

## ADDITIONAL QUALITIES OF PRODUCTS OF LLC PYATIGORSK DAIRY PLANT

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### Abstract

LLC Pyatigorsk Dairy Plant is a large modern enterprise for milk processing and the production of whole milk products in the Stavropol Territory. The article analyzes the factors that are creating the quality and storage capacity of products in this plant.

The peculiarity of this plant is that it is provided with its own milk, being part of an agricultural holding together with LLC AgroFirma "Selo named after G. V. Kaishev" (formerly LLC AgroFirma "Selo Voroshilova"). This is one of the most important components of the quality of products manufactured by the factory. High product quality and storage capacity is ensured by the conditions of its production on the farm, where all the necessary sanitary and hygienic requirements are met to ensure its microbiological purity, and in the future by ultra-pasteurization of raw milk, which is carried out no later than 12 hours after receipt for processing, which is carried out for 2 - 4 seconds at a temperature of 137 °C, followed by vacuum treatment for the purpose of deaeration. It is an additional factor ensuring long-term storage capacity of the resulting products. At the same time, after ultra-pasteurization the bioavailability of 94.1% of amino acids (irreplaceable and non-essential) is retained in milk, and during sterilization it is only 92.7%. Thus, the next quality component is effective heat treatment - ultra-pasteurization, which ensures not only safety and long shelf life, but also preserves the component composition of the original milk as much as possible. Together with a clear organization of all technological processes controlled by the automated Tetra PlantMaster system, hygienically designed aseptic filling of products and strict adherence to the requirements of sanitation and hygiene, the entire processing process is a guarantee of high quality dairy products.

Dairy products manufactured at LLC Pyatigorsk Dairy Plant are positioned as natural and environmentally friendly. This is ensured at every stage of the production cycle: environmentally friendly feed and healthy and highly productive dairy herd, high-quality milk processing, and ultimately, a natural, high-quality and safe dairy product for a final consumer.

**Key words:** *Milk, Agricultural holding, Ultra-pasteurization, Storage capacity.*