

# Yogurt Production

By- Dr Ekta Khare

Department of Microbiology,  
Chhatrapati Shahu Ji Maharaj University, Kanpur



# PRODUCTION OF YOGHURT

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- Yogurt, often known as yoghurt, is one of the most popular fermented dairy products in the world, with a wide range of health advantages in addition to basic nutrition.
- In general, yogurt is a nutrient-dense food because of its nutritional profile, and it is a high-calcium source that supplies considerable amounts of calcium in bio-available form.
- Furthermore, it contains milk proteins with a higher biological value as well as nearly all of the essential amino acids required for optimal health.
- Yogurt is a probiotic carrier food that may transfer large numbers of probiotic bacteria into the body, providing unique health benefits if consumed.
- These are commonly referred to as "bio-yogurts."
- Yogurt is also said to help with lactose tolerance, immunological boosting, and the prevention of gastrointestinal problems.

# Definition

- **A yogurt is a fermented milk product that is made by combining two specific starter bacteria: *Streptococcus thermophilus* and *Lactobacillus delbrueckii* subsp. *bulgaricus*.**
- In yogurt, some natural derivatives of milk are added, for example, whey concentrates, skim milk powder, caseinates, or creams, to create a gel structure caused by the coagulation of milk proteins, as well as the presence of lactic acid secreted by defined species of bacteria, which must be present or abundant at the time of consumption
- In addition to containing several essential nutrients, it also contains probiotics, fiber, vitamins, and minerals. Sweeteners, fruits, flavors, rice, soy, and nuts can also be added to it to change the consistency and aroma according to taste
- In addition to its high digestibility and bioavailability, yogurt is considered a healthy food and can also be recommended to individuals with lactose intolerance, gastrointestinal disorders such as inflammatory bowel disease and irritable bowel disease, as well as helping with weight loss and immunity.
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- Fermented milk products are mentioned in Indian Ayurvedic scripts dating back to about 6000 BC.
- In 100 BC, the Greeks were the first to mention yogurt in written references.
- Around 1542, yogurt appeared in France. The king of France, Francis I, cured himself of chronic diarrhea by eating yogurt.
- In 1984, the FAO/WHO defined yogurt as “coagulated milk obtained by lactic acid fermentation by *Lactobacillus delbrueckii* spp. *Lactobacillus bulgaricus* (*Lb. bulgaricus*) and *Streptococcus thermophilus* from milk.

# Types

- During the 1920s and 1930s, yogurt milk was described as having poor flavor because of its high acidity.
- Before the 1960s, yogurt was only found in a few grocery or health food stores.
- Today, many forms of yogurt can be found including:
  - plain yogurt,
  - fruit flavored yogurt (including fruit-on-the-bottom and blended forms),
  - whipped yogurt,
  - granola-topped yogurt,
  - drinkable yogurt,
  - frozen yogurt, and
  - Greek yogurt with varying fat contents (regular, low fat, and nonfat).

# Microorganisms involved

- *Streptococcus thermophilus* and *Lactobacillus bulgaricus* are the starter culture to be used in the production of yogurt.

