

## STUDY OF QUALITY MILK OF DIFFERENT BRANDS

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*The goal:* Study of milk quality of different brands, the development of techniques for the identification of food additives, labeling and study compliance with applicable standard specifications.

Milk is one of the perfect foods, created by nature. Nutritional and biological value of milk is the optimal balance between its components, easy digestibility (95-98 %) and the absolute necessity for the human body (plastic and energy functions). Milk contains all the necessary nutrients for human body, so milk and dairy products are essential in the diet of patients, children and the elderly.

Quality of drinking milk are regulated by national standards - DSTU 2661:2010 "Milk cow drinking. General technical conditions" and the Law of Ukraine № 1870 -IV "About milk and milk products".

For research, samples were taken of drinking cow's milk sold in retail outlets in Kharkiv region: "Balmoloko", " Ukrainian", "Romol", "Dobrinja", "Voloshkove pole", "Zarechie".

Milk samples were tested by organoleptic and physico- chemical parameters, including identification of the fat and protein, the content of antibiotics and some food additives, quality packaging and labeling.

According to the results of the analysis, it was found that out of 6 samples tested drinking milk 3 on different parameters did not meet regulatory requirements, and information on the label as well. One milk sample did not meet the stated information on working life (acidic medium). In two milk samples, fat mass fraction was 2.5 % instead of 2.6% and the next sample - 3.1 % instead of 3.2%. Furthermore, in the same samples revealed the presence in milk of antibiotics. In 2 batches of milk was the integrity of the packaging, as revealed their course.

All six sample were tested about food additives. It was established, that the concentration of soda (sodium hydrocarbonate) were higher than in standard. This fact needs interpretation about the interaction between milk and definite drugs.

Among the six samples of packaged milk, only one had a weight of 500 g, and almost five samples had significant deviations from the norm. All the shortcomings - the result of violations of the conditions of production, low production control and an insufficient level of producer responsibility for the quality of manufactured products.