

pH in Dairy

The importance of testing pH in dairy products

Testing the pH of milk and dairy products is **vitaly important to test for impurities and signs of infection** both upon collection of the milk as well as at the point of delivery. In the sterilization process, checking the pH is important as the lower the pH the faster the process will be. However, lower pH values in milk may also indicate that the producing cattle carry leukocyte infections such as mamites.

Importance of Testing pH in Milk

Milk to be used in the cheese manufacturing process must be of excellent quality. Its pH value decides whether the cheese will be soft or hard. pH is also checked during cheese preparation, the souring of milk and cream maturation. Pathogen multiplication of fresh and soft varieties can be slowed down drastically by ensuring that the pH stays within the 4.1 - 5.3 range.

Importance of Testing pH in Butter

pH control is very important in the butter manufacturing process. After pasteurization, the cream is cooled and must be kept at a strict pH value between 6.70 and 6.85 to generate sweet butter. To manufacture sour butter, citric acid extracts are added to acidify the cream to a pH of 4.6-5.0. With most butter products, a lower pH value enhances the shelf life of the product.

Importance of Testing pH in Yogurt

When producing yogurt, the cooling of the cultured milk can only start once acidification has reached a pH value of 4.4 to 4.6. As for fruity yogurts, the pH value of the fruit added must be the same as the yogurt itself to avoid any undesirable reactions at the end of the cycle. Ideally, a finished yogurt product should have a pH of 4.0 to 4.4 for longer conservation.