

Nutritional value and technological suitability of cow and goat milk with regard to production season

Summary

Nutritional value and technological suitability of milk of Simmental cows (79 samples) and goats without descent (76 samples) with regard to production season was analyzed. Content of fat, total protein, including casein, lactose, dry matter, urea, selected whey proteins and cholesterol, somatic cell count, pH value, heat stability, coagulation time and dispersion state of milk fat, were determined. It has been shown that milk of two evaluated animal species, despite the similar basic chemical composition, differed significantly with respect to the content of whey proteins and cholesterol. Goat milk was characterized by almost twice higher content of α -lactalbumin and lower (by 15%) concentration of cholesterol. Furthermore, the interspecies' differences in respect of dispersion state of fat were recorded but goat milk occurred to be more dispersed. However, it was characterized by poorer technological parameters, i.e. low colloidal stability and a very short time of enzymatic coagulation.

KEY WORDS: cow milk, goat milk, nutritional value, technological suitability, production season