

*Are your cattle getting everything they need  
from their forage? If not, it may be time to come up with —*

# *Supplemental* Game Plan



...three categories:  
protein supplements,  
energy supplements  
& mineral and vitamin  
supplements.

By KATRINA WATERS

**I**n a perfect world, forage would be abundant, high quality and the only ingredient needed for cattle to reach their potential. Unfortunately, that is not always the case. Sometimes your herd needs that extra nutritional boost. But, with so

many choices, it can be difficult to know which supplement is right for your situation and how to make the most of it.

Dr. Jason Banta, assistant professor and beef cattle specialist at Texas AgriLife Research and Extension Center at Overton, says the first step in determining supplement needs is a hay test.

“If you don’t know what the quality of your hay is, you don’t know where to go with your supplement program,” Banta says.

*[For more on hay tests, see “Does Your Hay Pass the Test?” from the October 2008 issue of The Cattleman.]*

## Reasons to supplement

Banta says there are four basic reasons for cattle needing supplements.

“The first one is inadequate nutrient intake,” he says, meaning simply that there is not enough available protein or energy in the forage to maintain the cattle.

Another reason to supplement is to improve performance, especially on stocker cattle. For instance, the forage may be good enough to convert to 1 pound or 1.5 pounds of gain per day, but because of the way the contract is written, they need to gain more per day.

“So, we may be getting decent gains on forage but we need to bump it up a little bit to meet those marketing goals,” Banta explains.

Just like humans, cattle require a balanced diet, and that is the next potential reason to supplement: a balanced ration for improved nutrient utilization.

“If we have a whole lot of protein in the diet and not as much energy, we can supply a little more energy to balance the protein-to-energy ratio and improve performance. Conversely, if we have a whole lot of energy and not enough protein in relation to that energy, we could bump the protein up to help balance that ratio and improve performance there,” Banta says.

The final major reason to

supplement is to make up for a lack of forage or hay, whether it is during a drought or there just is not enough hay to last through the winter.

## Supplement types

Banta divides supplements into three categories: protein supplements, energy supplements and mineral and vitamin supplements. He says he puts minerals and vitamins into the same category because, unlike the first two, they are often fed free-choice and year-round.

If the forage supply is short on protein, producers should look to a protein supplement to take up the slack. Banta says the most common options are cottonseed meal, soybean meal, 40 percent protein cubes or alfalfa hay. For cows, winter pasture is also an option.

Based on the hay test reports he has seen last year and this year, Banta expects many producers will need to provide energy supplements this winter. For added energy, the most popular options include 12 percent cubes, 20 percent cubes, or if bunks are available to feed corn, corn gluten feed or soybean hulls. With energy supplements, Banta says, it is important to gradually increase the energy level in the diet.

Many supplement types are available as either a self-fed or hand-fed product. Banta says the decision generally comes down to convenience versus value.

“Typically, when you price those supplements out per unit of protein or unit of energy, the hand-fed supplements are almost always the cheapest per unit of nutrient. So, you want to take that into account,” Banta says.

Additionally, hand-fed supplements often offer other important advantages — more consistent intake and fewer non-eaters, Banta says.

“On some of these self-fed products, we increase the variation of consumption across the herd and actually have some of those animals that just refuse to

eat those products. So what I tell people is, understand the positives and negatives.

“If you’re willing to pay more money for the convenience of some of those self-fed supplements, that’s fine; just realize you are paying quite a bit more in a lot of situations for that convenience,” he says.

## Before you buy

With so many options, selecting the right supplement may seem like a daunting task. Sure, it is relatively easy to spot protein, crude fat and crude fiber levels, but energy level is usually discussed as total digestible nutrients (TDN), a number that will not be found on any feed tag.

Banta says a general rule of thumb for determining energy potential is this: energy goes up when crude fat goes up. Conversely, as crude fiber goes up, energy typically goes down.

But just because TDN levels may not be published on the feed tag does not mean the information is not available, Banta says.

“Some of the companies publish TDN information on their Web sites. Also, if they don’t publish them on the Web site and you’re considering buying quite a bit, I’d consider picking up the phone and calling and asking them. That’s something I’ll do from time to time,” he says.

He says the most common purchasing mistake he sees is buying the product that is cheapest per bag versus cheapest per unit of nutrient. For example, when comparing protein supplements, a 40 percent cube is going to be considerably more expensive per bag than a 20 percent protein cube. However, when priced out per unit of nutrient, the 40 percent cube will typically be the better value.

## When to supplement

Banta says a common mistake he sees people making is assuming they need to feed protein and/or energy supplements year-round.

“We really only want to supplement when our forage or hay doesn’t meet the nutrient requirements of our targeted level of performance,” he says.

He says for a lot of cow-calf operations a protein supplement may become necessary during the late summer when it starts getting dry and forage quality declines. Depending on the available hay or forage supply, protein and energy supplementation may also be needed again during the winter.

Frequency of feeding is another factor to consider. Banta says, “Your flexibility on feeding frequency is going to vary depending on what you need, based on the quality of the forage and the nutrient requirements of your cattle.”

Protein supplements — all-natural products with a high concentration of protein without non-protein nitrogen or antibiotics — can be fed every day, every other day or twice per week, Banta says. Some research even shows they can be fed once per week with similar results.

“For example, let’s say we need [to feed] two pounds of a 40 percent protein cube per cow, per day,” Banta says. “That would be 14 pounds per week. If you’re going to feed that in two feedings, that would be 7 pounds per feeding. With fuel costs the way they are, that would be something to look at because you would have some fuel and some labor savings there by reducing the feeding frequency.”

He says he is not personally a big fan of the once-a-week feeding, although in certain situations he would consider it. He believes a twice-a-week feeding works really well with protein supplements.

Energy supplements are a different story. He recommends feeding them every day, unless feeding a small amount, in which case every other day may be all right.

## Feeding tips

For the most “bang” for your supplement buck, how you feed can be just as important as what

you feed. One common mistake Banta sees is putting the supplement out too soon.

“When you’re supplementing, you want to make sure the majority of the cattle have arrived before you start putting supplement out. You don’t want to go out there and dump enough cubes to feed 30, 40 or 100 head when there are only five standing there. The other ones may not come up,” he explains.

Banta says although feeding in bunks means less waste than feeding on the ground, he admits bunks are not always practical, especially on large operations.

When feeding on the ground, he says there are some practices that will help improve efficiency.

He recommends avoiding muddy areas or those with manure buildup. Additionally, gravel and rock roads should be avoided as cattle will inherently pick up some gravel with the cubes, causing their teeth to wear out more quickly.

How cubes are distributed can also make a difference.

“When I’m feeding cubes on the ground, I like to feed in small piles. I think you’ll have less of those cubes trampled,” Banta says. “The other thing I like to do is put those piles in a line. There’s nothing special about that, other than it makes it easier to go back and count those cattle after you get them fed. It’s just a little management trick to make things a little easier for you.”

And in challenging times like these, who isn’t looking for something to make things easier? ■