

# Calcium

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Calcium plays an important role in maintaining bone. Calcium is also needed for maintenance of normal blood pressure, blood clotting, and the functioning of the heart, muscles and nerves.

Calcium is a mineral found in many foods. Even after reaching full skeletal growth, adequate calcium intake is important because:

- Every day, calcium is lost in the urine and feces, and from shed skin, nails, hair, and sweat.
- The human body cannot produce calcium.
- When the diet does not contain enough calcium to perform its functions, calcium is taken from the bones, the storage area for calcium; this bone-loss is a cause of osteoporosis. Calcium alone cannot prevent or cure osteoporosis, but it is an important part of an overall prevention or treatment program.

## How Much Calcium?

Lost calcium must be replaced daily through the diet. National nutrition surveys have shown that many women and young girls consume *less than half* the amount of calcium recommended to grow and maintain healthy bones! The following table indicates recommended calcium intakes in milligrams:

Ages	mg
9 - 18	1300
19 - 50	1000
51+	1200

Although the recommended amounts are the same during pregnancy and breast-feeding, a little extra calcium has been shown to help prevent high blood pressure in the mother.

## Calcium-Rich Foods

No-fat or low-fat dairy products provide the easiest, most plentiful sources of calcium in the diet. Other good sources are leafy greens such as broccoli and kale, and salmon, especially with the bones included. Many foods are fortified with calcium and are readily available and affordable. Look for added calcium in fruit juices, snack foods, breakfast bars and cereals. To calculate your intake, go to:

<http://www.calciuminfo.com/index.htm>

Another easy and economical way to boost the calcium content of many meals is to add nonfat powdered dry milk to puddings, homemade cookies, breads or muffins, soups, gravy, casseroles and even a glass of milk. A single tablespoon of nonfat powdered dry milk adds 52 mg of calcium, and 2 to 4 tablespoons can be added to most recipes.

Vitamin D plays a major role in calcium absorption and bone health. Vitamin D is the key that unlocks the door and allows calcium to leave the intestine (be absorbed) and enter the bloodstream. Vitamin D also works in the kidneys to help reabsorb calcium that otherwise would be excreted. It is found in most dairy products, fatty fish, and is made in the body in response to direct sunlight exposure - 15 minutes a day is adequate for most people.

High protein diets accelerate the loss of calcium, as does too much sodium, phosphorus, and caffeine. Soft drinks contain phosphorus, sodium, and often, caffeine, and contain no calcium, so drinking them adds to your risk of osteoporosis.

## Calcium Supplements

You may find the easiest way to get the daily calcium you need is to make changes in your diet and take a calcium supplement. Calcium supplements are available without a prescription in a wide range of preparations and strengths, which can make selecting one a confusing experience. In choosing a calcium supplement, the following are important considerations:

- Avoid calcium from unrefined oyster shell, bone meal or dolomite, as these historically have contained higher lead levels or other toxic metals.
- Calcium, whether from the diet or supplements, is absorbed best by the body when it is taken several times a day in amounts of 500 mg or less, but taking it all at once is better than not taking it at all.
- Calcium carbonate is absorbed best when taken with food. Calcium citrate can be taken any time.

