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Don't Take Chances with Rebreeding Success!

Written by: Kristin Thompson, MSc., PAg, Ruminant Nutritionist

The ability to maintain a 365-day calving cycle means that cows must be rebred within 85 days post-calving. Clear breeding goals should be set for each operation, and management focused on meeting these parameters. Below are four tips for rebreeding success:

1. Feed for Optimal Body Condition

Body condition score (BCS) prior to and during the calving season has a direct impact on how fast a cow will return to estrus post-calving. A cow is more likely to conceive within the first 21 days if she begins to cycle prior to the breeding season. This will result in cows calving earlier in the season next year, producing a heavier calf at sale time in the fall.

The level of body condition also impacts the cows' ability to produce colostrum and maintain a high milk production to support calf growth. A cow maintained at a BCS of 3 during and after calving will allow her to easily maintain lactation while still meeting her own nutrient requirements. On the other hand, an under-conditioned cow will need to consume a higher plane of nutrition during this period to meet lactation and maintenance requirements. This can result in a delayed or no return to estrus.

2. Manage Heifers and Cows Separately

Heifers need to be on a higher plane of nutrition after their first calving and through to re-breeding, when compared to mature cows, to ensure that they recover from calving on time. During this phase, heifers are partitioning energy to lactation and maintenance as well as growth. Their nutrient requirements are approximately 20% higher than that of a mature cow. For example: if a mature cow is receiving a diet that is 11% protein and 60% total digestible nutrients (TDN), a heifer ration should be formulated to include 20% higher protein and energy.

In addition to the increased nutrient requirements, first calf heifers take at least 21 days longer to return to estrus when compared to mature cows. Therefore, heifers should be bred for the first time at least 3 weeks prior to the rest of the cow herd. This ensures that they will calve earlier than the rest of the herd and have a greater chance of returning to estrus before the next breeding season begins. This management strategy also allows heifers to be closely monitored for any calving difficulties.

3. Put a Focus on Mineral Nutrition

Mineral nutrition during the last 60-90 days of gestation will have a major impact on colostrum quality, calf trace mineral status and calf vigor. Fetal

growth is greatest during the final trimester of gestation which puts added nutritional pressure on the dam. It is essential that these demands are met in order to ensure a healthy calving. A mineral fed during this phase should include increased magnesium and calcium, as well as enhanced trace mineral levels or the inclusion of organic trace minerals.

Post-calving the cow is maintaining lactation at the same time that her reproductive tract is recovering from calving. Trace minerals play an essential role in ensuring the post-partum interval (period between calving and return to estrus) is on target: average of 50-60 days for cows and 85 days for heifers. These essential minerals are necessary to help mitigate the inflammatory response that occurs during and after calving. A breeding mineral should also include required phosphorus which is linked to improved conception rates and return to estrus.

4. Monitor Changes in Forage Quality

The main dietary component for beef cows is forage. Therefore, the nutrients (energy, protein, trace minerals, etc.) that these forages are providing must be determined to accurately formulate her ration. It is also important to ensure that changing forage type is taken into consideration, as the cows diet changes from consuming stored forages during the winter to grazing summer pastures. When forage quality is below average, a supplemental source of protein and energy should be provided.

Forage testing should also include a mineral analysis. This is especially important as there are a number of mineral interactions that are antagonistic. For example, high molybdenum forages cause reduced bioavailability of copper resulting in secondary copper deficiency. Similarly, high potassium forages can result in reduced absorption of magnesium and lead to grass tetany.

Conclusion

Reproductive disturbances can have a significant financial impact on your bottom-line. By being proactive in monitoring the various factors that impact rebreeding success, you are better equipped to meet the reproductive goals of your cow herd.

Company Update

By: Phil Roberts, National Sales and Marketing Manager

The good news is the ground hog did not see his shadow, so hopefully an early spring!

I want to thank you, our clients, for your ongoing support as we continue navigating through the challenges of Covid-19. The challenges from the pandemic are slightly different for everyone, yet it is fascinating to observe the creativity and resilience demonstrated in finding new and unique ways to get the job done.

