

Comparison of Broiler Chicken Meat Fat Fed Different Diets

Sterna V. Jemeljanovs A., Vitina I., Krastina V., Cerina S.

Latvia University of Agriculture, Research Institute of Biotechnology and Veterinary Medicine „Sigra”, Instituta street 1, Sigulda, Latvia, LV 2150, vitasterna@inbox.lv

In recent years, the demand for food with high nutrient value and enhancing health benefits has increased. Any improvement of meat production by nutritional means should take into consideration the composition and palatability of the meat and human health. Polyunsaturated fatty acids Linoleic acid and alfa linolenic acid are essential fatty acids because they cannot produced in human organism therefor these must be committed with products of animal origin. Meat characteristics may be changed due to the dietary components particularly supplemented substances and oils. The aim of investigation was compared chicken meat composition in connection by fed rapeseed oil, flaxseed oil and neutral extract substance supplements.

The composition of fatty acids was evaluated in chicken meat depending on composition of feed that was provided by different additives. Control group received basic feed (Standard requirements for broiler chicken); trial 1 group received basic feed, 1% rapeseed oil and 0.05% additive of neutral extract substances (NES) and trial 2 group received basic feed, 1% flaxseed oil and 0.05% (NES) From comparison of results it was ascertained that P/S ratio and ω -6/ ω -3 ratio better for human health were in group where chicken basic diet was supplemented with neutral extract substance and 1% fleaxseed oil than in control group. Content of EPA and DHA were higher in trial groups. Concluded that supplementation of basic feed with NES and 1% flaxseed oil can improve composition of broiler chicken meat fatty acids composition.