

Calcium

Why We Need It

Calcium is the major mineral found in our bones and teeth. Along with phosphorus and other nutrients, it builds the hard structure that makes bones and teeth strong. Calcium also is needed for proper heart, muscle and nerve function, blood clotting, and other body processes. It may help to reduce weight gain.

Amounts Needed

The 2005 Dietary Guidelines for Americans recommends that most adults and children daily consume at least 3 cups of fat-free or low-fat milk or equivalent amounts of yogurt or cheese.

Recommended Daily Intakes of Calcium

Age	Calcium (mg/day)
birth to 6 months	210
6 to 12 months	270
1 to 3 years	500
4 to 8 years	800
9 to 18 years	1,300*
19 to 50 years	1,000
51 years and over	1,200**

mg = milligrams

*Growth spurt

**A new recommendation

Source: adapted from the Dietary Reference Intakes series, National Academies Press. Copyright 1997, 1998, 2000, 2001, 2002, 2004, by the National Academies of Sciences.

Pregnant women and nursing mothers' needs are the same as others in their age level.

Sources

For many Americans, milk and milk products are the main sources of dietary calcium. This includes all fluid milk, yogurt, hard and soft cheeses, ice

cream, and puddings made from milk. Choose items that are low-fat or fat-free to keep fat and cholesterol intake low.

Even people who have lactose intolerance (trouble digesting the carbohydrate in milk) often can drink small amounts of milk at a time with no ill effects. Most people with lactose intolerance are able to eat yogurt and cheese.

People who do not eat dairy foods may have a hard time getting the calcium they need. Other food sources of calcium are: deep green leafy vegetables (turnip greens, kale, collards, broccoli, and Romaine lettuce); some types of tofu; calcium-fortified foods and beverages (orange juice and soymilk); dried beans and lentils; canned fish with bones (salmon, sardines); nuts; some vegetables and most fruits.

Here are some foods and the amount of calcium they contain.

Sources of Calcium

Food	Calcium (mg per serving)
tofu, raw, firm, ½ cup*	860
yogurt, low fat, fruit, 8 oz	370
milk, low-fat, 1 cup	300
fortified orange juice, ¾ cup	200
cheddar cheese, 1 oz	200
cottage cheese, 1%, 1 cup	140
collards, cooked, ½ cup	110
kale, frozen, cooked, 1 cup	90
fortified soy milk, 1 cup	80
broccoli, cooked, ½ cup	50
kidney beans, cooked, ½ cup	30

mg = milligrams

oz = ounces

*check label for tofu made with calcium

If We Don't Get Enough

We need calcium throughout our lives to support our bones, teeth, and other body functions. If we don't get enough calcium in foods we eat, it is taken from our bones to maintain blood calcium.

Currently two out of three school-age children are not getting enough calcium in their diets. We build most of the structure of our bones and teeth before we reach 30 years of age. Therefore, when we are young it is very important to get enough calcium to make our bones strong, reducing the risk for developing *osteoporosis* as we get older.

Osteoporosis: Many older adults do not get enough calcium from the foods they eat. This can lead to the bone disease *osteoporosis*, which causes bones to gradually become weak and brittle, putting people at a high risk for bone fractures.

People who are at greatest risk for *osteoporosis* include those who are:

- female
- white/Caucasian//Asian
- small boned and thin
- post-menopausal and don't take estrogen
- older adults
- diabetic or have thyroid disease
- taking certain medications to treat chronic medical conditions (e.g. high blood cholesterol, under-active thyroid, rheumatoid arthritis. Discuss this with your doctor or pharmacist. Never stop or cut back on your medication on your own.

Make these lifestyle choices to decrease your risk of developing *osteoporosis*:

- increase calcium intake
- get adequate vitamin D
- increase physical activity, including weight-bearing exercise
- do not smoke cigarettes
- avoid excess alcohol

Supplements

You may need to take a calcium supplement if you are not getting enough calcium from foods. Women at risk for osteoporosis may need supplements as

part of their preventive care. If you are concerned about your bone health, talk to your doctor.

The calcium in supplements is absorbed best in 500 mg doses or less. All calcium supplements are not the same, so check with your pharmacist about the type to take. The amount of calcium and rates of absorption are different.

It is better to take calcium supplements throughout the day than all at once. **If you use a supplement, do not get more than 2,500 mg of calcium per day from food and supplements together.**

Some calcium supplements contain vitamin D, which helps the body to properly absorb calcium. Do not take more than the recommended dosage of vitamin D, since getting over 50 µg (2,000 IU) a day can be harmful to your health (see [HGIC 4081, Vitamin D](#)).

For More Information

Request [HGIC 4018, Get Your Calcium-Rich Foods](#) for related information. In addition, the Family and Consumer Sciences (FCS) agent at your county Extension office may have more written information and nutrition classes for you to attend. Your doctor, health care provider, or a registered dietitian (RD) can provide reliable information, too.

Reliable nutrition information may be found on the Internet at the following sites:

<http://hgic.clemson.edu>

<http://virtual.clemson.edu/groups/NIRC/>

<http://www.eatright.org>

<http://www.nutrition.gov>

<http://www.nal.usda.gov/fnic>

Sources:

1. Bobroff, Linda B. University of Florida Extension. *Facts About Calcium*. FCS8703. March 2006.

<http://edis.ifas.ufl.edu/publications.html>

2..National Academies of Sciences. National Academies Press. *Dietary Reference Intakes series*. 2004.

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