

PROSPECTS OF USING GOAT MILK FOR MAKING FERMENTED BEVERAGES “BIFIFORM” AND “SIMBILAKT”

Kamishnikova V.O., Lapina K.A., Ivakhnenko O.L., Strilets O.P., Strelnikov L.S.

National University of Pharmacy, Kharkiv, Ukraine

veronica-bum@mail.ru

One of the current trends in pediatric therapy for the treatment of upper respiratory tract infections, such as viral respiratory infections, whooping cough, measles, flu, bronchitis, is antibiotic therapy. Despite their relative safety, the use of drugs aimed at the destruction of pathogens leads to dysbiosis of the gastrointestinal tract of children. Changes in the microflora in dysbiosis, usually develop gradually. In the initial stage of development of dysbiosis reduced functional activity of the representatives of the normal flora, especially antagonistic their activity and the ability to adhere. When effects of etiologic factors appear is saved the dysbiosis quantitative changes are appeared in the normal flora. The conditions for the change of intestinal homeostasis, changes occur in the pH, which contributes unbeatable growth of pathogenic microorganisms. Growing share of the blowing flora, and as a result, there is intestinal bloating. Reduction of the normal flora in the gut leads to disruption of digestive processes, reduces the absorption of nutrients, vitamins and minerals. In the result, the activity of pathogenic flora increases formation of toxins in the intestines, brakes detoxification processes in the gut lumen of the protective bacteria, increases the toxic load on the liver cells, disrupted its function. Pathological process in the intestine is accompanied by reduction of local immunity and general immunological resistance.

The children can have superinfection and they can be allergic to a lot of products, including cow's milk and its products. Simultaneously with antibiotic pediatricians recommend the use of probiotic preparations, such as “Biform”, “Linex”, or, more preferably, for children - dairy products containing live bacteria. Data analysis of the literature showed the promise of goat milk for making milk beverages containing live lactobacillus and bifidobacteria, as less allergenic and more favorable to the normal flora.

Goat milk contains 2 times less α S1 - casein, which is a strong allergen for people. A β -casein is 2.3 times higher in goat, and thus there is formed a soft clot easily digested in the human stomach. The size of the protein molecules of goat milk is less than cow's, which leads to a rapid and complete disintegration of the action of digestive enzymes of man. Fat globules of goat milk are - 2 microns, and the cow - 4 5mkm. Goat's milk still characterized by a high content of calcium, magnesium, chlorine, phosphorus, and selenium. The presented data show the perspectives of the goat's milk as a raw material for production of dairy products based on sourdough “Biform” and “Simbilakt”.

The comparative analysis of starters in the fermentation of cow and goat milk is planned to carry out at the Department of Biotechnology of the National University of Pharmacy.