



# Nutrition News You Can Use

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## Calcium, bones, and osteoporosis

Have you ever noticed that many elderly women break their hips? Often, osteoporosis causes these problems.

Osteoporosis means “porous bones.” In this disease, the bones are weakened by the loss of minerals, especially calcium, from their structure. The bones generally stay the same size, but the inside of some of them become full of holes like brittle pieces of coral or a hard, dry sponge. This happens slowly over many years.

When 30% or more of the mineral is lost, the bones may break under the slightest pressure – the kind of stress that would not hurt normal bones. For example, a woman may break a rib from trying not to sneeze. In later stages of osteoporosis, doing just about anything can cause a broken bone in back, wrist, hip, or ribs. The National Osteoporosis Foundation (NOF) estimates that half of all women and one in eight men in this country will have an osteoporosis-related fracture at some time in their life.

Osteoporosis is a crippling disease, which is growing in numbers each year among older Americans, particularly women. It is often referred to as the “silent disease” because there may be no symptoms until a fracture occurs; the diagnosis is made at that time. More than 25 million Americans have osteoporosis, and at least 1.5 million broken bones happen because of this disease each year.

The risk of a woman receiving a hip fracture due to osteoporosis is the same as her combined chances of developing breast, uterine, and ovarian cancer. With proper prevention, there is definite hope that these statistics will improve over the next few years. Treatments are now aimed at slowing down bone loss, starting at menopause.

Women can take preventive measures before menopause to lower their risk of developing osteoporosis. Two important steps to maintain healthy bones are doing weight-bearing exercises and getting the proper amount of calcium each day.

### Who is at risk for osteoporosis?

- Though men can develop osteoporosis, women are most at risk.
- Underweight white women who have stopped menstruating, especially those who have undergone early menopause.

Risk factors over which you have no control:

- Female gender
- Age
- Fair skin (Caucasian or Asian)
- Small bone structure
- Low body weight
- Early menopause, either natural or due to surgery
- Family history of osteoporosis

Although most studies have been done on Caucasian and Asian women, there are now indications that osteoporosis may be more prevalent than thought in Hispanic and Native American women. Almost one-third of African American women, a group once thought to be unaffected by osteoporosis, may also be affected. Though menopause is the single-most important cause of osteoporosis, osteoporosis is not an inevitable part of menopause or aging.

### Calcium in your diet

One of the reasons calcium is removed from the bones is that other parts of your body need calcium for other uses. It helps to make your muscles work. It is also essential for digestion. When the level of calcium in your blood is not high enough, the body takes calcium from the skeleton.

Building and keeping strong bones is a lifelong commitment. Too many women think they do not have to worry about osteoporosis until they reach menopause. This is simply not true. Research shows that the best way to prevent this disease is to develop lifelong healthy habits that build bone strength.

During childhood and adolescence, bones grow wider, longer, and stronger. Bones continue to grow in mass, strength, and hardness until around age 35. Sex, race, nutrition, exercise, and overall health influence bone mass. Though bone mass (denseness) will vary among individuals, men have about 30 percent more than women, and blacks have about 10 percent more than whites. The years between ages 11 to 16, particularly the first two years after the onset of menstruation, are critical for the buildup of bone mass. Almost half (45%) of bone mass develops during the teen years. Good health habits to prevent osteoporosis should begin at that early age.

It is never too late to do something to help your bones. The daily recommendations for calcium are:

<b>Adults 19-50 years old</b>	1,000 mg/day
<b>Adults 51 and older</b>	1,200 mg/day
<b>Postmenopausal women (not taking estrogen)</b>	1,500 mg/day

It is best to get your calcium from the foods you eat, but some people need to take a supplement. Calcium carbonate and calcium citrate are the most common types. Consult with your health care professional to determine if this may be helpful for you.

Remember to support your bones – they support you!

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## Is chocolate really good for you, or is that a gimmick?

