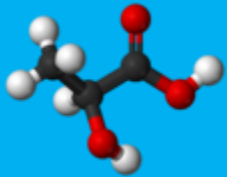


Lactic acid



Lactic acid is found primarily in sour milk products, such as koumiss, laban, yogurt, kefir, some cottage cheeses, and kombucha. The casein in fermented milk is coagulated (curdled) by lactic acid. Lactic acid is also responsible for the sour flavor of sourdough breads. This acid is used in beer brewing to lower the wort pH in order to reduce some undesirable substances such as tannins without giving off-flavors such as citric acid and increase the body of the beer. Some brewers and breweries will use food grade lactic acid to lower the pH in finished alcohols.

In winemaking, a bacterial process, natural or controlled, is often used to convert the naturally present malic acid to lactic acid, to reduce the sharpness and for other flavor-related reasons. This malolactic fermentation is undertaken by the family of lactic acid bacteria.

As a food additive it is approved for use in the EU, USA and Australia and New Zealand. It is listed by its INS number 270 or as E number E270. Lactic acid is used as a food preservative, curing agent, and flavoring agent. It is an ingredient in processed foods and is used as a decontaminant during meat processing. Lactic acid is produced commercially by fermentation of carbohydrates such as glucose, sucrose, or lactose, or by chemical synthesis. Carbohydrate sources include corn, beets, and cane sugar.