

# Nutrition News

## Information for Senior Citizens

Developed by Colorado State University Extension  
Department of Food Science & Human Nutrition

### Osteoporosis, Calcium and You

Osteoporosis has made major headlines in recent years, and rightly so. It is the most common bone disorder, which affects 15 to 20 million men and women in the United States. It is estimated that by age 65, 25% of all women will have one or more fractures related to osteoporosis.

Osteoporosis literally means “porous bone” because the bone looks like Swiss cheese with large holes. As one ages, some bone loss naturally occurs. However, too much bone loss can lead to osteoporosis.



### How Much Calcium Do You Need?

The Dietary Reference Intake (DRI) for calcium is 1200 mg per day for adults age 51 and over. According to MyPyramid, you should be consuming 3 servings of milk, yogurt or cheese each day. Add another serving or eat other calcium-rich foods to reach 1200 mg daily.

Unfortunately, most women consume less than 600 mg of calcium a day. So what can you do to increase calcium in your diet?

### What Counts as a Serving?

- 1 cup milk or yogurt
- 1½ oz natural cheese = 6 “dice”
- 2 oz processed cheese = 8 “dice”

### Dietary Sources of Calcium

Food	Calcium (mg)
Whole milk, 1 cup	291
Lowfat milk, 1 cup	297
Skim milk, 1 cup	302
Powdered, dry milk, 1/3 cup	279
Ice cream, 1 cup	176
Lowfat yogurt, 1 cup	415
Swiss cheese, 1 oz	272
Cheddar cheese, 1 oz	204
Cottage, 1% fat, 1/2 cup	69
Pink salmon, 3 oz (canned with bones)	167
Sardines, 3 oz (canned with bones)	372
Broccoli, 1 cup	136
Calcium-fortified orange juice	300

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## Questions and Answers



### Q: Who is greatest at risk?

**A:** Individuals with the following characteristics are at the greatest risk of developing osteoporosis:

- Caucasian and Asian women
- Small framed women
- Family history of osteoporosis
- Experience early menopause
- Smoke
- Sedentary

### Q: What causes osteoporosis?

**A:** There are two major factors that determine if osteoporosis will develop. They are:

- 1) One's peak bone mass, or the amount of bone build during the first 25 years of life.
- 2) The rate at which bone is lost later in life, especially after menopause.

By receiving adequate amounts of calcium early in life, maximum peak bone mass can be reached. Other factors such as inactivity and poor diet can also contribute to osteoporosis.

### Q: What can I do to prevent osteoporosis?

**A:** Lifestyle plays an important role in the prevention of osteoporosis. The two most important factors are getting an adequate amount of calcium in your diet and participating in weight bearing exercise regularly. Cigarette smoking, excessive alcohol and caffeine intake increase your chances of developing osteoporosis. Additional risk factors such as heredity are out of your control.

### Q: How is bone strength measured?

**A:** If you have several of the risk factors associated with osteoporosis, you may want to ask your doctor to do a bone density measurement known as osteodensitometry. It is used to measure your bone mass and strength and is usually done on your foot, arm, hip, or spine. This test will help your doctor estimate your fracture risk.

### Q: What if I am determined to have a high fracture risk?

**A:** Even if you are at high fracture risk, you can still take precautions to prevent fractures. One step that you can take is to "fall-proof" your home. You can help make your home fall-proof by:

- Ensuring adequate lighting in stairs and hallways
- Fastening down throw rugs, and having someone rearrange sharp-edged furniture.



**Q: What are the current treatments available for diagnosed osteoporosis?**

**A:** The current treatments include calcium and/or supplementation, Estrogen Replacement Therapy, calcitonin, and other drugs. It is important to seek medical treatment for osteoporosis from a doctor.



**Q: What is Estrogen Replacement Therapy?**

**A:** Estrogen Replacement Therapy (ERT) is one option available to post-menopausal women with osteoporosis. It is used to slow bone loss and reduce osteoporosis related fractures.

