

WRINKLE

A NEW UNDERSTANDING IN NUTRITION



Issue 20190018

Can Wet Distillers Grains Improve Feedlot Performance?

RESEARCH SUMMARY

Cattle producers and nutritionists sometimes have the option to include dry or wet distillers grains in their formulations. The value of these options often depend on proximity to the biorefinery, transportation costs, and capability of mixing facilities on the farm. The differences in nutritional value can also affect this decision. Producers must recognize and account for these variables to achieve the most value when feeding any form of distillers in their feedlot rations.

BACKGROUND

Researchers at the University of Nebraska fed 440 crossbred yearling steers one of four experimental diets for 154 days to determine the effects of distillers grains on feedlot growth performance. Treatments included 1) corn-based control; 2) dry distillers grains with solubles (DDGS); 3) modified distillers grains (MDGS); or 4) wet distillers grains (DWG). All of the distillers grains used in the experiment contained similar amounts of crude protein, sulfur, fat and NDF.

RESULTS

All cattle fed distillers in this experiment gained more body weight during the feeding period than the cattle fed the corn-based diet. Furthermore, cattle fed distillers consumed a similar amount of dry matter compared with the cows fed the corn-based diet. Since these cattle ate less and gained more weight, the cattle fed distillers had more favorable feed conversion (Figure 1).

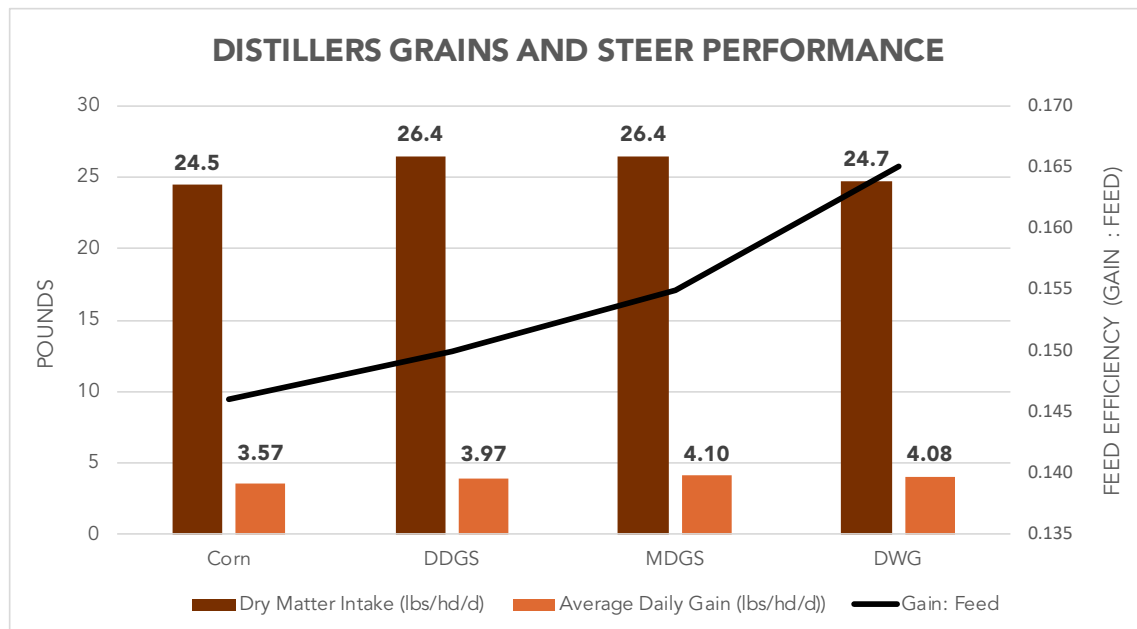
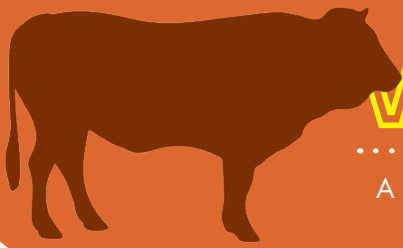


Figure 1. Finishing steer performance when fed corn and dry, modified, or wet distillers grains

*These results are not a guarantee of nutritional value, as laboratory results are influenced by factors beyond the control of POET Nutrition.



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RESULTS (CONT.)

When we calculate the relative feeding value based on feed efficiency, each of the distillers-based diets had greater value than the corn-based diet. Researchers also observed that feeding value increased as they fed distillers with greater moisture (Figure 2).

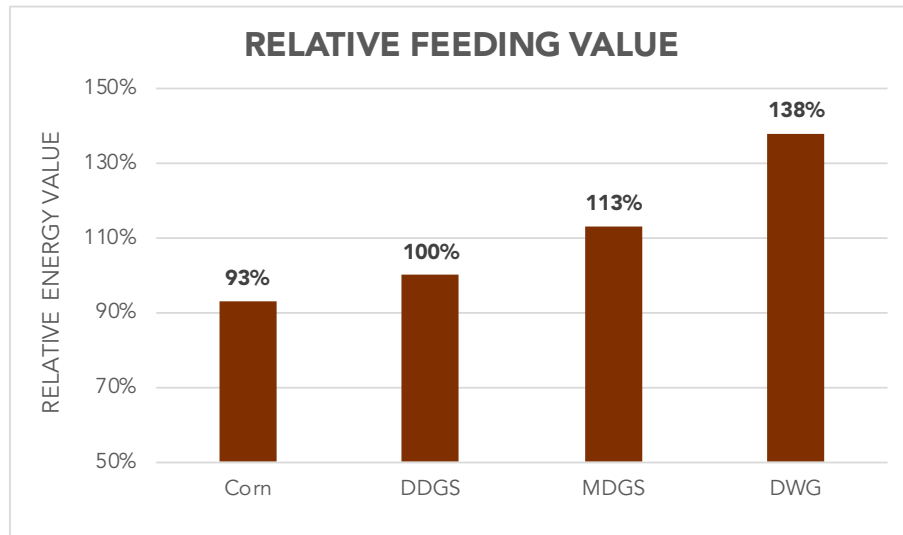


Figure 2. Relative energy of corn, DDGS, MDGS, and DWG

DISCUSSION

The results from this study show that distillers grains has value in finishing diets. Interestingly, the researchers saw an increase in average daily gain with no differences in dry matter intake. This suggests greater utilization of nutrients in the diets containing distillers grains. The highly digestible fiber and source of protein likely contribute to this increased utilization.

Furthermore, the researchers also observed differences in feeding value between the different forms of distillers. The effect of drying on nutrient loss could explain part of the differences between the distillers. However, the effect of the different distillers products on the physical form of the total diet also probably contributed to the response. Adding a wet ingredient to hold the ration together allows for a more uniform diet for the animal.

CONCLUSION

Even though cattle fed the modified and wet distillers performed better than cattle fed the dry distillers, all three treatments containing distillers performed better than the control diet containing corn. Producers need to consider this and look at factors such as economics and logistics to determine which option works best for their unique situation.

This research gives another example of how feeding Dakota Gold can provide value for beef producers. If you would like additional information on this study or more details on the nutritional profile of the Dakota Gold line of feed products, including availability of modified or wet distillers grains, please contact POET Nutrition or visit www.dakotagold.com.

Source: Nuttelman, B. L., W. A. Griffin, J. R. Benton, G. E. Erickson, T. J. Klopfenstein. 2011. Comparing dry, wet, or modified distillers grains plus solubles on feedlot cattle performance. Neb. Beef Report. 50-52.