Effect of feeding rapeseed and linseed to sheep on chemical composition of milk during a 24-hour period. Part II. Lipid's profile

Summary

A total of 12 nursing ewes in the 5th week of lactation were fed with forage, hay and concentrate mixture. Standard mixture was used in the control group (K) and the same mixture supplemented with whole rapeseed and linseed (100 and 50 g/animal/day, respectively) was used in the experimental group (RL). Milk was sampled 1 h after suckling, in 4 series during 24 h (i.e. 6, 12, 18 and 24 h after feeding). Inclusion of rapeseed and linseed to the diet for ewes caused significant changes in the fatty acid profile of dietary fat. Additionally, a general increase in the intake of fatty acids (mainly MUFA and PUFA) of daily ration by RL ewes occurred. Feeding the RL diet favourably influenced the fatty acid content of milk fat and its health quality compared with the control diet. Differences in the dynamic of diurnal changes were observed in the composition of milk fat according to the time after feeding. A very distinct effect of supplementing diet with rapeseed and linseed on the dynamic of diurnal changes was observed especially in case of CLA and cholesterol content of milk.