

Feeding Poor Quality Hay Result In Poor Performance

DR. JAMES B. NEEL

KNOXVILLE, TENN.



Winter feeding is the most expensive part of cow-calf production. However, a limited number of producers plan or think about the winter feeding program until winter is here. Then, it is too late.

Why is winter feeding so expensive? Much of the feed comes from harvested hay, a valuable commodity that is expensive to feed. It will be more costly this year thanks to increased cost of inputs to produce and harvest. Some areas of the state experienced dry weather, resulting in reduced hay and pasture production. In addition, some producers have already been feeding hay due to the dry weather.

Not only is quantity of hay a cost factor, quality of hay is, too. Feeding poor quality hay results in poor cattle performance and eventually reduced returns. The hay harvested in Tennessee by beef producers varies widely in quality. For example, all hays tested in the UT Forage Testing Laboratory ranged from a low of 5.8 percent to 19.0 percent crude protein and from 41 percent to 66 percent total digestible nutrients (TDN), a simple measure of energy content of the forage. Date of harvest or stage of maturity at harvest determines hay quality. In other words, quality is under the control of the producer.

To determine the feeding value of hay, it is recommended that it be forage tested. Hays that test less than 8 percent crude protein are poor quality, while hays with TDN value below 50 percent are poor quality. Hays of these nutrient levels should be supplemented, and that increases cost of the feed. However, if hay is fed that does not meet the animal's nutrient need, a greater cost will be incurred due to losses result of inadequate nutrition. Cows fed hays of

55 percent TDN and around 12 percent crude protein would probably not require supplementing.

What is the impact of poor quality hay on cow performance? Several production traits will be reduced:

- **Loss of weight and body condition.** Cows consuming poor quality hay cannot consume enough to meet their nutrient needs. To satisfy their hunger, cows need to eat about 2.5 percent of their body weight per day. For example, a 1,000-pound cow needs about 25 pounds of hay daily. When consuming poor quality hay, they may be able to eat only 1.5 percent to 2.0 percent of their body weight, resulting in a loss of overall weight and body condition.

- **Reduced reproduction.** Cows will be slower to start cycling and experience a lowered calf crop percentage born and weaned. Their reduced production will also spill over to subsequent years. Both cows and their calves will be more susceptible to the effects of subclinical health disorders and develop chronic diseases and increase the probability of death.

- **Lower calf survival rates.** Cows fed poor quality hay could lose enough weight and body condition to result in small, weak calves at birth. In addition, these cows would produce both low volume and poor quality of colostrum, which also would contribute to reduced calf survival and increased incidence of scours and other health problems. If these calves survive, their future performance will be reduced, too.

"You are what you eat." I am sure that you have heard this. This statement is also true with cows and calves. Consuming poor quality hay will result in poor performance. Have a forage test done on your hay and if needed, supplement. Testing and feeding based on the test is much more profitable than failing to meet the cows' and calves' nutrient needs. Δ

DR. JAMES B. NEEL: Professor of Animal Science/Extension Beef Cattle Specialist, University of Tennessee



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