

TECHNOLOGY AND QUALITY OF PLJEVLJA CHEESE - TRADITIONAL MONTENEGRIN DAIRY PRODUCT

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Abstract

During the last few decades of XX century, globalization and industrialization in the production of dairy products, especially cheese, has peaked. It had a negative impact on the production of traditional cheeses, because they could not compete, primarily due to low production costs of industrial cheeses. Recently, consumers are turning their backs on industrial cheeses due to their ordinary, predictable and "boring" taste. There is growing interest of consumers for cheeses produced by traditional technologies, usually based on the handmade production, which are characterized by piquant, unique and specific aromas, atypical for industrial cheeses. The wide range of Montenegrin traditional dairy products is well known, and one of the most important, both by quality and quantity, is Pljevlja cheese.

This paper presents the results of the quality of the milk, technology and chemical and microbiological quality of Pljevlja cheese. Sampling of milk and cheese, as well as scanning the technology, were done in 18 households who are actively engaged in the production Pljevlja cheese during several generations.

Analysis of milk and cheese were made by method of Fourier transform infrared - FTIR spectrophotometry. The quality of raw milk was good (3.82% fat, 3.22% protein, 4.52% lactose, 8.47% non-fat solids and 399,000 somatic cells/mL). The dry matter content in cheese samples varied from 37.58 to 53.05%, so samples belong to the soft and semi-hard cheeses. The content of fat in dry matter, which varied from 44.51 to 59.92%, has classified these samples in fat and full-fat cheeses. The presence of *Listeria monocytogenes*, *Salmonella* sp. and coagulase-positive staphylococci was detected by standard broth base methods. Results indicated that all samples of cheeses have met the requirements of national microbiological standards.

Disparity of chemical composition indicates that cheese technology is not standardized. As part of the launched initiatives for Pljevlja cheese protection by origin (PDO), as a first step in the development of standards for Pljevlja cheese, the product specification is also proposed in this paper.

Key words: Milk, Pljevlja cheese, Traditional technology, Chemical and microbial quality.