

Public Abstract

First Name:Hannah
Middle Name:Louise
Last Name:Evans
Adviser's First Name:Bryon
Adviser's Last Name:Wiegand
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Department:Animal Sciences
Degree:MS

Title:Shelf stability and quality of fresh ground pork and pork sausage from pigs fed ethanol co-products

This experiment was conducted to determine the effect of swine diets on subsequent meat quality characteristics and shelf life of ground pork products. Pigs were fed one of 8 different dietary treatments using dietary components common to the swine industry and three different products were made from each pig 1) ground pork, 2) pork sausage and 3) pork sausage with an added rosemary antioxidant. The experiment was set up to determine the effect of the swine diet on the degree of saturation of pork fat. Then the meat and fat were used to make three different products to determine the effect of the processing treatment on the shelf life and quality. The results indicated that diet plays a large role in determining the level of saturation of pork fat, but there are many factors other than the degree of saturation that can impact the quality of ground pork products and lead to product deterioration. Also, the results showed an improvement in shelf life of the products when the antioxidant, rosemary, was added. This research will allow producers and processors to better understand the relationship between the swine diet and meat and fat quality. Also, these results showed that current additives used in swine production, including dried distillers grains with solubles, can be fed without severe negative impacts of product quality.