



Sure Champ[®]

IN THE CLASSROOM

Should I Feed Whole or Cracked Corn in my Show Ration?

By: Team Sure Champ

Corn is included in cattle diets to increase the energy concentration of the diet. Nutritionally, starch is the most important component of corn. Mechanical processing of corn is often used to increase the extent of starch digestion in the rumen. Corn can be fed whole with excellent results, but cracking or rolling it will increase digestibility by 5-10%.

Although this improvement in digestibility can be important, it may not be enough to pay for the cost of processing the grain. Also, the improvement in digestibility may not be seen equally across the different life stages, which may make processing an unnecessary expense. Processing corn will not typically improve average daily gain (ADG), but it will improve feed efficiency. In most cases, cattle fed processed grains usually have similar energy intakes and ADG while consuming less feed. This reduction in intake could be due to excessive rates of acid production in the rumen and subclinical acidosis.

Advantages of feeding whole corn are:

- Eliminates the cost of grinding or rolling (\$10-\$20/ton) and shrink from grinding/rolling (2-5%)
- Reduces the risk of bloat and acidosis compared to ground corn

Recommendations for feeding whole corn:

- Do not limit feed a whole corn ration. Cattle should not be without feed for more than one hour at a time. Cattle tend to eat rapidly when fed and more grain is swallowed whole
- Ensure adequate bunk space so cattle can chew uninterrupted, and clean bunks daily
- Feed clean, whole corn. Fines will increase incidence of bloat and acidosis.
- Pellet all ingredients except the whole corn and hay to decrease fines and keep an even mix
- Feed limited hay (less than 10%) and have access to clean water

Although whole corn can be used successfully in many situations, it will not always be the best fit. The following are some guidelines for using whole corn:

When to use whole corn diets:

- Young calf diets
- Creep feeds
- Self fed diets – finishing no forage
- High forage diets: high rate of digestion of starch may adversely affect fiber digestion
- When acidosis is an issue

When NOT to use whole corn diets:

- Finishing rations for yearlings
- Dairy rations or other diets with high rate of passage

For additional livestock nutrition and stock show resources, visit surechamp.com/blog.