

YOGURT

AND OTHER CULTURED DAIRY PRODUCTS

The aroma, body and flavor of yogurt and other cultured dairy products can vary depending on the type of culture and milk, amount of milk fat and nonfat milk solids, fermentation process and temperature used. These foods are made by adding specific cultures to fluid dairy products in order to convert some lactose (milk's sugar) into lactic acid. The word "acidified" in the product name means acidifiers were added to produce the lactic acid.

WHAT IS YOGURT?

Yogurt is a mixture of milk (whole, reduced-fat, lowfat or nonfat) and cream fermented by a culture of lactic acid-producing bacteria, **Lactobacillus bulgaricus** and **Streptococcus thermophilus**. Other bacteria (e.g., acidophilus) and other strains of the above bacteria may be added to the culture. Sweeteners (e.g., sugar, honey, aspartame), flavorings (e.g., vanilla, coffee) and other ingredients (e.g., fruits, preserves, stabilizers such as gelatin) may also be added. Yogurt contains at least 3.25% milk fat and 8.25% solids-not-fat. The mixture of dairy products and optional ingredients, except bulky flavorings, must be pasteurized or ultrapasteurized. The milk in most yogurts is also homogenized. Some yogurts carry a seal (below) on the label indicating that the yogurt contains a significant level of live, active cultures.



* Meets National Yogurt Association Criteria for Live and Active Culture Yogurt

VARIETIES

- **Lowfat Yogurt** is similar in composition to yogurt except that it contains either 0.5%, 1%, 1.5% or 2% milk fat.
- **Nonfat Yogurt** is similar in composition to yogurt and lowfat yogurt except that it contains less than 0.5% milk fat.
- **Yogurt Beverages** are available in a variety of flavors and in single-serve and larger containers.

OTHER CULTURED DAIRY FOODS

- **Buttermilk** is made by adding lactic acid-producing bacteria, usually **Streptococcus lactis**, to pasteurized or ultrapasteurized milk (whole, reduced-fat, lowfat, nonfat) with nonfat dry milk solids under controlled conditions. The product is heated until the desired acidity is achieved, then cooled to stop fermentation. Buttermilk flakes or liquid butter may be added to give cold milk the appearance of churned buttermilk. Salt, citric acid or sodium citrate may be added to enhance flavor. Today, depending on the level of milk fat in the product, buttermilk may be called **cultured buttermilk**, **cultured lowfat buttermilk**

or **cultured skim (nonfat) buttermilk**. Originally, buttermilk was the lowfat liquid remaining after churning cream into butter.

- **Acidophilus Milk** is typically a lowfat or nonfat milk to which active cultures of **Lactobacillus acidophilus** have been added. The mixture is heated until a curd forms and the desired acidity is reached. The milk is then refrigerated. Adding **Lactobacillus acidophilus** cultures to cold, lowfat or nonfat milk and then refrigerating the product to prevent further growth of the harmless bacteria produces **Sweet Acidophilus Milk**. Unlike fermented acidophilus milk, which has a slightly tart taste, this product has a sweet taste.



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NUTRITIONAL INFORMATION

The nutritional and caloric contents of yogurt, buttermilk and acidophilus milk are similar to those of the fluid milks from which they are made. Each is an important source of calcium, riboflavin (B₂) and protein. Check the Nutrition Facts panel on product labels for the nutritional content of specific products.

STORING AND HANDLING

Yogurt, buttermilk and acidophilus milk should be stored in closed containers in the refrigerator at 40°F to maintain their quality. Yogurt will keep for about a week and buttermilk and acidophilus milk will keep for about 2 weeks in the refrigerator. Freezing is not recommended for any of these cultured dairy foods.

COMMONLY ASKED QUESTIONS ABOUT YOGURT AND OTHER CULTURED DAIRY PRODUCTS

Does Yogurt Have Unique Health Benefits?

The main benefit of yogurt is that, like other dairy foods, it provides protein, calcium, vitamins and other minerals. Numerous health benefits beyond its nutritional value have been associated with consuming yogurt. Scientists have found that intake of yogurt with active cultures may aid digestion, ease diarrhea, boost immunity, fight infection and protect against cancer. These specific health benefits depend on the strain and viability of the culture in yogurt. This is why it is important to choose yogurt with a seal indicating that it contains live, active cultures.

A NUTRITIONAL LOOK AT YOGURT

| Food 1 cup (8 oz) | Calories Kcal | Fat g | Calcium mg |
|----------------------|------------------|----------|---------------|
| Yogurt | | | |
| Whole milk, plain | 150 | 8.0 | 296 |
| Lowfat, plain | 155 | 4.0 | 447 |
| Lowfat, vanilla | 209 | 3.0 | 419 |
| Lowfat, fruit | 243 | 3.0 | 339 |
| Nonfat, plain | 137 | 0.4 | 488 |
| Buttermilk | | | |
| Lowfat | 99 | 2.0 | 285 |

Source: USDA Nutrient Database for Standard Reference.

Why Is Yogurt Beneficial for Individuals with Lactose Intolerance?

Many yogurts contain lower amounts of lactose than milk. As yogurt ferments, some of the lactose (milk's sugar) changes to lactic acid. Importantly, starter cultures in yogurt may produce the enzyme lactase, which digests lactose. Yogurt's semi-solid state also contributes to improved tolerance to lactose.

Is Yogurt Fortified with Vitamin D?

Vitamin D-fortification of milk products is optional. If vitamin D is added to yogurt, it must be indicated on the product label.

Is Sweet Acidophilus Milk Advantageous for Lactose Intolerant Individuals?

The lactose in sweet acidophilus milk is tolerated about the same as that in regular milk. Sweet acidophilus milk, cultured buttermilk or yogurt without live, active cultures all have about the same amount of lactose as regular milk. Consuming these milk products with meals improves lactose digestion.

What Is a/B Milk?

This is a lowfat or nonfat milk to which acidophilus and bifidobacteria cultures have been added. Some cottage cheeses and light ice creams have a/B cultures added. Nutritionally, these products are similar to the milk from which they are made. 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.

