



NEWS COLUMN

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Particle Size Reductions May Help Lower Feed Costs

URBANA – It is well known that corn needs to be ground to be effectively utilized by pigs. New research shows that particle size reductions beyond current common practice may help lower feed costs.

“For many years producers have been grinding to an average particle size between 650 and 700 microns,” said Hans H. Stein, University of Illinois Extension swine specialist and professor in the Department of Animal Sciences. “This particle size was based on research showing that if grain is ground to a smaller particle size, then problems with ulcers in pigs may increase.”

However, Stein said research also shows that energy and nutrient digestibility will increase if particle size is reduced to smaller than 650 microns. Because of this increase in nutrient and energy digestibility, less feed is needed to produce one pound of gain if grain particle size is reduced.

Newer research indicates that feed conversion may be improved by 3 to 5 percent if corn particle size is reduced from 650 to 450 microns. This could lead to substantial savings, he said. Because of this, many producers are now grinding to an average particle size of 450 to 500 microns.

Problems with ulcers do not seem to be as much of an issue now, Stein said. He believes this is due to diets containing more fiber than they used to because of the inclusion of DDGS. Inclusion of more fiber such as DDGS or wheat middlings in the diets reduces the risk of pigs getting ulcers.

He said there are also producers who do not use DDGS and have reduced the particle size of the grain without experiencing problems with ulcers.

“With the increasing costs of feed ingredients, it is necessary to look at all opportunities for reduction in feed costs – and reduction of the grain particle size is an easy way to start saving,” Stein said.