

## CALCIUM

Calcium is an “essential” nutrient, a nutrient the human body needs but cannot make. Humans rely upon foods in the diet to supply calcium. Unfortunately, most Americans do not get nearly enough calcium in their diets.

Calcium is needed for building and maintaining strong **bones and teeth**. The amount of calcium consumed during childhood and adolescence affects lifelong adult bone strength. Calcium also helps **regulate heartbeat** and **muscle contractions** and the **clotting of blood**. Calcium may play a role in maintaining healthy blood pressure.

Bones are constantly being broken down and rebuilt, so a steady daily supply of calcium is very important. If the dietary intake of calcium is low, the body takes what it needs from the bones. Over time this can lead to weak bones that are prone to breaks or fractures.

It is never too late to get enough calcium. The Recommended Dietary Allowance (RDA) for calcium is measured in milligrams (mg) and depends on age:

<u>Age</u>	<u>Daily Intake Needed</u>
Birth – 6 mos	200 mg
6 mos – 1 yr	260 mg
1 yr – 3 yrs	700 mg
4 yrs – 8 yrs	1000 mg
9 yrs – 18 yrs	1300 mg

Dairy products are the richest sources of dietary calcium. Some people do not like milk and some are allergic to it. For those who tolerate milk, serving dairy products in a variety of forms may be helpful. Try pudding, custard, yogurt, milk-based soups (“cream of-”), cooked cereals made with milk instead of water (oatmeal, farina), grilled cheese sandwiches, main dishes made with cheese or a white sauce (macaroni and cheese, tuna noodle casserole) and beverages that use milk or vanilla yogurt as a base (milkshake or fruit smoothie). Consider adding nonfat dry milk powder to foods (mashed potatoes, muffins, hot cereal) to boost the calcium content.

Calcium-fortified foods are another option. These are foods that are not natural sources of calcium, but calcium has been added. Check the “Nutrition Facts” panel on food labels for information on calcium content. If the “per cent daily value” (% DV) is ten percent (10%) or more, the food is a good source of calcium. The daily value (DV) for calcium for adults is 1000 mg, so the percent listed on the food label is percent of 1000 mg (i.e., 20% DV for calcium would mean the food supplies 200 mg calcium per serving).

In the produce section, choose broccoli, kale, bok choy, carrots, oranges and tofu processed with calcium. Down the cereal aisle, check food labels for products fortified with calcium. A few brands of cereal or granola bars are also good sources of calcium; be sure to check the Nutrition Facts panel. In the infant and toddler section, look for fortified cereals, juices, and toddler “nutritional beverages.” In the grocery aisles, consider dried beans, salmon or sardines with bones and calcium-fortified soy milk. In addition to dairy products, refrigerated and frozen food cases offer several brands of calcium-fortified orange juice, cheese pizza and other food made with cheese (ravioli, macaroni and cheese, etc.).

When a person is unable to get enough calcium from the diet, a calcium supplement may be recommended. Be sure to discuss the choice of a suitable with your health care provider.

### GUIDE TO CALCIUM CONTENT OF FOODS

PRODUCE	Serving Size	Estimated Calcium*
Collard greens, frozen	8 oz	360mg
Broccoli rabe	8 oz	200mg
Kale, frozen	8 oz	180mg
Soy Beans, green, boiled	8 oz	175mg
Bok choy, cooked, boiled	8 oz	160mg
Figs, dried	2 figs	65mg
Broccoli, fresh, cooked	8 oz	60mg
Oranges	1 whole	55mg
<b>SEAFOOD</b>		
Sardines, canned with bones	3 oz	325mg
Salmon, canned with bones	3 oz	180mg
Shrimp, canned	3 oz	125mg
<b>DAIRY</b>		
Ricotta, part-skim	4 oz	335mg
Yogurt, plain, low-fat	6 oz	310mg
Milk, skim, low-fat, whole	8 oz	300mg
Yogurt with fruit, low-fat	6 oz	260mg
Mozzarella, part-skim	1 oz	210mg
Cheddar	1 oz	205mg
Yogurt, greek	6 oz	200mg
American Cheese	1 oz	195mg
Feta Cheese	4 oz	140mg
Cottage Cheese, 2%	4 oz	105mg
Frozen Yogurt, vanilla	8 oz	105mg
Ice Cream, vanilla	8 oz	85mg
Parmesan	1 tbsp	55mg
<b>FORTIFIED FOOD</b>		
Almond milk, rice milk or soy milk, fortified	8 oz	300mg
Orange juice and other fruit juices, fortified	8 oz	300mg
Tofu, prepared with calcium	4 oz	205mg
Waffe, frozen, fortified	2 pieces	200mg
Oatmeal, fortified	1 packet	140mg
English muffin, fortified	1 muffin	100mg
Cereal, fortified	8 oz	100-1,000mg
<b>OTHER</b>		
Mac & cheese, frozen	1 package	325mg
Pizza, cheese, frozen	1 serving	115mg
Pudding, chocolate, prepared with 2% milk	4 oz	160mg
Beans baked, canned	4 oz	160mg

\*The calcium content listed for most foods is estimated and can vary due to multiple factors. Check the food label to determine how much calcium is in a particular product.

Source: National Osteoporosis Foundation

Supplements include Tums, Caltrate, Citracal, Viactiv and multiple brands of “gummy” chewable calcium products. These have different concentrations of calcium so check the label for “elemental” calcium values. Calcium is best absorbed when given with food. Vitamin D helps bones deposit calcium, so some supplements also contain Vitamin D.