Calcium content of foods

How much calcium does my child need?

DIETARY REFERENCE INTAKES FOR ELEMENTAL CALCIUM

Infants 0 - 6 months: 200 mg Infants 7 - 12 months: 260 mg Children 1 - 3 years: 700 mg Children 4 - 8 years: 1,000 mg Children 9 - 18 years: 1,300 mg

Calcium carbonate and calcium citrate are the two most commonly used forms of calcium. Calcium carbonate contains 400 mg elemental calcium per gram while calcium citrate contains 211 mg elemental calcium per gram. (1,000 mg elemental calcium = 2,500 mg calcium carbonate = 4,700 mg calcium citrate)

According to the National Institutes for Health, "calcium absorption varies by type of food. The absorption of calcium from dairy products and fortified foods is about 30%. Certain compounds in plants (e.g., oxalic acid, phytic acid) can decrease calcium absorption by forming indigestible salts with calcium, decreasing its absorption. As a result, absorption of calcium is only 5% for spinach, whereas it is much higher, at 27%, for milk. In addition to spinach, foods with high levels of oxalic acid include collard greens, sweet potatoes, rhubarb, and beans. The bioavailability of calcium from other plants that do not contain these compounds—including broccoli, kale, and cabbage—is similar to that of milk, although the amount of calcium per serving is much lower. When people eat many different types of foods, these interactions with oxalic or phytic acid probably have little or no nutritional consequence. Net absorption of dietary calcium is also reduced to a small extent by intakes of caffeine and phosphorus and to a greater extent by low status of vitamin D."

When supplementing with calcium we recommend using calcium citrate in most cases, as this form of calcium does not depend on gastric acid secretion. Limit supplementation to no more than 500 mg daily to prevent issues with absorption. Calcium supplements should be taken *with* food to improve absorption.

Food*	Milligrams (mg) per serving	Percent DV*
Yogurt, plain, low fat, 8 ounces	415	32
Orange juice, calcium fortified, 1 cup	349	27
Yogurt, fruit, low fat, 8 ounces	344	27
Mozzarella, part skim, 1.5 ounces	333	26
Sardines, canned in oil, with bones, 3 ounces	325	25
Milk, nonfat, 1 cup**	299	23
Soymilk, calcium fortified, 1 cup	299	23
Milk, whole (3.25% milk fat), 1 cup**	276	21
Tofu, firm, made with calcium sulfate, ½ cup***	253	19
Salmon, pink, canned, solids with bones, 3 ounces	181	14
Cottage cheese, 1% milk fat, 1 cup	138	11
Tofu, soft, made with calcium sulfate, ½ cup***	138	11
Soybeans, cooked, ½ cup	131	10
Breakfast cereals, fortified with 10% of the DV for calcium, 1 serving	130	10
Spinach, boiled, drained, ½ cup	123	9
Frozen yogurt, vanilla, soft serve, ½ cup	103	8
Turnip greens, fresh, boiled, ½ cup	99	8
Kale, fresh, cooked, 1 cup	94	7
Chia seeds, 1 tablespoon	76	6
Chinese cabbage (bok choi), raw, shredded, 1 cup	74	6
Beans, pinto, canned, drained, ½ cup	54	4
Tortilla, corn, one, 6" diameter	46	4
Sour cream, reduced fat, 2 tablespoons	31	2
Bread, whole-wheat, 1 slice	30	2
Kale, raw, chopped, 1 cup	24	2

21

10

2

Broccoli, raw, ½ cup

Apple, golden delicious, with skin, 1 medium