STUDY OF ANTIMICROBIAL PROPERTIES OF "NON-TRADITIONAL" DAIRY BEVERAGE TYPE KUMYS

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Nowadays fermented milk drinks, i.e. milk, fermented by various lactic acid bacteria enjoy well-deserved popularity among millions of people of different countries. The growth of consumer interest in fermented milk products (FMP) is caused by bringing their positive effects on the human body. In addition, because of the relevance of a healthy diet unconventional for our regions dairy products appear in retail. It is worth noting that the emergence of new products shows that although the market and formed, there is a need for new kinds of products, which are healthy and of high quality. This explains the growing popularity of functional FMP.

The above encourages domestic producers to expand its product range. New products for our market include ayran, tan, kumys, etc. Despite the fact that the history of these drinks has 15 centuries, for many consumers, this product remains unknown, and is in low demand.

The Department of biotechnology of NUPh in the laboratory developed manufacturing technology of such a product as Kumys. The study of the qualitative and quantitative composition of the product manufactured by us showed the presence of a large amount of Lactobacillus and yeast microflora, which is responsible for the manifestation of antimicrobial properties.

This paper presents the results of the study of antimicrobial properties of Kumys which was made by us and its comparison with the product of trademarks LLC "NEO Product".

The study of antimicrobial properties of unconventional FMP was performed with method of co-culture with conditionally pathogenic microorganisms (E. coli, St. aureus) followed by inoculation of the corresponding dense environment. The principle of the method consists in counting the number of colonies of conditionally pathogenic microorganisms that grew up after cultivation in liquid medium with FMP and compared with the control (test microorganisms without FMP).

The results of the experiments showed that both types of non-traditional FMP have antimicrobial properties against of the most common pathogens - St. aureus and E. coli. But, it should be noted that the products manufactured by us had a more pronounced antimicrobial effect, which is associated, primarily, with a large number of microorganisms in the microflora of our product and, secondly, using the "correct" controlpane raw materials.