

Ross Mosteller
District Extension Agent, Livestock & Natural Resources

Fall Calving Nutrition

For those true fall calving cowherds, cows are likely in the very last stages of gestation or early lactation. A dry pregnant cow experiences a shift in nutrient requirements leading up to calving and in the transition into higher nutrient demands of lactation. Providing proper nutrition during this crucial time will influence milk production and reproductive efficiency. It is always important to note this shift in requirements but is especially important in fall as grazing resources tend to trend lower in quality.

The main nutrient considerations are protein (CP) and energy, most easily assessed by total digestible nutrients (TDN). During the last 60 days of pregnancy, cow requirements increase from 48% to 54% TDN and from 7% to 9% CP. Moving into peak lactation, which corresponds with the greatest nutrient demand, a diet containing more energy, 60% TDN and protein, 12% CP is required. Since very few forages available in fall will provide these levels, a combination of forages and supplemental nutrition added to the diet will need to be evaluated to ensure that nutritional needs are met.

There are some basic indicators to help guide in knowing if the cow is getting enough nutrients. Obviously, the gold standard is feed testing and balancing rations, but good observation can tell much. In terms of dry matter intake, a mature cow will typically consume 2% to 2.5% of bodyweight, if forage intake is not limited by poor quality or low availability, both of which become problematic going into winter. Watching the backside of the cow in studying cowpies can tell you basic nutritional status. If cowpies begin to get too firm and stack up, the cow is likely getting deficient in dietary protein.

Body condition score (BCS) can give a good snapshot of nutritional status over time. BCS is measured on a scale of 1 to 9, with 1 being extremely thin and 9 corresponding to extremely fat. A mature cow should maintain a BCS of 5, and first-calf heifers should be in BCS 6 at calving. When BCS falls outside of that range 5 to 6, negative effects on milk production and rebreeding may be observed.

To maintain a 365-day calving interval, a cow must rebreed within 82 days after calving. Cows that calve in BCS 5 to 6 tend to exhibit cyclicity earlier than those that calved in BCS 3 to 4. This is due to the greater nutrition requirements of lactation, where cows may lose some condition to meet the demands of producing milk.

One of the most difficult and expensive things to do is to get a cow to gain body condition during the lactation period. To ensure that cows are in the ideal BCS range for rebreeding, and in turn maintaining an acceptable 365 day calving interval, make sure proper nutrition is provided in the days leading up to calving and throughout lactation. Just a note for spring calving cows with weaned calves, in the opposite plane of nutrition. This can be an excellent time of year to build body condition going into winter.