



Facts about milk

A standard 8-oz. serving of milk provides good to excellent sources of nine essential nutrients, making it one of the most nutrient-dense foods. This means it provides a high level of essential nutrients compared to its calories. In fact, each serving of milk provides 10% or more of the recommended daily intake for calcium, vitamin D (if fortified), protein, potassium, vitamin A, vitamin B12, riboflavin and phosphorus.

Milk is well known as an excellent source of calcium. Regardless of its fat content, milk provides about 300 milligrams of calcium per serving (8 fluid ounces). The chart below provides information on the calcium content of fluid milk products per serving. A diet that includes three servings of milk (or other comparable dairy foods) each day provides enough calcium and other nutrients that may help reduce the risk of osteoporosis, high blood pressure and colon cancer.

It is difficult to obtain enough calcium without consuming milk (or other dairy foods). To help meet calcium requirements, the following number of servings of milk (or its equivalent) is recommended each day:

- Children 4 to 8: 3 servings
- Children 9 to 18: 4 servings
- Adults 19 to 50: 3 servings
- Adults 50-plus: 4 servings

Milk by the numbers

1 cup milk	Calories (Kcal)	Fat (g)	Calcium (mg)
Whole	149	7.7	291
2% Reduced fat	121	4.4	296
1% Lowfat	104	2.2	312
Nonfat	90	0.5	316
Chocolate, Whole	208	8.0	280
Chocolate, 2% Reduced fat	178	4.7	284
Chocolate, 1% Lowfat	157	2.3	286

Source: USDA Nutrient Database for Standard Reference.

A nutrient-by-nutrient look at milk

Calcium: 30% Daily Value

An 8-oz serving of milk provides 30% of the Daily Value of calcium. Calcium helps build and maintain strong bones and teeth. This mineral also plays an important role in nerve function, muscle contraction and blood clotting.

Vitamin D: 25% Daily Value

When fortified, a glass of milk provides about 25% of the Daily Value for vitamin D. Vitamin D helps promote the absorption of calcium and enhances bone mineralization. Milk is one of the few dietary sources of this important nutrient.

Protein: 16% Daily Value

The protein in milk is high quality, which means it contains all of the essential amino acids in the proportions that the body requires for good health. Protein builds and repairs muscle tissue and serves as a source of energy during high-powered endurance exercise. An 8-oz glass of milk provides about 16% of the Daily Value for protein.

Potassium: 11% Daily Value

Potassium regulates the body's fluid balance and helps maintain normal blood pressure. It's also needed for muscle activity and contraction.

Vitamin A: 6%-10% Daily Value

A glass of 2%, 1% or fat-free milk provides 10% of the Daily Value of vitamin A; a glass of whole milk provides 6%. This nutrient helps maintain normal vision and skin. It also helps regulate cell growth and maintains the integrity of the immune system.

Vitamin B12: 13% Daily Value

Vitamin B12 helps build red blood cells that carry oxygen from the lungs to working muscles. Just one 8-oz glass of milk provides about 13% of the Daily Value for this vitamin.

Riboflavin: 24% Daily Value

Milk is an excellent source of riboflavin, providing 24% of the Daily Value. Riboflavin, also known as vitamin B2, helps convert food into energy—a process crucial for exercising muscles.

Niacin: 10% Dietary Reference Intake (or Niacin equivalent)

Niacin is important for the normal function of many enzymes in the body, and is involved in the metabolism of sugars and fatty acids. A glass of milk provides 10% of the Dietary Reference Intake for niacin.

Phosphorus: 20% Daily Value

Phosphorus helps strengthen bones and generates energy in the body's cells. Milk is an excellent source of phosphorus, providing 20% of the Daily Value.

Varieties of fluid milk

Milk has long been a popular beverage, not only for its flavor, but because of its unique nutrient package.

Whole milk (3.25% fat) contains about 150 calories and about 8 grams of fat per serving (8 ounces). Although not required, whole milk may be fortified with vitamin D at a level of 400 International Units (IU) per quart. If vitamin D is added, the label must state this fact.

2% reduced-fat milk (2% fat) contains about 120 calories and about 5 grams of fat per serving (8 ounces). Vitamin A is removed with the milkfat. For this reason, Vitamin A must be added to 2% reduced-fat milk so that it contains at least 1,200 IU of vitamin A per quart, although 2,000 IU are typically added based on FDA recommendations. Vitamin D is added to virtually all milk at a level of 400 IU of Vitamin D per quart. The addition of these vitamins must be stated on the label.

1% lowfat milk (also called light milk) (1% fat) contains 100 calories and 2.5 grams of fat per serving (8 ounces). Vitamin A is removed with the milkfat. For this reason, Vitamin A must be added to 1% lowfat milk so that it contains at least 1,200 IU of vitamin A per quart, although 2,000 IU are typically added based on FDA recommendations. Vitamin D is added to virtually all milk at a level of 400 IU of Vitamin D per quart. The addition of these vitamins must be stated on the label.

Fat-free milk (also called skim or nonfat milk) (0% fat) contains 80 calories and 0 grams of fat per serving (8 ounces). Vitamin A is removed with the milkfat. For this reason, Vitamin A must be added to fat-free milk so that it contains at least 1,200 IU of vitamin A per quart, although 2,000 IU are typically added based on FDA recommendations. Vitamin D is added to virtually all milk at a level of 400 IU of Vitamin D per quart. The addition of these vitamins must be stated on the label.

Skim deluxe or skim supreme milk looks like and has the mouthfeel of 2% reduced-fat milk as a result of the addition of a small amount of dietary fiber to the milk. This milk is an option to provide the look and mouthfeel of 2% lowfat or whole milk without the extra calories and fat.

Acidophilus/Bifidobacteria milk is a lowfat or nonfat milk to which acidophilus and bifidobacteria cultures have been added. There is some evidence that these cultures have unique health benefits, such as improving lactose digestion, lowering blood pressure and promoting a better balance of bacteria in the gastrointestinal tract.

Chocolate milk (fat-free, 1% lowfat, 2% reduced-fat, whole milk) is milk to which chocolate or cocoa and a sweetener have been added. This milk is just as nutritious as its unflavored counterpart. Compared to plain milk, chocolate milk contains about 60 more calories per serving (8 ounces).

Evaporated milk (6.5% fat) is made by removing about 60% of the water from whole milk. The milk is then homogenized, fortified with vitamin D to a level of 25 IU per 1 ounce, canned and heat sterilized. The addition of vitamin A is optional. If added, each fluid ounce must contain not less than 125 IU of vitamin A.

Evaporated fat-free milk (0.5% fat or less) is a concentrated, fat-free (skim or nonfat) milk that has been fortified with vitamins A and D, canned and sterilized.

Sweetened condensed milk (8% fat or less) is a canned milk concentrate of whole milk to which sugar has been added. The sweetener used (usually sucrose) prevents spoilage. Sweetened condensed fat-free milk contains no more than 0.5% milkfat.