Following menopause, there is a decrease in production of the hormone estrogen. This drop in estrogen increases the rate of bone loss.

There are several side effects and risks associated with ERT. Ask your doctor for more information about ERT and other options for post-menopausal women.

**Q: Should I be taking calcium supplements?**

**A:** Before you decide to take calcium or any other kinds of supplements, you should talk to your doctor. Supplements should not be thought of as a substitute for food. In fact, your body may absorb calcium in food better than the calcium in supplements.

Calcium, taken in excess, can cause problems such as constipation, and may interfere with your body's ability to absorb iron and zinc. While calcium is important for healthy bones, calcium alone will not prevent or treat osteoporosis. Other lifestyle factors (discussed previously) also play a role in maintaining healthy bones.

**Q: I am lactose intolerant. Is there a way to get enough dietary calcium without consuming dairy products?**

**A:** Although calcium is found abundantly in dairy products, foods such as dark green vegetables (e.g., broccoli and spinach) and some fortified foods, such as orange juice and cereal, are also a good source of calcium. Even though you are lactose intolerant, you may be able to enjoy certain dairy foods such as aged hard cheese, yogurt, and Lact-Aid® milk (contains 40 to 90 percent less lactose than regular milk). Also, ask the pharmacist at your local drug store if they carry any products that help individuals with lactose intolerance.



**FITNESS FOCUS**

We all know that exercise is important. It strengthens your heart and lungs, and it can also strengthen your bones, especially weight-bearing exercise like walking and running. It is never too late to start exercising. Contact your local hospital and senior center to inquire about an exercise program. Your muscles and bones will thank you!



## Sample Menu

	Calcium (mg)
<b>Breakfast</b>	
• Low fat milk, 1 cup	297
• Total <sup>®</sup> Cereal with Calcium	200
• 1 hard boiled egg	
• Calcium fortified OJ, 6 oz	225
<b>Lunch</b>	
• Cheese 1.5 oz	300
• Whole wheat bread, 2 slices	60
• 3 oz turkey	
• 1 oz pretzels	
• 1 cup raw carrots	
• 1 medium apple	
<b>Snack</b>	
• 1 cup non-fat vanilla yogurt	
• ½ cup fresh berries	
<b>Dinner</b>	
• Low fat milk, 1 cup	297
• Canned salmon, 3 oz	167
• Spinach salad, 1 cup	55
• Steamed rice, 1 cup	21
• Ice cream, 1 cup	176
<b>Total:</b>	<b>1798</b>

## Non-fat Dry Milk . . . New Ideas

Non-fat dry milk has all the nutrients that regular liquid milk has, without the fat. Dry milk is a good source of protein, riboflavin, vitamins A and D, and calcium! When stored in a cool, dry place such as the refrigerator, it can be kept up to one year. Prepared dried milk tastes best when it is cold. For extra calcium, add 1/3 cup dried milk for each cup of liquid in breads, muffins, biscuits, pancakes, waffles, milkshakes, hot chocolate, and cakes.

### Senior Resource: Are Food Stamps cash?

No. Food Stamp benefits can only be used to purchase food. Food Stamp benefits come on a plastic card (EBT – Electronic Benefits Transfer) that you use just like a bankcard or debit card. Most food stores accept the EBT card.

For more information and to find out if or someone you know qualifies for Food Stamps, call 1-800-221-5689.

## Fruited Milk Shake

### Ingredients:

- 3/4 cup frozen strawberries, unsweetened
- 1/2 medium banana, chunked
- 5 tablespoons frozen pineapple juice concentrate
- 1 cup skim milk
- 1 teaspoon vanilla
- 6 ice cubes

### Directions:

Combine all ingredients in blender. Blend until smooth and serve in tall frosty glasses.

Serves 2. (222 calories, 0.5 gm fat, 2 mg cholesterol, and 151 mg calcium per servings)