

STUDY OF THE COMPOSITION OF MILK AND DAIRY PRODUCTS

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ANNOTATION

Milk contains protein, fat, milk sugar, mineral salts, water, organic acids, vitamins, enzymes, and other nutrients necessary for normal human development. The aim of pasteurization, the homogenization process, and the quality and poor quality milk are discussed in this article.

Keywords: Human body, pasteurization, dairy products, homogenization.

INTRODUCTION

The majority of people believe that milk and dairy products are healthy foods, but is this true? Dairy products can be extremely beneficial to one's health or, on the other hand, can be extremely harmful. How? This is due to the fact that the quality of milk is determined by the source of the milk. We can't determine whether cow's or goat's milk is healthy or harmful in general. The quality of milk is determined by the breastfeeding animal's particular habitat and milk processing processes.

If we concentrate on the composition of milk and dairy products, the network system comprises companies that make milk, fermented milk products, sour cream, butter, cheese, canned milk, ice cream, casein, and other items. Milk and dairy products play an essential role in increasing the nutritional composition of foods ingested in order to meet the population's demand for a specific nutrient: protein. As a result, the development of the dairy industry receives special emphasis.

Dairy farms have recently begun producing milk for young children, which is then used to feed dairy calves. Butter, hard and soft cheese, technological and feed output are all expanding. Joint ventures with foreign countries are being formed in order to fully supply the population's need for milk and dairy products while also improving product quality. It is, in reality, a light-yellow liquid with an unique odor and a somewhat sweeter flavor that is created as a result of the mammary glands' activity. Milk is produced in an animal's body as a result of deep and complicated changes in the nutrients in the feed, as well as new synthesis of chemicals in the mammary gland cells.

Protein, fat, milk sugar, mineral salts, water, organic acids, vitamins, enzymes, and other nutrients are all found in milk and are required for the regular development of the human body. Milk from cows, sheep, camels, deer, and goats is utilized in food and processing. Recycled calcium is now derived in our country through dairy products, and it is also high in phosphorus

when compared to other goods. Phosphorus is found in 0.4-0.6 grams per 100 grams of cheese. Cow's milk is the most common type of milk used by the body and ingested by the general public. Pasteurization kills pathogens (dangerous bacteria) that may be present in milk. Pasteurization destroys or breaks down the following components in milk: protein structure; natural enzymes; vitamin A (totally broken down); 38 percent of B vitamins are mostly or entirely vitamin C; 20 percent of iodine; amino acids. The natural enzymes in milk are important for proper milk digestion, and when they are broken down, milk digestion becomes extremely difficult. The body's absorption of milk protein is reduced by 17 percent as a result of changes in the structure of amino acids during pasteurization. This means that pasteurized milk is difficult to digest, and that the body that drinks it is vitamin and mineral deficient. Is it true that pasteurization kills all dangerous bacteria in milk? Pasteurization does not ensure that all germs in milk are killed. The following microbes, for example, are not killed during pasteurization.

Heating milk, according to the researchers, causes a rise in hazardous germs in the milk due to the breakdown of "inhibitors" in the milk, which are factors that hinder bacteria from growing.

What are the health risks associated with pasteurized milk? Excessive intake of pasteurized milk, according to some scientific evidence, might result in the following symptoms and diseases: diarrhea, abdominal rest, osteoporosis, arthritis, heart disease, chronic ear inflammation, cancer, diabetes (I), rheumatoid arthritis, infertility, leukemia, autism, autoimmune diseases, gastrointestinal problems, asthma, seizures in children, growth problems, attention deficit syndrome in children.

What is the homogenization procedure, and how does it effects milk quality? The milk is processed at a high pressure (17,200-20,700 kPa) with a specific pump, ensuring that the fatty part of the milk does not separate on the top and that the milk fat is always mixed with the milk. Milk fat molecules break down into very little micro particles as a result. The homogenization process is the name for this procedure. Homogenized milk, according to some scientific evidence, can induce heart disease, atherosclerosis, allergies, and a variety of inflammations.

Causes of poor milk quality. Consider an animal that lives in a crowded and filthy environment, sleeps on each other's litter, receives almost no sunlight, eats artificial feeds and animal carcasses instead of greens, and is given hormones to promote milk production. Harmful pathogens thrive and multiply under these settings. Because it is natural for such animals to become ill fast, antibiotics are administered to them as well. Artificial feeds (protein mixes, cereals, genetically modified grains, animal waste, etc.) significantly affect the intestinal micro flora of animals whose main food should be green (cows). They are more likely to become ill as a result of this.

Reasons for the excellent milk's origin. Greenery or straw in winter is the main meal in big pastures, fresh air, and grazing in the sun, and milk, which is given by animals who eat little or no grain, is highly rich in vital micronutrients. Such creatures have clear eyes, lustrous coats, and a powerful and balanced body structure. Greens and herbs give animal milk fat a yellow color (rather than white) and supplement it with nutrients such vitamins A, D, and K2 as well

As a test, Staph was found in both pasteurized and unpasteurized raw milk. The activity of pathogens in raw milk refrigerated at 37 C was dramatically reduced when the pathogens *Aureus*, *S. Enteritidis*, and *Listeria monocytogenes* were compared. The number of microorganisms in pasteurized milk held at the same temperature increased. 5 different strains of H7 intestinal rods are added to raw milk and this milk is stored at 5C. Pathogens are completely killed in a few days before they develop. Lactoperoxidase, a naturally occurring substance in raw milk, kills bacterial and fungal agents added to milk. The pathogen *Campylobacter jejuni*, added to raw goat's milk, cannot survive in this milk and dies. When H7 intestinal rods were immersed in raw milk, the amount of pathogens began to decrease sharply within 7 days. After 7 days, there was a slight increase. This is probably due to the fact that after 7 days, the immune system in the milk is slightly weakened.

What type of milk should be avoided? Poor-quality milk can be found in the following types of milk: Milk from a factory or a pet fed in improper conditions, always living in a cramped and filthy environment, eating unnatural foods Milk with A1 beta-casein. Pasteurized milk is milk that has been pasteurized. Milk that has been homogenized. Milk that has been skimmed.

What is the best way to choose milk? Milk of the highest quality passes all of the following criteria: Wide pastures, pure air, sun grazing, greens or straw as the main meal in winter, milk from animals fed minimum or no cereals is highly high in important micronutrients. Animal milk fat is yellow, and it is virtually always eaten by greens and herbs (not white). Milk with A2 beta-casein. A2 beta-casein is always present in human milk (breast milk) and goat's milk. Individual cows should be examined. Milk that has not been pasteurized. (Note: Drinking raw milk from non-natural animals is harmful.) (For more information, see the section above.) It has not been pasteurized. There is no homogenization. Skim milk that is low in fat. Yogurt can

be made from pasteurized, high-quality sour milk. Milk that has been ultra-pasteurized is likewise unsuitable for creating yogurt.

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