

## **TECHNOLOGY OF PROBIOTIC PRODUCT FROM CAMEL MILK**

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### **ABSTRACT**

Formation of probiotic properties of dairy products depend on the composition of the microbiota. The prerequisite of the research was on the selection of specific strains of bacteria producing a complex of biologically active substances and enzymes. The raw material for the production of fermented milk product is camel milk with different fat mass fraction. Camel milk with high nutritional and biological value, as well as their digestibility as compared to other types of milk will create a product that meets the physiological needs for essential nutrients and energy. Camel milk as the habitat of lactic microbiota is less studied than cow's milk (whole, low fat, concentrated, etc.). The basic requirements to develop functional foods are (1) the energy value of the product shall be not less than 100 calories and is provided by milk fat, carbohydrates, dairy and vegetable proteins; (2) living microbiota providing probiotic properties of a product in an amount of not less than 10<sup>7</sup> CFU in 1 g of food; (3) the content of vitamins A, E, D, C, B and minerals Fe, Zn, K, Ca, and other amounts for preventive standardized for daily consumption; (4) titrated acidity of the product to 80 ° T; and (5) high organoleptic characteristics (appearance, texture, and taste). As the main raw milk which has sufficient energy value, it was investigated that in camel milk, they have 3.6, 4.2, and 6.7% of fat, which is a source of fat-soluble vitamins A, D, E, β-carotene, flavouring and aromatic substances. The fat in the milk of camel is finely dispersed, so it is easier to digest. High nutritional and biological value of camel milk fat, as well as their digestibility, will create a product that has essential nutrients and energy for general consumption. In addition, the high fat content in the camel milk helps in protecting the bacterial cells from the adverse factors, including the passage of the stomach acid barrier. Therefore, bifidobacteria contained in dairy products are developed in large number so when they are in the consumer's intestine, they will contribute in the normalization of microflora, improvement of the hydrolysis, absorption of fat, protein and mineral metabolism.

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