

RESEARCH OF FERMENTED MILK DRINKS WITH PROBIOTICS AND ESSENTIAL AMINO ACIDS

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Introduction. At present, many people suffer from unbalanced nutrition. The absence of essential amino acids in the diet causes such problems as metabolic disorders, loss of body weight, decreased immunity. Prolonged use of antibiotics, stress, and improper diet can cause intestinal dysbacteriosis. This leads to violations of digestion, intoxication, abdominal pain. Of interest is the creation of probiotic preparations for oral administration with the addition of radically indispensable amino acids to maintain the health of the body.

Aim. The aim of the work was to create an effective combined dietary supplement in the form of a sour-milk beverage containing probiotics and a complex of three essential amino acids.

Materials and methods. We studied the properties of a group of essential amino acids, namely valine, leucine and isoleucine, which are known as BCAA. Also samples of fermented drinks were prepared using dry ferments "FOOD YOGHURT" and "Narine". To the obtained drinks, the BCAA complex was added in two selected doses - 4 and 8 g per 200 ml of the beverage. To mask the unpleasant aftertaste characteristic of amino acids, and to improve the taste of the drinks obtained, sweeteners honey natural and fructose were added. Studies were made of samples of a sour-milk drink with essential amino acids and auxiliary substances, organoleptic and physico-chemical properties of the probiotic preparations were studied. The ability to grow probiotic microorganisms and their sensitivity to antibiotics has also been studied. The most optimal composition was determined.

Results and discussion. The goals were solved using unified methods of physical, chemical and microbiological research. After the end of the cultivation period, colony growth was detected only in fermented milk drinks "Yogurt with BCAA complex," and the higher the concentration of essential BCAA amino acids, the more colonies were observed. In the sour-milk drinks "Narine (control)" and "Narine with the BCAA complex" there was no growth of colonies in all crops. In the study of beverage samples, *Streptococcus salivarius* subsp. *thermophilus*, and *Lactobacillus delbrueckii* subsp. *bulgaricus*.

Conclusions. This confirms the feasibility, relevance and prospects of further work on the creation of preparations based on probiotics with essential amino acids.

PERSPECTIVES OF USING OF GOATS AND COWS MILK FOR PRODUCTION OF SOUR CREAM

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Introduction. Sour cream is a sour-milk product, which is obtained by digestion of normalized pasteurized cream with pure cultures of lactic acid bacteria.

Usually cow's milk used as a material for sour cream.

Goat milk contains more vitamins, macro- and microelements than cow's milk.

In the goat's intestinal, all carotene is converted into vitamin A. Goat's milk contains significantly more potassium, which is needed for the normal functioning of the cardiovascular system and more cobalt that needed for hematopoiesis. Goats milk is considered more easily digestible and less allergic than cow's milk.

The aim of the work was to compare the quality of sour cream from goat's and cow's milk.

Materials and methods. For research, we took cows milk and goats milk. The milk of both species was received on the farm KhDZVA.