

The Possibility of Increase UFA in Milk by Adding of Canola Seed in Holstein Dairy Cow Diets

Authors : H. Mansoori Yarahmadi, A. Aghazadeh, K. Nazeradl

Abstract : This study was done to evaluate the effects of feeding canola seed for enrichment of UFA and milk performance of early lactation dairy cows. Twelve multi parous Holstein cows (635.3 ± 18 kg BW and 36 ± 9 DIM) were assigned to 1 of 3 treatments: 1- Control (CON) without canola seed, 2- 7.5% raw canola seed (CUT), and 3- 7.5% Heat-treated canola seed (CHT) of the total ration. Diets contained same crude protein, but varied in net energy. Diets were composed by basis of corn silage and alfalfa. Cows were milked twice daily for 4 wk. The inclusion of canola seed did not alter DM intake, weight gain, or body condition score of cows. Milk fat from CHT cows had greater proportions of UFA and MUFA ($P < 0.05$). Feeding CUT increased PUFA without significant difference. Milk fat from CHT had a greater proportion of C18 UFA and tended to have a higher proportion of other UFA. FCM milk yields, milk fat and protein percentages and total yield of these components were similar between treatments. Milk urea nitrogen was lower in cows fed CON and CHT. Feeding canola seed to lactating dairy cows resulted in milk fat with higher proportions of healthful fatty acids without adverse affecting milk yield or milk composition.

Keywords : canola seed, fatty acid, dairy cow, milk

Conference Title : ICVBS 2015 : International Conference on Veterinary and Biomedical Sciences

Conference Location : Istanbul, Türkiye

Conference Dates : June 18-19, 2015