

# TECHNICAL BULLETIN

## DAIRY



## QUALITY CONTROL ON FRESH COWS

Track stars that run the 100 m dash know that getting out of the blocks, accelerating quickly, and maintaining speed as long as possible is the key to winning.

We expect the same from our dairy cows. Stumbling out of the blocks in the fresh pen is going to hold them back for the entire race. Without a quick and clean start, they will never reach their potential.

The nutrition program is critical to getting these cows off to the right start. What can you do for your athletes?

- **Monitor TMR sorting.** I have heard many a producer tell me that they don't think their cows sort. My answer is simple: prove it to me! If we can monitor an abstract concept like "procedural drift" in milkers, why can we not monitor sorting? A lot of expensive additives are usually added to fresh cow diets. If only 80% of your cows get these additives because of sorting, should you be surprised if 20% of your cows have health issues or don't peak correctly? Monitor sorting biweekly with the Penn State Shake every 4-6 hours for a day.
- **Eliminate TMR sorting.** Ok, the cows are sorting. Now what? Sorting can usually be eliminated by focusing on ration DM, TMR length, and adding a liquid supplement that contains molasses (the sticky factor). Less than 50% on the bottom pan of the three part shaker box is a start, but go further than that. Is the long hay or straw easily sorted because it's too long? Is the diet too dry and falls apart? Are your dry minerals being left at the bottom of the bunk?
- **Monitor feed consistency.** Is the feed the same from one end of the bunk to the other? Again the Penn State Shaker is a start; take 10 samples along the bunk and shake them out. And then go the next step. Take another 10 samples and have them analyzed for moisture, protein, calcium, manganese/zinc, and NDF. This should give you a pretty good idea if your mixing procedures are working. I like using the manganese or zinc as a marker for other ingredients (like ionophores) to ensure they are getting mixed correctly.
- **Spend time and money on quality control.** Yes, if you are monitoring sorting and consistency, you are spending time and money. But it bears repeating. Think of all the money you spend on quality control in the parlor; feed management is long overdue for this same focus. If you monitor daily milk production from each cow on your computer, shouldn't the same be true of your feeding program?
- **Use the right mixer.** Many farms have sized their mixer for their main lactating herd. They are trying to reduce mixing time with larger mixers. This probably makes sense for the main herd but does the mixer work for the small group of fresh cows? Some mixers do not work properly with small loads. Solutions might include having a second, smaller mixer for dry and fresh cows. This might be your old, smaller mixer but make sure it still works properly.

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- **Process hay correctly.** Many fresh cow diets may include some hay. If possible, grind this hay before adding it to the mixer. If you can't process the hay correctly and consistently, consider taking it out. If the cows are able to sort long hay, you might be causing more problems than solving.
- **Communication between the herds person and the feeder.** The number of cows in a fresh cow pen tends to vary a lot from one day to the next. Feed software can help but are the numbers being updated daily? Days in milk and intake can also vary quite a bit in fresh cow pens. Develop a plan so that feed is always available.
- **Minimize cattle handling.** Milking, lying down, and eating are the preferred activities of your star athlete. There is nice research out there to say milking fresh cows 4 to 6 times a day for a few weeks will increase milk production the rest of the lactation. But is that realistic on your farm? Can you walk these cows to the parlor, milk them, and get them back in 20 minutes? That's two hours of milking time for 6x. How long are your cows in headlocks for fresh cow monitoring?
- **Keep bunk space to at least 30 inches per head.** We've known for a while that two feet per head doesn't cut it for the fresh cows. But can you maintain 30 inches all year round? Have you planned for the flushes of fresh cows that inevitably happen?
- **Monitor the time in the fresh pen.** How long a cow should be in the fresh pen is a point of debate from farm to farm. Too often a cow is moved too quickly or too slowly because a flush of fresh cows or overfilled lactating groups. Keeping the athlete in the starting blocks might prevent her from reaching her maximum speed. Great managers watch their cows. When she's eating well and milk production is ramping up, it's time to move on.
- **Maximize cow comfort.** For a nutrition article the obvious must be said.
- **Balance the ration.** As a nutritionist, I certainly respect the importance of the diet but perhaps it's the last part to fresh cow success. If we control and monitor the rest of the feed management program, that's when we can monitor real responses to diet changes.
- **Watch the carbs and pass me a liver.** Intake regulation in dairy cattle has gotten some press in the last few years. The HOT theory (Hepatic Oxidative Theory) has pointed to propionate and the liver as important regulators to intake. It's been suggested that in early lactation cows, fat mobilization could accentuate this regulation. Feeding ground dry corn and sugar might be good ways to improve intakes on these early lactation cows.
- **Fill up and let the race begin.** For more than 50 years, there have been arguments about fresh cow rations. But most will agree on one thing, if you can get her to eat, she'll be fine. Increased intake will help BCS, peaks, reproduction, and reduce health problems.

Quality control on fresh cow diets requires attention to detail. Focus on this detail and your cows will be off to the races.