



Requirements in the Technological Process in the Production of Milk and Dairy Products and the Safety of the Product

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Abstract: This article covers the issues related to the composition, quality and safety of milk and dairy products for the human body, the requirements imposed on them on the basis of technical regulations, their organoleptic, physico-chemical and microbiological assessment.

Keywords: quality and safety of milk and dairy products, chemical composition, fats, protein, lactose, amino acids, technical regulations, evaluation methods, technical specifications.

Milk processing in the production of dairy products. How to create your own profitable business in milk processing technical regulation requirements for the production of dairy products.

Milk separation. Whole milk is separated into two fractions - cream and skim milk (skim milk), as well as to clean it from mechanical impurities. In separators, milk separation is carried out. Separators consist of the following units: milk bottles, drum, drive mechanism and Bed body. The performance of the most common separators is from 50 to 3000 liters of milk per hour.

During the separation process, it is necessary to achieve the maximum possible separation of fat and reduce its emissions in skim milk. The main factor affecting the level of skimming milk is the size of the fat globule. The larger the fat globules, the better they stand out and the higher the rate of skimming milk. The smallest of these (less than 0.1 μm in diameter) remains in skim, due to which the fat content of the oil varies from 0.03 - 0.05%.

Severe contamination of milk disrupts its excretion and reduces the level of degreasing. The increased acidity of milk leads to partial coagulation of proteins that fill the dirt gap and the gaps between the plates, which also worsens the degreasing process and increases the waste of reverse fat. The higher the milk temperature, the better the separation conditions. Many separators are designed to separate fresh milk.

The completeness of the oil separation also depends on the correct Assembly of the separator. With a high rotation frequency of the drum, there will be less oil leakage in the opposite direction. When less milk enters the drum, it is exposed to centrifugal force for a long time, so there is a high probability of complete separation of fat.

Milk

Cow's milk is mainly used for food use. About 95% of the milk consumed by the population is cow's milk. In this regard, we will mainly talk about this type of milk.

About milk, a large amount of scientific and practical knowledge that has been accumulated to this day makes it possible to adequately appreciate this wealth, which has an invaluable value for mankind.

According to modern scientific data, milk contains more than 200 different components and contains 20 amino acids, more than 147 fatty acids, milk sugar that is, lactose, various minerals,



microelements, all types of vitamins now known, pigments, phosphatides, steroids, enzymes, hormones and other substances that the body needs to maintain normal life activity are among them.

Dairy minerals are calcium, potassium, sodium, magnesium, phosphorus, iron, etc. It will consist of salts. All of them are of great importance for the human organism. Proteins, fats and carbohydrates in milk are almost completely digested in the human body. A liter of milk gives about 670 kcal.

The composition of milk is not always the same, and they will depend on the breed and age of the cow, the duration of the period of care, feeding, milking, and other causal factors. The most important of these factors is the grazing and breeding of the animal. Good nutrition increases milk yield, improves its composition and quality.

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Milk is a perishable product. Most often, milk is spoiled by the action of bacteria. Real bacteria of lactic acid (*Streptococcus*, *bulgarskaya palochka*, *acidophilnaya palochka*) are used in lactic acid products.

The traded cow's milk is pasteurized, sterilized, boiled, cooked according to its thermal processing, and in a state in which no oil is obtained (normalized and recovered), seryog, degreased protein is modulated, vitaminized, ionized, non-greasy coffee or cocoa is added according to the composition.

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Sterilized milk does not differ in its composition from pasteurized milk. The sterilization process is carried out in autoclaves with a pressure of 103-104 to 118-123 degrees Celsius; in this, all microbes and their spores die. Such milk will be able to be stored at home for 10-15 days.

Boiled milk is made from 6 percent fat, milk that has not been skimmed. It is stored at a temperature of 80-85 degrees for 4 hours or at a temperature of 90-95 degrees for 2-3 hours. Normalized milk is milk in which the fat content is reached by 3.2 percent by skimming natural milk or adding cream.

Pasteurized milk is developed in a wide range, differing in its cross-chemical composition, pasteurization regimes, and the addition and non-addition of various fillers.

Chemical composition of milk

Freshly milked milk tastes a little sweeter, and the color is whiter yellow. Milk is inherently liquid, becoming more liquid after a homogeneous heat treatment, while it becomes jipsy when cooled. Milk boils at a temperature of 100, 20 C, and freezes at a temperature of 0.54-0.580 C.

The chemical composition of cow's milk is made up of various elements, in which: water -87.5%; dry matter-12.5 %; at the same time milk fat -3.8 %; protein -3.3 % (of which: casein -2.7 albumin-0.5 and globulin 0.1), milk sugar -4.7%; minerals -0.7%.



Milk intake, processing, storage of milk and dairy products should be carried out in very clean conditions. From farms that do not have a monthly reference from fan control, the plant should not receive milk. And there should be a sign in it that it is pasteurized.

On July 7, 2017, the Cabinet of Ministers of the Republic of Uzbekistan adopted Resolution No. 474 "on approval of the general technical regulation on the safety of milk and dairy products". The general technical regulation on the safety of milk and dairy products is established to be implemented after eighteen months have passed from the date of its official publication.

Conclusion

Milk and dairy products are important in the human body. Today, there are several proposals and considerations regarding the quality and safety of milk and dairy products. Milk and dairy products belong to the type of perishable, long-term non-storage product.

Therefore, the production of dairy products based on state templates assumes the safety of the product and, in turn, attracts consumers. All enterprises or organizations that produce milk and dairy products should, of course, pay great attention and control, first of all, to raw materials, technological processes, equipment, buildings and the fact that workers follow the rules of sanitary hygiene.

In the implementation of these works, it is necessary to introduce a system of strict control over all these whether the presence of an expert auditor specialist distributed abroad is producing products on the quality of the product itself, on the basis of State templates of the enterprise or organization.

The studies under study show that the technology of production of dairy products, chemical composition differ from other products in complexity, variety. It is necessary to apply foreign experience in the implementation of certification work for the production of quality dairy products in our territory.

REFERENCES

1. On the development strategy of the New Uzbekistan for 2022-2026. T.: January 28, 2022, decree of the president of the Republic of Uzbekistan No. PF-60.
2. The law of the Republic of Uzbekistan "on the quality and safety of food products". T.: 30 August 1997. 483 I.
3. Fayziev J.S., Gurbanov J.M., Physical chemical methods of Food Research, Tashkent, Ilmi Ziyoyi 2009. 179-185b.
4. Kryuchkova V.V. Technology Moloka i molochnix produktov: uchebnoe posobie. Donskoy gau. - Persianovskiy: Donskoy gau. - 2018. - 232 P.
5. Shalapugina, Eleonora Petrovna. Technology Moloka i molochnix produktov: uchebnoe posobie / e. P. Shalapugina, N. V. Shalapugina. - M.: Dashkov I K, 2013. - 301 P. 61S
6. Tverdoleb, Galina Vasilevna. Technology Moloka i molochnix produktov: [uchebnoe posobie] / G. V. Tverdoleb, G. Yu. Sazhinov, R. I. Ramanauskas. - M.: Deli print, 2006. - 614, [1] p.