What — a skeptic? And with Valentine's Day approaching? You probably study the calorie and fat content of your favorite chocolate bar, which would be enough for anyone to question claims about its health benefits. But chocolate, especially dark chocolate, is a great example of the dietitian's adage that "there are no good or bad foods, just good and bad diets."

Chocolate doesn't contain a lot of vitamins and minerals, but they are rich in "phytochemicals," or plant-based compounds that nutritionists believe can give your health a boost. There are several kinds of phytochemicals. Carotenoids, such as beta-carotene and lycopene, are one type. Another type is polyphenols, such as



anthocyanins, flavanols, isoflavones, and flavonoids. Studies indicate that cocoa powder and dark chocolate are especially rich in flavonoids. Researchers found that the flavonoid epicatechin was absorbed at high levels in the blood and appeared to help blood vessels dilate. That helps increase blood flow and reduces the risk of heart disease.

### **Health Concerns of Chocolate**

Chocolate contains extra calories and is not always good for the waistline. Even dark chocolate can contain a lot of calories, saturated fat and sugar. An ounce has about 150 calories. Similar antioxidants are available in vegetables, fruits and whole grains, which are low-fat, high-fiber foods.

To get the heart healthy benefits, choose a small piece of dark chocolate, not milk or white chocolate. The darker the chocolate is, the less fat and sugar it contains and the healthier it is for you. The most beneficial is dark chocolate that is at least 70% cocoa.

Most Americans eat milk chocolate, which contains a low amount of flavonoids and antioxidant value compared to dark chocolate. It also has a relatively high sugar and saturated fat content and has been shown to increase blood cholesterol levels. A standard-size 1.5 ounce chocolate bar has eight grams of fat, but a one-cup serving of hot cocoa only has  $\frac{1}{3}$  gram of fat.

White chocolate, a blend of cocoa butter and sugar, contains almost none of the antioxidants found in dark chocolate. In addition, more than half the fat in white chocolate is saturated.

Always read the ingredients list of the food label on chocolate products. Look for palm, coconut, hydrogenated and partially hydrogenated oils. These unhealthy oils should be limited or avoided, because they can raise blood cholesterol levels.

### **Antioxidant Values**

Cocoa is one of the richest sources of antioxidants found in any food, and research shows that we should eat more antioxidant-rich foods. However, most of the antioxidants in the diet should come from nutrient-dense, low-calorie, brightly-colored fruits and vegetables and calorie-free green or black tea.

In a comparison of different chocolate products, cocoa powder ranks highest in antioxidants. According to food scientists at Cornell University, a cup of hot cocoa has up to three times the antioxidants found in a cup of green tea and almost twice the amount in a glass of red wine.

Next in antioxidant value is dark chocolate, which contains about eight times the antioxidants of strawberries. There are as many antioxidants in 1.5 ounces of dark chocolate as there are in five ounces of red wine.

### **Melting Away Some Chocolate Myths**

- Chocolate does not cause acne or make it worse.
- Chocolate does not cause tooth decay, and the tannins in dark chocolate may fight tooth decay.
- Chocolate does not contain a lot of caffeine. An 8-ounce glass of chocolate milk has only two milligrams of caffeine more than a 5-ounce cup of decaffeinated coffee. An ounce of dark chocolate contains only 28



mg of caffeine, while a regular cup of coffee has 95-140 mg.

- Chocolate cannot become addictive. Some people, referred to as “chocoholics,” just have a strong preference for chocolate’s taste, aroma and texture.
- Chocolate bars are not less healthful than carob bars. Both have the same amount of calories and fat.

The bottom line? We still have a lot to learn about chocolate’s health effects. We know that chocolate, like nuts and other fat-rich foods, pack a lot of calories in small packages. But enjoying a small amount in moderation certainly won’t hurt, and just might help overall health.

