services, Food Stamp Program.

**Louisiana State University Agricultural  
Center**, William B. Richardson, Chancellor  
**Louisiana Cooperative Extension Service**,  
Jack Bagent, Vice Chancellor and Director

Pub. 2815 10M 8/00

Issued in furtherance of Cooperative Extension  
work, Acts of Congress of May 8 and June 30, 1914, in  
cooperation with the United States Department of  
Agriculture. The Louisiana Cooperative Extension  
Service provides equal opportunities in programs and  
employment.