

## Ross Mosteller

District Extension Agent  
Livestock & Natural Resources

### **Cowherd Supplement Considerations**

Opening the gate from the dry, brown, crunchy grass pasture - out to a freshly harvested corn field last weekend has me considering my approach to cow supplementation this fall. I'll often cuss the smooth brome and fescue makeup of this particular pasture, but typically, there is some lush green fall growth that helps extend the grazing season. While this is not case this fall, it does lead into discussions on what supplementation programs might look like this fall/winter.

Probably few producers enjoying paying for supplemented protein and/or energy sources, yet understand the importance of maintaining or improving body condition scores sooner rather than later. As forage becomes dry, dormant or scarce, it becomes necessary to design an economic protein supplement program for cows utilizing lower quality forages. Feeding supplemental protein is necessary when the existing diet does not meet the animal's nutritional requirements. This typically occurs when grass becomes dry, dormant, and protein content in the plant drops.

Feeding cattle supplemental protein can boost forage intake and assist in effective rumen digestion. Long-term research shows that generally, a typical crop residue field will provide forage that meets the animals needs completely for one month of grazing, and energy needs - with protein supplementation, for two months of grazing. Protein supplements also can be important with grazing of dormant winter range forage, because these forage sources are typically very low in protein. All that said, rarely is there a time where animals can graze all winter long without some plan for supplementing protein and in most cases energy as well.

Knowing when protein supplements are needed, takes a watchful, well-trained eye. For the cow-calf operation, this is most easily accomplished with visual body-condition scoring. A body-condition score (BCS) of 4.5 to 6.5 is a good target. If BCS gets above that level you are probably over-supplementing. If BCS drops below, the cow is using reserves and not meeting her requirements, so supplementation is needed. In a stocker/feeder scenario, rate of gain is typically a good indicator of whether supplemental feed is necessary.

Ideally, animals need to have all the nutrients they require provided daily. However, that might not always be practical and research shows that alternate delivery methods can work. For example, a project at Texas A&M showed that offering a weekly protein supplement, well-dosed the animals with protein, creating a stockpiling effect. Feeding three times a week was shown to be optimal, but weekly feeding is less expensive than daily feeding and decreases time and labor expense. Another benefit was alteration in the animal's behavior pattern, to graze more with infrequent supplementation versus daily, where animals stand at the gate waiting for supplement.

The convenience of self-fed or self-limiting supplements has helped increased their use and popularity, but this can be at the sacrifice of individual intake. Some cows may not consume any supplement, while others may consume large amounts. Most commercial products have an intake limiter in them, which helps minimize over-consumption. Making sure there are enough tanks, tubs or blocks for the number of cows will reduce variation in intake.

Next week I plan to continue this discussion, looking a bit more at the economic side. In the meantime, if you'd like to know more check out the supplement section of K-State's resource: [Questions and Answers on Beef Cattle Nutrition C733](#)