

CHARACTERISTICS OF KUMIS, TAN, AYRAN AS PRODUCTS WITH TREATMENT PROPHYLACTIC PROPERTIES

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Introduction. Milk among other beverages has a special place as a permanent and the most important source of most vitamins, amino acids and higher fatty acids in nature.

Aim. The aim of the study is to characterize of kumis, tan, ayran as product with treatment prophylactic properties.

Materials and methods. We used the descriptive research method: literary and Internet sources that are freely available were analyzed.

Results and discussion. Milk is not only one of the main food product, but also a widespread therapeutic and prophylactic remedy. Milk contains an almost all natural fat-soluble and water-soluble vitamins. An important role has the immune bodies contained in milk that increase the resistance of the organism to infectious diseases, what is especially important for children. Also dissolved proteins in the milk easily digested with proteolytic enzymes of the digestive tract.

Depending on the content of fat, protein and some other factors, milk divided into different types and species. Milk products on the market could be classified according to the type of animal. In the whole world, has been used milk from variety of animals: cow's milk; goat; mare; sheep; camel; deer; buffalo. The most part of milk products on the world market is made from cow's milk.

Mare milk is a small segment of the market of milk and dairy products, because milk yield for such animals are small, and even small production can be organized by farms with rooted traditions. At the same time, it is known that cow's milk yields to mare milk in usefulness and nutrition.

The composition of the mare's milk has significantly different from the cow's milk and other animals. It contains twice lower amount of the proteins. Mare's milk contains almost 1.5 times more lactose than in cow's milk. The acidity of milk is low – about 6 °T, the density – (1032 -1034) kg/m³. Quantity and composition of proteins, as well as the content of lactose, mare's milk is close to female milk. Studies have shown that mare's milk refers to the albumin group (that is, the ratio of casein and albumin 50:50, respectively), which plays an important role in the diet of humans suffering from allergic reactions to casein.

According to the organoleptic properties of the mare's milk, it is a white, with a blue tinge, a bit a bitter taste. It is used for the preparation of a valuable dietary and medicinal product – kumis. So in the milk of mares 1.5 times more milk sugar than in the cow, it gives it a sweet-tart taste, creates favorable conditions for sour milk and alcohol fermentation during the processing into kumis.

Peculiarities of mare's milk are also due to vitamin and mineral composition. The total amount of minerals in mare's milk is twice lower than in cow's milk, the ratio of calcium and phosphorus is 2:1. Except calcium, in mare's milk a lot of other trace elements – potassium, sodium, cobalt, copper, iodine, manganese, zinc, aluminum and iron, which have a positive effect on metabolism, tissue respiration and immunity.

By its composition and biological properties, mare's milk is close to the female. This is the basis for breastfeeding babies with mare's milk. Mare's milk can serve as the basis for the creation of adapted formula for the feeding of both healthy children and sensitive to protein cow's milk. Mare's milk is recommended for diseases of the stomach, liver, intestines, skin, with violations of the immune system, the treatment of peptic ulcer. The high content of ascorbic acid and retinol in the mare's milk is of great importance in improving digestive processes. Positive results are obtained with the usage of the whole mare's milk in the treatment of patients with chronic hepatitis.

The main method of processing mare milk is the preparation of kumis and other dairy products, which are effective biostimulants and antibacterial agents due to their diverse effects on the body. Kumis increases the oxidation-reduction processes, increases metabolism, stimulates the activity of the cardiovascular system and the respiratory center, normalizes protein, carbohydrate, water-salt metabolism, acid-alkaline balance, increases the number of red blood cells and hemoglobin, stimulates lymph formation,

the function of the endocrine glands and the gastro- intestinal tract, increases the protective function of the liver, increases the glycogen stores, provides lipotropic and hypocholesterolemic action.

However, kumis is used not only for medical purposes, but also for daily usage as juices, cocktails and other drinks. It is also a therapeutic and a firming product. There are other sour-milk products made from mare's milk, which have a high demand among the population, but it's consumption is limited by the cultivation of horses in certain regions, therefore it is possible to find these non-traditional for our region beverages made with cow's milk, which is more traditional raw material for Ukraine.

Ayran is a kind of sour-milk beverage based of a kатык or variety of kefir in Turkic, North Caucasian, South Caucasian and Balkan peoples. In different languages and different peoples, the cooking technology is slightly different, but the common thing is that it is a milk product derived with lactic acid bacteria. At the same time in settled peoples, it is liquid and well quenches thirst, and in nomadic ones – thick as liquid sour cream, which is very convenient for storage and transportation. Traditional ayran is made from cow's milk with the addition of water and salt. Instead of a cow's could be used goat's, sheep's and mare's milk. It made with leaven of lactobacillus and thermophile streptococcus. As a primary leaven newborn calf's abomasums is used. For this purpose, the abomasum had salted and dried. After obtaining ayran it is possible to use as a ferment already ready ayran.

Tan is a sour milk drink made with cow's, goat's, mare's milk with the leaven contains yeast, lactobacillus and thermophile streptococcus, as well as with the addition of salted water. It is widespread in the Transcaucasia, where it has traditionally been prepared from matsun.

Functional dairy products, which are non-traditional for our region, are becoming more and more popular in the Ukrainian market. Due to their therapeutic and prophylactic properties, these products have a great demand from the population.

Conclusion. The production of kumis, tan and ayran by traditional recipes is limited by horses breeding regions, so replacing the mare's milk by cow's milk, which is more affordable raw material for our region, with addition of various enrichment components, is used as a basis for the production of functional beverages.

BIO BREAD – A MODERN FORM OF BREAD FUNCTIONAL PURPOSE

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Introduction. Food fortification is a widely used and effective mechanism for correcting the population's nutrition. According to Ukrainian and foreign scientists, the development of the functional food industry is the most promising direction in the food industry at the present time. The improvement of nutrition and health of the population depends on its implementation.

Aim. The aim of the study is to characterize of bio bread as new product with functional properties.

Materials and methods. We used the descriptive research method: literary and Internet sources that are freely available were analyzed.

Results and discussion. One of the main products in the diet of Ukrainians is bread. Bread is the main source of substances that support the adequate functioning of the nervous system, as well as dietary fiber, vegetable protein. Moreover, the varieties of bread are very different, why strongly depends on their nutritional and health value.

Enriched bread includes, for example, bread with bran or whole wheat flour. In this bread, in addition to starch, there are also grain shells, which are rich in vital for the human body b vitamins, A and E. Carbohydrates from such breads are absorbed much more slowly, which does not cause sudden spikes in glucose, which will either be disposed of too quickly, or deposited in the form of fat reserves. Modern food industry produces functional varieties of bread to solve some problems with the organization of food. Thus, bread without salt is intended for people with kidney disease or others that require the