

Ethanol Byproducts Still Pay Their Way In Feedlot Rations

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Paying the feed bill has cleaned out bank accounts faster than Jesse James in recent years, as high corn prices left cattlemen everywhere looking for the cheapest, most efficient alternatives.

Answering that search, Galen Erickson shared research results and insight on distillers' grains at the Feeding Quality Forums in Omaha, Neb., and Garden City, Kan., in August 2013.

As of late summer, the ethanol byproducts were selling at near corn prices. Many cattlemen responded by cutting back or removing it, but Erickson, feedlot Extension specialist at the University of Nebraska-Lincoln, said that could be a mistake.

Ethanol plants remove starch from grain, he explained, thus concentrating the remaining protein, oils and minerals in byproducts that have nearly three times the amount of those as corn.

"No matter how expensive it gets, it's still an inexpensive protein source," Erickson said. He suggested lowering the amount of distillers' grains in a diet to no less than 15% to lower input costs while maintaining a relatively cheap protein supplement.

After reviewing research on feeding performance, he explained there are three common forms to consider.

All ethanol plants produce wet distillers' grains and solubles, frequently mixed together (WDGS). Some plants partially or completely dry the WDGS, producing modified distillers' grain (MDGS) or dried distillers' grains with solubles (DDGS). These three products start out the same way, but feeding performance differs.

Research has studied performance of all three in comparison to dry-rolled corn in feedlot rations.

Research results

"Wetter is better," Erickson said as he went over the results. With diets including 30% distillers' grains, WDGS had the most value at approximately 137% that of corn.

During his presentation in southwest Kansas, Erickson warned of local exceptions because of steam-flaked corn fed in the region rather than dry-rolled corn. Research showed performance of WDGS was distinctly lower in a steam-flaked ration. Gains decreased when more than 15% WDGS were added to the

steam-flaked diet, while feed conversions stayed the same.

"So how you process the corn appears to dramatically impact the value of distillers' relative to corn," he said. "If you're in an area where you have access to a lot of distillers' grains and you're planning to feed 20% or more, I would not recommend flaked corn."

For those feeding a steam-flaked diet, Erickson offered another option. He found feed-to-gain ratios and average daily gains could be improved by including more solubles in the ration.

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is right, Erickson would double the amount. Research showed optimum gains and conversions when 18% to 27% solubles were included. That may change the appearance of the feed, he added. "But cattle don't really

care what the diet looks like."

Nearly half the ethanol plants across the United States have added a new step in processing. To cut back on tonnage shipped out, they spin off a third of the oil from those solubles first.

Erickson expected that to decrease feeding performance, but he was surprised by research results that showed no large impact. So far, studies show a range of 1% improvement to a 3.5% decline in performance depending on the setup, and results will be monitored over time.

Producers often ask if distillers' grains in a ration require changes in roughages or additives, but the Extension specialist said to manage them the same as any grain-based diet.

One concern associated with feeding a high level of distillers' grains is that one of the concentrated minerals is sulfur. Too much of that can lead to polio in cattle, but the Nebraska research often feeds cattle much higher levels of distillers' grains than any commercial operation would.

"So if there's going to be any polio, we should see it," Erickson said, noting they have seen 28 cases out of 17,000 head finished in the past seven years. Summarizing that data, he concluded that as long as an operation is feeding less than 40% distillers' grains in the diet and the water does not have high levels of sulfur, there should be no problems with polio.

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Editor's Note: Lyndee Stabel is a freelance writer for *Certified Angus Beef LLC*.

