MANAGING FEED INTAKE THROUGH TRANSITION STRESS

Transitions are stressful for cattle of all ages, but they are especially challenging for cattle starting on feed. What happens to an animal before or after a key transition, for example pre-weaning to weaning, can have a major impact on the health, productivity and profitability of that animal during the feeding period.

"The starting period for cattle is a critical point of intersection for animal health, nutrition and management," said Michael Hubbert, PhD, president of Hubbert Biological Systems. "How an animal adapts to the first 45 to 60 days in the feedlot will determine the productivity and ultimately the profitability for the entire feeding period."

Dr. Hubbert, a consulting ruminant nutritionist, has studied the dynamics of starting cattle for more than two decades as an academic and industry professional. The effect on cattle depends on the intensity and duration of the stress, said Dr. Hubbert. How cattle are handled, distance traveled, previous health protocol and receiving management are all factors to consider.

There are three categories of stress-related effects:

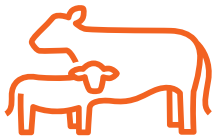
- **Physical,** including fatigue, dehydration, lack of adequate feed or improper handling
- **Physiological,** covering disruption of normal rumen function, impaired gut motility and function, and an impaired immune function
- **Psychological,** including adequate space to eat and drink, and social and intimidation factors

All of these factors have adverse effects on appetite, feed intake and health. "Stressed animals tend to eat less, so then they aren't taking in adequate nutrients and energy for their body to mount an immune response," said Dr. Hubbert. "We have to formulate nutrient-dense rations with feed additives that encourage feed intake during the starting phase. This is really critical for high-risk calves."

MATCHING NUTRITIONAL NEEDS

Dr. Hubbert said nutritionists evaluate expected feed intake based on the level of risk with the cattle. An example is a high-risk calf who is commingled with other calves from different operations and may travel a long distance to the next place. A nutritionist would expect lower dry matter (DM) intake with increased morbidity and mortality due to bovine respiratory disease (BRD) and coccidiosis in those calves. At the other end of the spectrum are lower-risk yearling cattle with higher intake and lower expected cases of BRD.

The goal is to match nutrient demand with nutrient supply. One of the methods to help increase feed intake is to incorporate an ionophore in the starting cattle diet. But Dr. Hubbert cautions that not all ionophores work the same when it comes to feed intake.



"The molecular structure of lasalocid (BOVATEC®) is different than monensin (Rumensin®)," explained Dr. Hubbert. "They work differently and are fed differently."

Dr. Hubbert explained that monensin when fed at 30 grams per ton (g/ton) is detrimental to feed intake on cattle not adapted to the feedlot. While lasalocid fed at 30 g/ton mildly suppresses intake when compared to no ionophore, it provides the advantage of allowing the animal to consume greater amounts of feed than monensin.[1,2] This helps the animal replenish nutrients needed for immune response and growth while also controlling coccidiosis.

"Well-designed and implemented starting programs can allow cattle to make successful transitions for a healthy and productive time in the feedyard," said Dr. Hubbert. "The way an animal starts on feed from day one influences final feeding performance. If we start cattle right, we improve animal health, as well as performance in the live animal weight and carcass quality."

For more information on managing cattle through the starting phase, visit CattleFeedAdditives.com.

Do not use BOVATEC in calves to be processed for veal. Do not allow horses or other equines access to feeds containing lasalocid, as ingestion may be fatal. Feeding undiluted or mixing errors resulting in excessive concentrations of lasalocid could be fatal to cattle and sheep.

[1] Galyean ML, Hubbert ME. Rationale for use and selection of ionophores in ruminant production. Paper presented at: Southwest Nutrition and Management Conference; 1989; University of Arizona, Tucson.

[2] Data on file. Zoetis Trial MC015-06-AULA13 (Oklahoma study), Zoetis Services LLC.