Seasonal Influences on the Fatty Acid Composition Content of Raw Milk especialy on the Conjugated Linoleic Acid

Rozália Veronika Salamon[1], Anikó Győri[2], Katalin Lóki[3], János Csapó[1,3]

[1]Sapientia Hungarian University of Transylvania, Miercurea-Ciuc, RO-530104 Libertății nr:1.

[2]University of Debrecen, Centre of Agricultural Scieneces, Debrecen, H-4032 Böszörményi út 138.

[3]University of Kaposvár, Faculty of Animal Science, Kaposvár, H-7400 Guba S. u. 40.

The purpose of the research was to determine the fatty acid composition of milk of common breeds from Hungary: Hungarian Simmenthal, Red Holstein Friesian and Black Holstein Friesian. Also the changes in the fatty acid composition of their milk fat throughout the year with special respect to the conjugated linoleic acid content was determined. The amount of unsaturated fatty acids (oleic, linoleic and linolenic acid) including conjugated linoleic acid was higher in summer than in winter. In the case of the saturated fatty acids (butyric, caproic, caprylic, capric, myristic, palmitic and stearic acid) the opposite tendency was shown. The amount of conjugated linoleic acid ranged from 0,8 to 1,4%, with an average value of 1,1%.