

Calcium in Your Diet

Why do I need calcium?

Calcium is the most abundant mineral in the body and performs many basic functions. Your body uses 99% of its calcium to build and maintain strong bones and teeth. The other 1% of calcium keeps your muscles, nervous system, and heart healthy.

How much calcium do I need?

Recommendations for calcium intake vary based on age, gender, and other factors. Getting enough calcium may lower your risk of fractures, falls, and bone loss.

Recommended Dietary Allowances (RDAs) for Calcium

Age	Male	Female	Pregnant	Lactating
0-6 months	200 mg	200 mg		
7-12 months	260 mg	260 mg		
1-3 years	700 mg	700 mg		
4-8 years	1,000 mg	1,000 mg		
9-13 years	1,300 mg	1,300 mg		
14-18 years	1,300 mg	1,300 mg	1,300 mg	1,300 mg
19-50 years	1,000 mg	1,000 mg	1,000 mg	1,000 mg
51-70 years	1,000 mg	1,200 mg		
70+ years	1,200 mg	1,200 mg		

Reference: Committee to Review Dietary Reference Intakes for Vitamin D and Calcium, Food and Nutrition Board, Institute of Medicine. Dietary Reference Intakes for Calcium and Vitamin D. Washington, DC: National Academy Press, 2010.

Which foods contain calcium?

Calcium is found in many foods. Below is a list of common foods and the amount of calcium they provide. You can also read a product's Nutrition Facts label to learn how much calcium it has.

Food	Serving size	Milligrams (mg) per serving
Yogurt, plain, low fat	8 ounces	415
Orange juice, calcium fortified	1 cup	349
Mozzarella, part skim	1.5 ounces	333
Sardines, canned in oil, with bones	3 ounces	325
Cheddar cheese	1.5 ounces	307



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Food	Serving size	Milligrams (mg) per serving
Milk, low fat, 1% milk fat	1 cup	305
Milk, nonfat	1 cup	299
Soy milk, calcium fortified	1 cup	299
Milk, reduced fat, 2% milk fat	1 cup	293
Milk, buttermilk, low fat	1 cup	284
Milk, whole, 3.25% milk fat	1 cup	276
Yogurt, fruit, low fat	6 ounces	258
Tofu, firm, made with calcium sulfate	½ cup	253
Salmon, pink, canned, solids with bone	3 ounces	181
Cottage cheese, 1% milk fat	1 cup	138
Tofu, soft, made with calcium sulfate	½ cup	138
Soybeans, cooked	½ cup	131
Breakfast cereals, fortified with 10% Daily Value (DV) for calcium	1 serving	130
Spinach, boiled, drained	½ cup	123
Frozen yogurt, vanilla, soft serve	½ cup	103
Turnip greens, fresh, broiled	½ cup	99
Kale, fresh, cooked	1 cup	94
Ice cream, vanilla	½ cup	84
Chia seeds	1 tablespoon	76
Chinese cabbage (bok choy), raw, shredded	1 cup	74
Beans, pinto, canned, drained	½ cup	54
Tortilla, corn	one, 6-inch diameter	46
Bread, white, commercially prepared	1 slice	42
Tortilla, flour	one, 6-inch diameter	32
Sour cream, reduced fat	2 tablespoons	31
Bread, whole wheat	1 slice	30
Kale, raw, chopped	1 cup	24
Broccoli, raw	½ cup	21
Cream cheese, regular	1 tablespoon	14

References: U.S. Department of Agriculture, Agricultural Research Service. FoodData Central, 2019; USDA National Nutrient Database for Standard Reference release 28, ods.od.nih.gov/pubs/usdandb/Calcium-Food.pdf. Accessed 17 Aug. 2023.

Should I take a calcium supplement?

The best way to get calcium is through foods. If you cannot get enough calcium in foods, talk to your health care provider about taking a calcium supplement.

How do I choose a calcium supplement?

Choose a supplement with calcium carbonate or calcium citrate. Check to see that a USP mark is on the label to ensure purity and quality. Avoid supplements made of bone meal, dolomite, and oyster shell, which may contain metals and lead.

Calcium carbonate supplements

Calcium carbonate should be taken with meals because it needs stomach acid to dissolve and absorb. Examples include:

- Caltrate 600
- GNC Calcium Complete
- Os-Cal 500
- Tums 500
- Viactive Soft Calcium Chews with vitamins D and K

Calcium citrate supplements

Calcium citrate is absorbed equally well when taken with or without food. Examples include:

- Citracal
- Citracal with Vitamin D
- Citracal Ultradense Calcium Citrate tablets
- GNC Calcimate Plus 800
- TwinLab Calcium Citrate Caps
- Solgar Calcium Citrate

What affects calcium absorption?

- **Amount of calcium consumed:**

Calcium absorption decreases as you consume more calcium. Consuming too much calcium, especially in the form of calcium supplements, can also lead to constipation and kidney stones.

For best absorption, take no more than 500-600 mg at one time, 4 hours apart. To avoid toxicity, limit daily calcium to 2,500 mg.

- **Iron supplements:**

Do not take your calcium supplement with an iron supplement as these nutrients compete for absorption. **Take these supplements 2 hours apart.**

- **Age and life stage:**

Absorption is highest in infants and young children and decreases in adulthood.

- **Vitamin D intake:**

Vitamin D, obtained through regular sun exposure and from food, improves calcium absorption.

These foods are good sources of Vitamin D:

- Cod liver oil
- Salmon
- Tuna fish
- Shrimp
- Milk, fortified with vitamin D
- Yogurt, fortified with vitamin D
- Orange juice, fortified with vitamin D
- Cereal, fortified with vitamin D
- Cheese

Most people are unable to get enough vitamin D from food alone. However, it is important to eat these foods to help meet your total needs. **Most adults under age 70 need 600 IU daily and most adults aged 70 and older need 800 IU daily.** Some people may need more. Ask your provider how much vitamin D you need.

- **Phytic acid and oxalic acid:**

Phytic acid and oxalic acid, found naturally in some plants, bind to calcium, making it unavailable for absorption. Eat moderate amounts of foods with these components.

- Foods high in phytic acid include whole grains, beans, legumes, nuts, seeds, and soybeans.
- Foods high in oxalic acid include beans, cocoa powder, chocolate, collard greens, rhubarb, soda (cola), soy beans, spinach, sweet potatoes, tea (black), and wheat bran.

- **Calcium that leaves the body in urine, stool, and sweat:**

The amount is affected by:

- **Sodium intake:** High sodium intake increases loss of calcium through urine. This depletes calcium stores in the body, increasing fracture risk.
- **Caffeine intake:** Caffeine is a stimulant in coffee and tea. High caffeine intake increases loss of calcium through urine. Moderate caffeine intake, about 1 cup of coffee or 2 cups of tea per day, does not appear to have any negative effects on bone.
- **Alcohol intake:** Chronic heavy alcohol use may lower bone mass, increasing fracture risk.
- **Phosphorous intake:** Drinking large amounts of carbonated soft drinks may lower bone mass, increasing fracture risk.

This handout is for informational purposes only. Talk with your doctor or health care team if you have any questions about your care.

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