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## Fiber 101

Confused by fiber? Well, you're not alone. Most people are. But you don't have to know all the ins and outs of fiber to get benefit from it. When you eat a healthy diet rich in whole grains, vegetables, and fruits, you usually get most of the fiber you'll need, which means you'll also be lowering your risk of diabetes, heart disease, diverticulitis, and constipation. Not a bad package deal. Here's a rundown on the various kinds of fiber, their beneficial effects and sources:

- *Whole grain* breads, cereals, fruits and vegetables have been shown to lower the risk of diabetes and heart disease. Check the ingredient label to be sure a whole grain is listed as the first ingredient in packaged products. These foods are high in soluble and insoluble fiber and also contribute to satiety which may help with weight loss and weight maintenance.
- *Insoluble fiber*, which is not broken down in the digestive tract, is found in fruits and vegetables and in higher quantities in whole grains. It can help prevent constipation and some studies have shown insoluble fiber may decrease heart attacks by reducing inflammation, blood pressure or reducing the risk of clots.
- *Soluble fiber*, also in fruits, vegetables and whole grains, is broken down during digestion. These gummy soluble fibers are linked to lowering cholesterol.



New on the grocery shelves you may see "Isolated Fiber." Food manufactures are adding fiber to foods that never had it before, such as yogurt, ice cream, sugar substitutes, and drink mixes. Consumers are led to believe that "isolated" fibers are equal to the fiber found naturally in food. The distinction is further complicated because there is no distinction on the Nutrient Facts Label between naturally occurring and isolated fiber.

It is important not to just isolate the fiber by consuming it as a supplement or as an isolated fiber. Fiber, though important for the digestive system and beneficial in lowering cholesterol, does not contain the antioxidants, vitamins and minerals that whole grain foods do.

### **Load up your grocery cart with fruit, veggies and whole grains**

What's a health conscious consumer to do? Eating foods with isolated fiber likely won't hurt you but they will not provide the benefits of consuming intact fiber. Load up your grocery cart with fruits, vegetables and whole grains. Don't replace naturally occurring fiber with isolated fiber foods created by manufacturers.

The Dietary Guidelines for Americans recommends replacing half of your refined grain foods like white bread and rolls, with naturally occurring high fiber grains.

Check packaging for the whole grain contents of foods, she advised. Ideally, ingredients such as “whole wheat flour,” or “whole grains” should top the lists on packaging, because ingredients are listed in order of weight, with the predominant one coming first.

### Ideas to get more whole grain into your diet

- *Popcorn* is a whole grain. Steer clear of buttery, highly salted microwave or movie theater popcorn when choosing this quick-to-fix snack.
- Look for is slightly *crunchy quinoa* which can be use by individuals who are wheat sensitive. As an added bonus, it's high in protein and cooks quickly. Rinse the grain first to remove the bitter coating.
- Other whole grains which may be new to you include *spelt, teff, kasha* and *amaranth*.
- Add *dry whole grains* to boiling water in the proportions specified in the directions and simmer until the liquid is absorbed. To speed up cooking time consider pre-soaking whole grains for a few hours before cooking.

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## Winning movie snacks.

The Oscar nominations are out and there are a lot of movies to see in the next couple of weeks. What's a good flick without some snacks to go with it? Most film snacks have a lot of calories and fat and come in large sizes.

What are movie goers to do? Pick wisely.

If you like popcorn, watch the butter. A large tub of buttered popcorn can contain as much as 1,500 calories. Cut the butter and eliminate 800 calories. Also go easy with the salt shaker.

Love candy? Limit the chocolate. A big movie box of chocolate candy can pack a 900-calorie punch. Share a box of gummy or hard candy. Although they have sugar, they don't contain as much fat. And drink light. A 32-oz soda has up to 450 calories. Pick water, or diet sodas.

You may also want to consider packing your own healthy snacks, like carrot sticks or pretzels to munch on before you go to the theater. That way you can bypass the goodies when walking to your seat.

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