

## **The Advantages of Using Corn Distillers Dried Grains with Solubles in Swine Diets**

- **Corn Distillers Dried Grains with Solubles is an Economical Addition to Swine Diets**

In one ton of complete feed, adding 200 lbs. of Corn Distillers Grains with Solubles (CDDGS) and 3 lbs. of limestone to a finisher diet will replace approximately:

177 lbs of corn  
20 lbs of soybean meal 44%  
6 lbs of dicalcium phosphate

Calculate the opportunity cost of using CDDGS in swine diets as follows:

Additions:

+ CDDGS	200 lbs. X price/lb	= \$
+ Limestone	3 lbs. X price/lb	= \$
	<b>TOTAL A</b>	<b>= \$</b>

Subtractions:

- Corn	177 lbs. X price/lb	= \$
- Soybean Meal 44%	20 lbs. X price/lb	= \$
- Dicalcium Phosphate	6 lbs. X price/lb	= \$
	<b>TOTAL S</b>	<b>= \$</b>

Opportunity Cost:

Total S – Total A = Opportunity Cost of CDDGS/lb X 200 lbs/ton = Opportunity cost/ton of complete feed

- **“New Generation” Ethanol Plants Produce Higher Quality CDDGS**

CDDGS have more digestible energy, amino acids, and phosphorus than other DDGS sources produced in the ethanol industry. This makes CDDGS an excellent alternative ingredient for livestock rations.

- **CDDGS Can Be Effectively Used in Swine Diets With Maximum Dietary Inclusion Rates of:**

Nursery Pigs (>15 lbs.)	25%	Lactating Sows	10%
Grow-finish Pigs	20%	Gestating Sows	50%

- **Feeding High Levels of CDDGS to Sows Has Been Shown to Increase Litter Size Weaned**

Recent research results from the University of Minnesota have shown that feeding high levels of CDDGS in gestation and/or lactation in a previous reproductive cycle, increases litter size weaned in the subsequent reproductive cycle compared to sows fed typical corn-soybean meal diets.

- **Feeding Diets Containing CDDGS May Improve Gut Health of Pigs**

Studies are currently underway at the University of Minnesota to determine if adding CDDGS to diets for growing pigs reduces the incidence and severity of ileitis (*Lawsonia intracellularis*).

- **CDDGS Reduces Phosphorus Excretion in Manure and Does Not Adversely Affect Air Quality in Confinement Swine Facilities**

CDDGS contains 0.70% available phosphorus (P), which is 18 times more than the available P in corn (0.04%). This means that the natural P in CDDGS is better digested and absorbed by the pig than P in corn and soybean meal. The end result is less need for dietary P supplementation and a reduction in P excretion in manure.

University of Minnesota research has shown that ammonia, hydrogen sulfide, and odor emissions from swine manure from grow-finish pigs fed a diet containing CDDGS are the same as when conventional corn-soybean meal based diets are fed to swine.

- The Greatest Nutritional and Economic Value from Using DDGS in Swine Diets is Achieved when Diets are Formulated on a Digestible Amino Acid and an Available Phosphorus Basis.
- Nutrient Profiles and Digestibility Coefficients are Available for Each Ethanol Plant Producing CDDGS.

**For additional information on feeding distillers grains to sheep, contact:**

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