

## **5 Keys to Winter Supplementation of the Cow Herd**

Kim Mullenix, Ph.D., Extension Beef Cattle Systems Specialist, Auburn University

### **1) Know the nutrient requirements of your cow herd.**

Nutritional requirements increase significantly at the time of calving and it is important to adjust the feeding program accordingly to meet these requirements. Refer to ANR-0060 Nutrient Requirements of Beef Cattle for more information

([www.alabamabeefsystems.com](http://www.alabamabeefsystems.com) under the 'Nutrition' tab) on the daily dry matter, total digestible nutrients (TDN), crude protein (CP), and mineral needs of different classes of livestock.

### **2) Consider the source.**

Know and understand the quality of the hay that you are feeding. A forage analysis is needed to accurately determine the nutritional value of hay and if additional supplementation is needed outside of this feedstuff in your herd. Estimate the number of hay feeding days per year, and the quantity of hay needed to carry your herd through the winter.

### **3) Match.**

Matching the quality of hay with animal nutrient requirements is the first step in developing a supplementation plan. This starts with comparing the nutrient requirements of your animals (Table 1; green columns) to the amount of nutrients provided by the forage. If the quality of hay is less than the daily nutritional requirement of the animal, additional supplementation will be needed.

**Table 1. Matching animal nutrient requirements with differing hay quality.**

			4-wk regrowth Coastal bermudagrass hay (62% TDN, 12% CP)	8-wk regrowth Coastal bermudagrass hay (52% TDN, 8% CP)
Stage of Production	TDN Required (% in diet needed per day)	CP Required (% in diet needed per day)	Supplement Needed?	
Dry Pregnant	48	7	No	No
Peak Lactation (0 to 90 days after calving)	60	12	No	Yes
Late Lactation	55	9	No	Yes

#### 4) Evaluate and compare supplemental nutrient sources.

If supplemental feed is needed, evaluate the feed on a cost per pound of nutrient basis, not solely cost per ton of feed. For example, if additional energy (TDN) is needed, compare feed sources on a cost per pound of TDN basis. Use a decision tool like the cost calculator in the [UGA Basic Balancer](#) or the Alabama Beef Systems [Byproduct Feed Quick Reference Guide](#) for comparing the value of feedstuffs.

#### 5) Provide supplemental energy to cattle during severe, cold weather events.

In cold, wet weather often found in the winter in the Southeast, the energy requirements of beef cattle increase 2% for each degree that the wind chill is below 59°F. Provide a small amount of digestible energy supplement (ex. soybean hulls at 0.3 to 0.5% of animal body weight per day) along with free choice hay during and after (3 to 5 days) the cold event to decrease energy losses during this time period.