

# COMPARATIVE STUDY ON THE MICROBIOLOGY AND MORPHOLOGY OF MILK AND CHEESE MICROBIOTA

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## Abstract

Over time, many studies have been developed to describe microbial communities and to understand the dynamics and the role of these organisms during milk processing and during production of different types of cheese. For an evaluation of the microbiology of milk and cheese, a comparative study was carried out on 5 samples of whole cow's milk and 5 samples of Telemea-type cheeses in terms of identification and morphological characterization of milk microorganisms as raw material and cheese, as a finished product obtained, by correlating their microbiological characteristics in relation to the identified physico-chemical characteristics. The results obtained for the milk and cheese samples corresponded to those mentioned in the product-specific standards. Microbiologically, for the milk samples, the median value was  $6.1 \times 10^3$  CFU/mL for milk and for the telemea cheese the CFU of samples was  $4.3 \times 10^3$  CFU/g product. Microscopic analysis revealed a total of 9 colonies: 7 colonies of yeast and 2 colonies of bacteria, to which was added a mold (*Fusarium* spp.). The final results showed that there may be a certain degree of contamination, due to factors such as sanitary-veterinary hygiene and resistance increasing degree of microorganisms.

**Key words:** yeast, bacteria, microorganism, milk, cheese