

عنوان مقاله:

Effect of Rolled or Extruded Flaxseeds in Finisher Diet on Pellet Quality, Performance, and n-3 Fatty Acids in Breast and Thigh Muscles of Broiler Chickens

محل انتشار:

مجله علوم طیور، دوره 7، شماره 1 (سال: 1398)

تعداد صفحات اصل مقاله: 13

نویسندگان:

Zhaleh S - Department of Animal Science, Faculty of Agriculture, Ferdowsi University of Mashhad, Mashhad, Iran

Golian A - Department of Animal Science, Faculty of Agriculture, Ferdowsi University of Mashhad, Mashhad, Iran

Zerehdaran S - Department of Animal Science, Faculty of Agriculture, Ferdowsi University of Mashhad, Mashhad, Iran

خلاصه مقاله:

An experiment was conducted to compare the effect of corn-soybean meal finisher (29-42d) diets containing flaxseeds (rolled or extruded) on pellet quality, performance, n-3 fatty acids (FA) and oxidative stability of meat in broiler chickens. Seven pelleted diets were provided in a 3×2 factorial arrangement with three flaxseed levels (5, 10, and 15%) and two processing methods (rolled or extruded) and a zero flaxseed diet (control). Birds fed diet containing 15% flaxseed had significantly lower weight gain and higher feed conversion ratio compared to those fed diets contained 0, 5 and/or 10% flaxseed. The type of flaxseed processing did not influence ($P > 0.05$) fatty acid profile and the MDA content in muscles. Chickens fed the control diet had relatively high levels of saturated and monounsaturated fatty acids and low levels of polyunsaturated fatty acids. Feeding diets contained flaxseed markedly reduced the levels of saturated fatty acids, monounsaturated fatty acids and increased polyunsaturated fatty acids, particularly the n-3 fatty acids in meat. It is concluded that the addition of 15% flaxseeds to finisher diet can increase n-3 fatty acids and lipid peroxidation in meat, while reducing growth performance of broiler chickens. However, feeding finisher diet containing 10% flaxseed compared to 5 or 15% flaxseed is of more practical to achieve an acceptable level of Omega-3 fatty acids in breast and thigh muscles without compromising the performance of broiler chickens.

کلمات کلیدی:

Broiler, Flaxseed, Extrusion, Meat quality, Finisher diet

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/938967>

