Distillers Dried Grains (DDG) feeding and impacts on meat quality for grazing steers

Results from this study show that including soyhulls and DDGS in a cattle diet could possibly produce a healthier beef product. Further research is merited to determine the potential human health benefits of feeding cattle these soyhull/DDG by-products and the effect on fatty acid profiles. The investigators were hoping to produce beef with high CLA levels, but also high animal performance.

What was done and why?

Due to rising costs of conventional feedstuffs, more focus has been put on feeding by-products, especially dried distiller grains (DDG) from ethanol production or further processing of grains. In July 2010, there were 28 ethanol refineries in Iowa and an additional 71 refineries in neighboring states; so this potential feedstuff is readily available to producers. The effects of using these feedstuffs on live animal performance, carcass traits and the economic benefits are still under investigation.

Conjugated linoleic acid (CLA) has been shown to have many health benefits, including anticancer properties in animals. Because of this discovery, more attention has been paid to the CLA content of food products, especially meat and milk, which are major sources of daily CLA intake. Studies have shown that CLA levels of meat can increase when cattle are supplemented with DDG by-products.

The objective of this study was to investigate the effects of finishing yearling cattle on pasture utilizing combinations of self-fed DDG by-products and corn grain on growth and carcass traits and investigating the fatty acid profiles, especially CLA content of beef raised in this type of feeding system.

What did we learn?

This study investigated the feasibility of finishing market beef cattle on pasture with supplemented self-fed by-products and the effects on fatty acid profiles in the meat. Feeding self-fed DDGS and soyhulls to market beef cattle on pasture produces excellent performance and carcass traits and results in higher CLA fatty acid levels in the beef than would be expected from conventionally-fed beef cattle. It is worth noting that this method produces high-quality beef without feeding corn. The feeder should give some careful consideration to time of year when marketing cattle and the cattle's genetics. This system is a potential alternative to high-grain conventional beef finishing production in feedlots.