Too much of the good stuff can cause problems

By Dr. Brian Reed DVM, MBA

"I'm so frustrated! Why are my cows and heifers looking good with full udders after freshening, but within a few days, they look dull and depressed with variable manure?" I've heard this, or similar comments, many times over the years while visiting dairy farms. I heard it much more often in my earlier years in practice, when both cow comfort and nutrition programs had a long way to go to get to where we are today in the industry. There can be a number of situations that can cause the above description, including feed quality issues, ineffective dry cow programs and certain diseases amongst other things. However, the topic of this column is subacute, or even sometimes acute, rumen acidosis (SARA). In the last few of months, I've come across this condition in a couple of herds I have been doing some work with.

In years past, there were fewer herds using a total mixed ration (TMR), there was much more top-dress feeding systems, there was marginal cow comfort and ventilation systems, and there was less understanding about sorting and feedbunk management. Those things led to more problems with SARA and its sequela, including displaced abomasum, ketosis, lameness issues and decreased milk production. As the dairy industry advanced and started focusing on cow comfort, feedbunk management and new ideas about what a healthy diet is, SARA decreased correspondingly. As butterfat has increased in the overall dairy industry in the range of .4% butterfat over the last few years, it is easy to become a little complacent and feel that SARA is not a problem in your herd. That is why I'm highlighting situations that can still lead to SARA, especially in fresh cows, when dairy farm managers are focused on the traditional levels of butterfat, not the higher levels we are able to achieve today.

The first recent situation I observed involved a combination of forage that was not properly processed at harvest, cows away from access to feed for several hours after milking while out in an exercise lot, foot health issues in dry and fresh cows, and unavailability of feed at the bunk when cows were allowed back into the freestall area. As in many situations on dairy farms, one of these situations might not have led to an obvious problem. However, when all were occurring together, this situation had become fairly severe. Production, health, culling levels and reproductive performance were all affected. This situation coincided with a change in management, personnel and equipment breakdowns. It serves as a reminder of constantly staying vigilant in your management and monitoring all aspects of your operation as an owner.

The second situation involved a robotic milking operation. In robotic systems, generally a mixed ration is fed at the bunk, but pellets are fed in the robot stall itself as a way to entice the cows to come into the stall to be milked. The key to success for this system is that the mixed ration at the bunk, when combined with the pellets fed at the robot, adds up to an optimal ration for the cow. The potential problem with that is the same as the tradition of feeding a top dress to cows. If an individual cow's ration skews relatively too far towards the pellet side of the equation, the cow is not getting an optimal diet into her rumen. Also, if a bit too much pellet is fed at a feeding, it can act like slug feeding in the rumen. The goal should be to feed the absolute minimal pounds of pellets possible to entice the cow to come in to be milked.

For this farm, it appears they were getting pellets based on their milk production and the average intake of the mixed ration for the high group. With those assumptions, the ration looked good on paper. However, following freshening, many cows have not been ramping up their dry matter intake as quickly as their milk production. This leads them to get the pounds of pellets programmed for their milk production, while not eating enough of the mixed ration – which ultimately leads to a relative "grain overload" condition. This leads to rumen acidosis, altered digestion, health issues, production problems, and lower peak milk. To solve this in a robot or top dress herd, the assumptions for total intake are reduced for the fresh cows to match what actually happens to dry matter intake, so the pellets are not fed as aggressively during early lactation. This is not the first time I have seen this scenario in a robotic milking herd. I like robotic milking systems for many farms. You just have to be careful when you are putting together your feeding program to avoid SARA, just as top dress feeding herds have had to be careful historically.

The other advantage to reducing the pounds of pellets being fed overall, and instead including more of the nutrients in the mixed ration at the bunk, is one of economics. Generally, the top dress being fed is from off-farm sources. This adds costs to your feeding system. I am not saying this to disparage the provider of your purchased feeds. The reality is that there are costs incurred when crops are transported to a facility, stored there or somewhere else, processed and handled, ingredients added, and then transported back to your farm to be fed. If you can provide an optimal, balanced ration from as many high-quality feeds raised on your farm as possible, you gain economically. Every farm needs feedstuffs and ingredients from off their farm to make an optimal diet for their herd, but the less dollars required for this the better.

I think a good analogy for these concepts in human diets is as follows. If I went to a buffet and first went to the desert table and ate what I thought looked good there first, followed by going to the salad bar and main buffet, I would have a few more belly aches myself! Sometimes too much of the good stuff can cause problems.