Our supply chains continue to be interrupted by the ongoing global pandemic; however, our teams continue to explore options to keep your feed and our offerings competitive. It is certainly not an easy feat to pilot the market volatility we are experiencing, which is truly quite incredible. Our team is committed to finding options and resources to help you, our business partners, through these uneasy times. Please ensure you are consulting with your New-Life Mills representative to assist you and your operation with the best viable solution to meet your needs.



Does More Grain Always Equal Gain?

Written by: Maureen Bowman, BSc., MSc., Ruminant Technical Representative

With the continued drive for improved animal performance in the forms of streamlined feed conversions, it is not surprising that corn and other grains are the prized champions in the forefronts of most feeder finisher rations. High in starch it provides a consistent source of fermentable carbohydrates to certain groups of the rumen's growing organisms and therefore delivers consistent energy to growing animals resulting in impressive gains. It's however, important to recognize the need for ruminal balance and keep the scales in check to prevent long term repercussions in the race for gain. The nemesis for many beef finisher feed lots is acidosis, or its chronic cousin SARA (subacute ruminal acidosis).

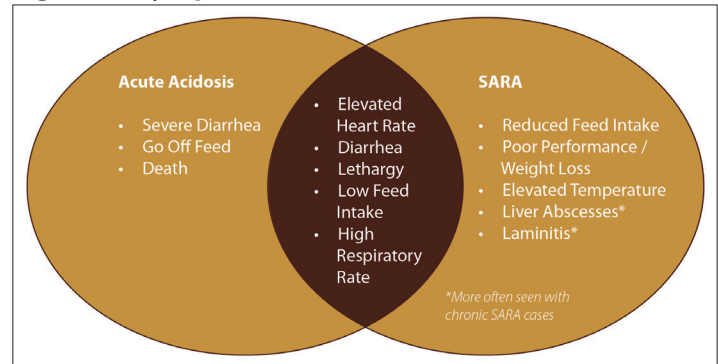
What is Acidosis?

Acidosis occurs when the pH of the rumen falls below 5.5. This primarily occurs when high levels of readily fermentable carbohydrates are fed without appropriate levels of physically effective fiber. If the rumen is exposed to this kind of acidic environment over a long period of time the condition is referred to as SARA (sub-acute ruminal acidosis). The low pH in the rumen disrupts the balance in the microflora favoring the acid-producing bacteria. Feeding fiber promotes buffering through saliva production, the dilution of acids and favors other types of bacteria and protozoa. Without physical fiber to promote rumination and saliva, the rumen motility stops, acids accumulate and dry matter intake decreases affecting animal performance. Long-term exposure can cause degradation to both the lining of the rumen and intestinal walls leading to ulceration and scarring. This scarring decreases the efficiency of nutrient uptake for the animals and, in extreme situations, its integrity can be weakened enough that certain bacteria can migrate from the rumen into the blood stream and lead to abscesses in other parts of the body, particularly the liver. Several other long-term effects of chronic acidosis are laminitis, resulting from the low pH levels wearing down the integrity of the hoof walls.

How does grain processing impact acidosis risk?

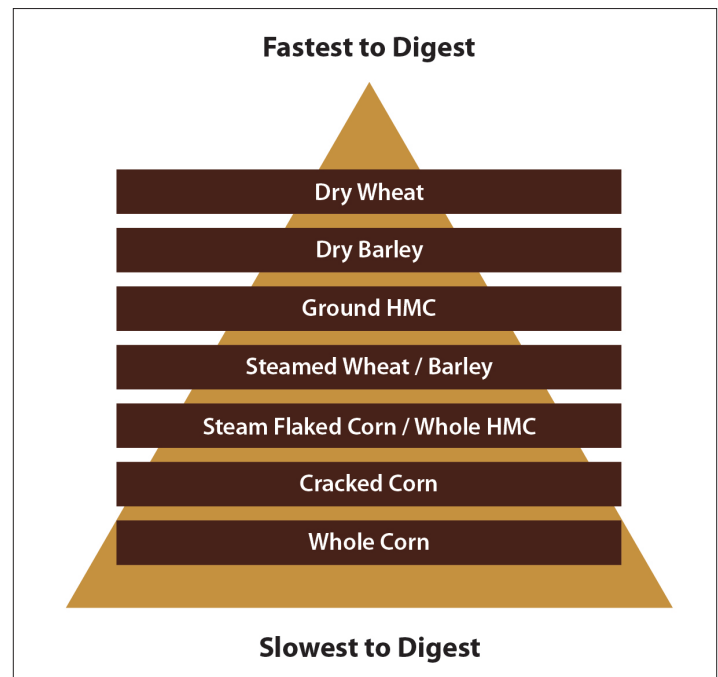
When utilizing on farm grains and forages it is

