

Shopping for Health: Milk¹

Wendy J. Dahl and Lauren Foster²

Why is milk important for health?

Milk, specifically cow's milk, provides a variety of essential nutrients that your body needs to maintain good health. These nutrients include calcium, vitamin D, vitamin A, and potassium. Milk also contains high-quality protein that helps meet your body's needs.

Health Benefits

A diet with the recommended servings of milk and milk products will help build and maintain bone. This is especially beneficial during childhood and adolescence when the majority of bone is made. In addition, milk may help control blood pressure because of its potassium and calcium content.

Shopping for Milk

Shopping for milk may seem overwhelming due to the wide variety of milk products in the market. You may find that some types of milk meet your needs better than others based on your specific health conditions or preferences.



Figure 1. Milk.
Credits: 4x6, iStock/Getty Images Plus

Fat Content of Milk

Current recommendations recommend replacing saturated fat with polyunsaturated fats (e.g., fats from nuts, seeds, or most vegetable oils) to reduce risk of heart disease (USDHHS-USDA 2015). Milk contains saturated fat. By choosing low-fat or skim milk, you can receive the nutritional benefits of milk without the excess calories and saturated fat. Table 1 shows the amount of fat in different types of cow's milk. If you prefer the flavor of whole milk to skim milk, try slowly transitioning to lower fat versions. This may allow you to grow accustomed to the different taste and decrease your daily fat intake.

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2. Wendy J. Dahl, Ph.D., associate professor; and Lauren Foster, B.S.; Food Science and Human Nutrition Department, UF/IFAS Extension, Gainesville, FL 32611.

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Table 1. Fat content of cow's milk.

Milk Type	Fat (g/8 oz. glass)
Whole milk	8
Reduced-fat (2%) milk	5
Low-fat (1%) milk	2.5
Skim milk	0

g = gram(s)
oz = ounce

Animal Milks

LACTOSE-FREE MILK

Some people lack the enzyme needed to digest the milk sugar, lactose. These people may have unpleasant gastrointestinal symptoms after drinking milk. This is known as lactose intolerance. Many people who are unable to digest lactose may be able to consume small amounts of lactose without troubling side effects.

Lactase enzyme may be added to regular milk to predigest the lactose, preventing possibility of gastrointestinal side effects in those with lactose intolerance. Some brands, such as Lactaid®, offer milk products with this enzyme added. Since the lactose in this kind of milk is broken down into smaller sugars, the milk may taste sweeter.

RAW MILK

Raw milk is milk that has not been pasteurized. *Pasteurization* is a heating procedure used to kill harmful bacteria in dairy products. Raw and pasteurized milk contain the same nutrients, but the bacteria in raw milk may cause a variety of foodborne illnesses (USDHHS-FDA 2018). This is especially dangerous for people with weakened immune systems.

ORGANIC MILK

Milk may be labeled as *organic* if the animal is not treated with hormones or medications, is fed only organic feed, and is allowed enough grazing time. If milk is produced according to standards set by the USDA National Organic Program, it will carry the seal shown here (USDA-AMS n.d.):



Figure 2. When you see the USDA Organic Seal, you know the product is at least 95 percent organic and has been produced and processed in accordance with the USDA's National Organic Program standards.

Credits: USDA-AMS n.d. <http://www.ams.usda.gov/nop/>

Organic milk has the same nutrient content as regular milk, and production must comply with the same safety standards. There are no known health benefits of drinking organic milk over non-organic milk, but some consumers choose organic milk to avoid consuming milk from cows given growth hormone.

GOAT'S MILK

Although less popular in the United States, goat's milk is used as an alternative to cow's milk in many countries.

There are no nutritional advantages of goat's milk compared to cow's milk or a lower risk of allergy with goat's milk (Turck 2013). Like cow's milk, goat's milk contains the sugar lactose, and may cause digestive upset in people with lactose intolerance.

Goat's milk has a slightly higher fat content than whole cow's milk, with about 10 g of fat per 8 oz glass. If you are looking to lower your fat intake, goat's milk is not a good choice.

Plant-Based Milks

SOYMILK

Rather than using animal products, soy milk is made from soybeans. It may be a healthy alternative to cow's milk for many people. Soymilk contains about the same amount of protein as cow's milk.

Soymilk is safe for people with an allergy to cow's milk because it lacks the protein *casein*, which is responsible for many allergic reactions (Tsabouri et al. 2014). Soy milk is also lactose-free and is a good source of protein and added calcium for people with lactose intolerance.

Soymilk has no cholesterol and less saturated fat than cow's milk. Soy protein may help decrease blood cholesterol and reduce your risk for heart disease (Blanco Mejia et al. 2019, Jenkins et al. 2019).

RICE MILK

Rice milk, another plant-based milk substitute, is made from rice grains. Like soymilk, it is safe for people with a cow's milk allergy and will not cause gastrointestinal symptoms in those with lactose intolerance.

If you drink rice milk as a replacement for cow's milk in your diet, you should be aware that it has a very different nutrient content. With only 2.5 g of fat per cup, rice milk may be a good choice for people looking to decrease their fat intake. However, rice milk is not recommended for

infants or young children due to its low protein content (Keller et al. 2012) and may not be the best choice for older adults who need higher protein intakes (Bauer et al. 2013). While normal cow's milk has about 8 grams of protein per cup, rice milk has less than 1 gram per cup.

ALMOND MILK

A more recent plant-based milk substitute is almond milk. Almond milk is a safe alternative for those with cow's milk allergy and has no lactose so is well tolerated by those with lactose intolerance. As with rice milk, almond milk is often lower in fat, containing only 2.5 g of fat per cup. However, due to its low protein content at 1 g per cup, almond milk is not recommended as a milk replacement for infants or young children or older adults who may need higher protein choices to meet their needs.

Chocolate Milk

Most milk and milk substitutes come in a chocolate-flavored variety. Chocolate milk generally has more calories and sugar than the plain alternative but still provides the same essential nutrients and health benefits (Murphy et al. 2008, Fayet et al. 2013). Drinking low-fat chocolate milk in appropriate amounts may be a healthy option for children who might otherwise not drink milk.

Be an Informed Shopper

Consuming milk and milk products can provide long-term health benefits, but you should know the facts before you shop. Not all types of milk provide the same amounts of nutrients.

Learn More

Contact your local UF/IFAS Extension Family and Consumer Sciences (FCS) agent for more information and ask about nutrition classes for you to attend. Also, you can receive reliable information from a registered dietitian (RD). If you have concerns about your specific health condition, you should speak to your doctor.

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