

Definition: **butter** from *Philip's Encyclopedia*

Edible fat made from milk. A churning process changes the milk from a water-in-oil emulsion to an oil-in-water emulsion. The fat (oil) globules of the milk collide and coalesce, losing their protective shield of protein and turning into butter, thus separating out from the more watery whey. Commercial butter contains about 80% fat, 1-3% added salt, 1% milk solids and 16% water.



Image from:

[Unsaturated fats are an important supply of... in Encyclopedia of Global Health](#)

Summary Article: **butter**

From *The Columbia Encyclopedia*

dairy product obtained by churning the fat from milk until it solidifies. In most areas the milk of cows is the basis, but elsewhere that of goats, sheep, and mares has been used. Butter was known by 2000 B.C., although in ancient times it was used less as food than as an ointment, medicine, or illuminating oil. At first it was churned in skin pouches thrown back and forth or swung over the back of trotting horses. Later, various hand churns were devised, including rotating, swinging, and rocking containers operated by plungers. Butter-making on the farm consists of allowing the milk to cool in pans, letting the cream rise to the top, skimming the cream off, and letting it ripen by natural fermentation;

it is then churned. Exclusively farm-made until about 1850, butter has become increasingly a factory product. The centrifugal cream separator, introduced into the United States c.1880, and a method devised in 1890 by Stephen Moulton Babcock to determine the butterfat content of milk and cream gave impetus to large-scale production. The application of chemistry and bacteriology facilitates the making of butter of uniform quality. The percentage of fat extraction and the time required for churning depend on the composition of the butterfat (see fats and oils); the temperature, acidity, richness, and viscosity of the cream; the speed and motion of the churn; and the size of the fat globules. Commercial butter usually contains from 80% to 85% milk fat, from 12% to 16% water, and about 2% salt. Sweet, or unsalted, butter is favored in Europe, but other markets prefer at least 2% salt. Renovated or process butter is made from rancid or inferior butter, melted and refined, then rechurned. Whey butter, made from cream separated from whey, is usually oily and of inferior quality. The natural color of butter, derived from the carotene in green fodder, ranges from pale yellow to deep gold. The European Union, with France, Germany, and the Netherlands leading the way, is the world's leading butter producer, followed by India, the United States, and Russia. The EU, New Zealand, Australia, and the United States are the chief exporters; and Russia and Great Britain are heavy importers. Wisconsin, California, and Minnesota are the leading producers in the United States, with an output of 1.3 billion pounds of butter in 1991. Clarified butter, butterfat with the milk solids removed, is useful in cooking and has good keeping qualities. It is made in quantity in Egypt and in India, where it is known as *ghee*. The dietary value of butter is due to its large proportion of easily digested animal fat and to its vitamin A and vitamin D content. Consumption of butter has dropped, however, because the high animal fat content has been identified as a contributor to obesity and heart disease.

**APA**



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butter. (2018). In P. Lagasse, & Columbia University, *The Columbia encyclopedia* (8th ed.). New York, NY: Columbia University Press. Retrieved from <https://search.credoreference.com/content/topic/butter>

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## APA

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## Harvard

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## MLA

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