Figure 1: Symptoms of Acidosis



important to keep in mind the rate of digestion of the ingredients being utilized. Processing such as steam flaking, rolling and cracking all assist in making starch more readily available for digestion and by doing so increase the rate of which they are digested in the rumen (Figure 2).

Figure 2: A Quick Guideline to Starch Digestion of Grains



Management Tips for Preventing Acidosis

Rapid changes to the animal's diet can cause disruption of the rumen microflora leading to a decrease in rumen pH. During periods when diet changes are necessary, such as weaning or diet transition, it is important to make changes gradually to ensure that rumen conditions are kept consistent and the rumen has time to adapt. The use of yeast as

a dietary support during these periods also help to improve gut health by promoting microbial diversity and pH stabilization. The use of sodium bicarbonate is also helpful to mediate the drop of pH as it assists in naturally buffering the rumen.

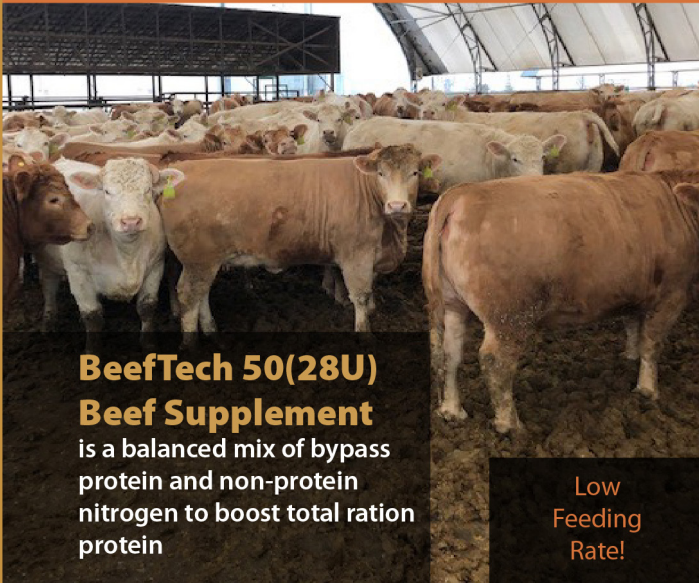
Encouraging feed push-ups throughout the day and ensuring there is always feed available in the bunk helps to prevent slug feeding behavior in the animals and this can help to reduce drastic drops in pH throughout the day. A way to manage this on farm is to ensure there is adequate bunk space available. Recommendations for finisher cattle are 6 inches for cattle with feed available full time, 8-10 inches when feed is available most of the time and 18 inches when feedings are widely spread. Additionally, feeding throughout the day at regularly scheduled increments ensures that fresh feed is always available and helps to reduce the risks of a drop in ruminal pH

through slug feeding behaviors.

Conclusion

Cattle health and performance are influenced by both the ration they are fed and the environment they are in. Therefore, it is important to balance energy intake with the appropriate forages to help keep consistent rumen pH and flow of digesta through the gastrointestinal tract of the animal. It is also necessary to regularly monitor feed bunks to encourage consistent feeding behaviors and promote optimal gains on farm. The additional use of additives, such as yeast and bicarbonate, can be used to improve gut health. However, they won't replace a proper diet formulation or management practices. Please consult with your nutritional representative if you have questions or concerns with acidosis or other nutritional upsets on your farm.

Increase the protein level of the ration without increasing costs!




BeefTech 50(28U) Beef Supplement is a balanced mix of bypass protein and non-protein nitrogen to boost total ration protein

Low Feeding Rate!

Contact your New-Life Mill Representative for more information.

Formulated to ensure healthy GAINS in each stage of the feeding period

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