

# Precautions For Feeding Distillers Grains



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**D**istillers grains are becoming more available as cattle feed. There are many procedures and questions about feeding the material to cattle. Following are a few questions and responses to the inquiries.

## **What nutrient composition can be expected from distillers grains?**

Distillers grains can be excellent sources of both supplemental protein (including rumen bypass protein) and energy for beef cattle diets. However, nutrient content can be highly variable. Distillers grains vary in nutrient content from corn milling plant to plant and also within plants. The only way to be sure of the nutrient composition of distillers grains is to test a representative sample at an appropriate analytical laboratory such as the Mississippi Chemical Laboratory. Then livestock diets can be formulated properly.

## **How much distillers grains should be fed to beef cattle?**

Wet distillers grains should not be offered to livestock free choice. Producers should offer mature beef cattle a maximum of 8 to 10 pounds of wet distillers grains per head per day. Feeding levels for growing calves should be closer to 3 to 4 pounds of ethanol co-products daily. Economic feeding levels for stockers are generally in the range of 15 percent to 25 percent of dietary dry matter. Feeding amounts of distillers grains are limited by the fat content of the product (often 10 percent on a dry matter basis). Keep dietary fat levels below 8 percent in mature cattle, 6 percent in growing cattle and 4 percent in lightweight or very young calves.

Should wet distillers grains be fed to horses?

It is not recommended to feed wet distillers grains to horses. The primary concern is the possibility of mold developing in this type of feed, which can produce toxins. Dried distillers grains can be fed to horses. If dried distillers grains are used, they must be part of a formu-

lated diet to prevent any nutrient imbalance and limited to no more than 20 percent of the diet.

## **Why are sulfur levels a concern when feeding distillers grains?**

Monitor sulfur levels when feeding ethanol co-products including distillers grains. Distillers grains average approximately 0.7 percent to 0.8 percent sulfur on a dry matter basis, but sulfur content can be highly variable. Take care to make sure that sulfur intake from all dietary sources, including water, does not exceed 0.4 percent of the dry matter intake. Excessive sulfur intake can inhibit an animal's ability to properly utilize thiamine and result in polioencephalomalacia in cattle. Cattle suffering from this condition are often called "brainers." Signs can include but are not limited to blindness, inconsistent and uncoordinated movements, head pressing, "goose" stepping, lying with full body contact with the ground with the head and legs extended, tetany (muscle spasms), convulsions with padding motions and death. These signs usually exhibit sudden onset.

## **What other mineral concerns exist with feeding wet distillers grains?**

Distillers grains are relatively high in phosphorus. When low-quality forages or feeds high in phosphorus (such as corn or corn gluten feed) are used in combination with distillers grains, the phosphorus-to-calcium ratio will be high. Calcium supplementation (e.g., feed grade limestone or calcium carbonate) may be necessary to keep the calcium-to-phosphorus ratio within a 1:1 to 2:1 range in total diet for beef cattle.

## **Should moldy distillers grains be fed to livestock?**

If mold develops on distillers grains, the potential for mycotoxin production increases. Producers are advised to avoid feeding moldy feeds to livestock. Moldy feeds are often less palatable to livestock and can negatively impact animal performance and health. Δ

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