

Calcium – What Can It Do For You?

What and where is calcium?

- Calcium is a major mineral in our bodies. 99% of it is in bones and teeth, 1% in body fluids.
- Bones and teeth act as storage for calcium. Hormones regulate the blood levels of calcium and can pull it out of bones and teeth, if dietary intake is too low, to keep blood levels tightly controlled.
- Fluoride replaces some calcium to form material in bones and teeth that is harder to reabsorb, adding strength and stability.

What does it do?

It is essential for:

- Muscle contraction, including the heartbeat.
- Nerve function.
- Blood pressure regulation.
- Secretion of digestive enzymes, hormones, and neurotransmitters.
- Blood clotting.

Health issues related to calcium:

- Calcium can lower blood pressure in some people.
- It seems to lower the risk of colon cancer.
- Some leg cramps are relieved with increased calcium intake.
- Adequate intake can help prevent or slow the onset of osteoporosis.

Other nutrients important to calcium use by the body:

- **Vitamin D:** helps the body absorb and utilize calcium. Recommendations increase with age since the ability to make vitamin D in the body decreases with age. Recommendations: 200 IU per day (5 micrograms) for adults to 50 years, 400 IU (10 micrograms) from 51-70 years, 600 IU (15 micrograms) over 70 years. Sources: Fortified milk and cereal products, liver, sunlight.
- **Magnesium:** works with calcium in muscle function and directly affects metabolism of calcium and Vitamin D. Recommendations: 420 milligrams/day for adults. Sources: Milk, whole grains, legumes, green leafy vegetables, nuts and seeds, hard water.
- **Protein:** too much or too little causes loss of calcium from the bones. Maximum recommended intake is 65 grams/day. Sources: Meats, milk, cheese, legumes, nuts and seeds, eggs, tofu, are especially rich.
- **Sodium:** too much may cause calcium loss. Recommendations: 2400mg/day or less for most people. Sources: Salt, processed foods, soy sauce, cheese, soft water.
- **Vitamin K:** important in making at least one bone protein. May be as important as vitamin D for bone formation. Recommendations: 65 micrograms/day for adult women and 80 micrograms for adult men. Sources: Green leafy vegetables, soybean oil.

How much is enough?

Recommendations:

- Adolescents: 1,300 milligrams per day.

- Women and men (19-50 years): 1,000 milligrams per day.
- Women and men (51 years and older): 1,200 milligrams per day.

How can I get enough calcium?

- 8 oz. of **milk or calcium fortified orange juice** has about 300 milligrams.
- 8 oz. of **non-fat yogurt** has 488 milligrams.
- 8 oz. of **frozen yogurt** has 206 milligrams.
- 1 oz. of **cheddar cheese** has 202 milligrams.
- ½ cup cooked **collard greens** has 113 milligrams.
- ½ cup cooked **broccoli** has 36 milligrams.
- ½ cup cooked **kale** has 46 milligrams.
- ½ cup regular **tofu** (calcium processed) has 138 milligrams.

Other suggestions:

- Add milk to coffee and tea.
- Cook hot cereals with milk instead of water.
- Add yogurt to cold cereals.
- Add low fat cheese to sandwiches, scrambled eggs, salads, potatoes, etc.
- Use custard, puddings, frozen yogurt, or ice milk for desserts.
- Add non-fat dried milk to cereals, casseroles, sauces, drinks, soups, etc.
- Rutabaga, broccoli, beet greens, turnip greens, mustard greens, bok choy, kale, collard greens, are good sources of calcium. Cabbage, and kohlrabi are fair sources. Add them to salads, soups, stews, pasta dishes, stir-fry dishes, omelets, etc.
- Choose coleslaw instead of potato or pasta salads.
- Use canned salmon and sardines with the soft bones included.
- Cook bones for soup stock with vinegar added to the water.
- Take calcium supplements so food sources plus supplements equal about 1500 mg/day.