



NOVEMBER 2024 DAIRY NEWSLETTER

It is almost time to tie a bow on 2024 and say goodbye to another farming year. And as the snow falls heavily in most areas, you may be scrambling to get the last winterizing touches on the barns and sheds and getting the equipment ready to move snow. Maybe even coming up with a to do list for kids home from school!

This fall has been good for getting most of the field work done with harvesting, manure removal and some tillage ahead of schedule. Possibly there is time to look at management changes around housing and routine protocols and of course there will be many an idea floated out at meetings this winter season. One area that always pays back dividends is in the management of dry cows. It is everyone's favourite topic when we discuss the group of cows not contributing to today's bottom line but geared up to make an impact in the coming months. A study in the Journal of Dairy Science looking at mostly Canadian herds related work done through the Vital 90 survey used on dairy farms from 2014-2018 and matched it with DHI data to arrive at some useable insights. Some of you participated in the use of the Vital 90 survey that we used alongside your nutritionist to investigate areas of your dry cow management. Areas such as crowding, feed access, ventilation, resting area, water access etc. All the questions in the survey were research backed from a history of studies into this important area. By matching the DHI data with the survey they were able to identify which areas had the most influence on hyperketolactia prevalence (ketosis) at the herd level. It is important to note that these are all herd level indicators, meaning it is looking at how many cows came through your system successfully based on a lack of ketosis and some key performance indicators such as milk production.

Herds with higher ketosis had two details very strongly correlated: lack of fresh water access in the dry period and a lack of constant resting space in the fresh cow area. The higher ketosis was associated with lower milk production on a herd level. We know fresh clean water with multiple access points and constant availability is important for making milk, but this seems to be true as well for the dry cows. The measure is 10 linear centimeters (4 inches) per cow in at least 2 access spots. Access to resting spots in the fresh cows is interesting as the survey included asking about dead ends. In both the dry cow and the fresh cow area we need to have 'escape routes' for cows to access resources and be able leave when a dominant cow approaches. Some barns have made fresh cow areas at the end of groups around the end of a row of stalls, likewise with some close-up groups. Maybe there is another area that can address these points, or a consideration in future build projects.

Ketosis was also less in herds that had a higher proportion of primiparous cows which might have some of you saying, obviously! But that's not always the case and a review of your health info this winter

might be a good idea to see the number of RP's, LDA, culls non dairy and injuries split out by lactation group. Ketosis and hypocalcemia have been rebranded in the last few years as not just signals of poor energy or mineral intake/composition of dry cow rations, they have been investigated more intensely as part of signals in the overall inflammatory process. Along with haptoglobin (not routinely done) they can signal why your herd just is not hitting on all cylinders, in spite of chasing mineral level in the close-up or fresh cows or level of metabolizable protein in close up etc. Historical investigations into leaky gut syndrome have come around to this being mostly tied to an inflammatory process, likely initiating during the dry cow and fresh cow times. There is a reason why so much benefit to anti-inflammatory therapy (Meloxicam oral, Metacam, banamine, ketoprofen etc) at time of calving has been seen by producers. Protocols that show a benefit like this are well adopted and have a return on investment (a little over 2:1) but some are signals of an underlying concern. Inflammation and oxidative stress are underlying concerns that researchers are scurrying to find predictable, cow-side measures to be able to quantitate and then explore individuals and herds to develop risk models.

For now, lets look at an audit of both the process of making a cow dry, the area(s) she is housed during and after and how successful has your process been based on disease and performance!

As this maybe the last letter you read this year, Have a Wonderful and Joyous Christmas. We are extremely lucky to be in the industry we are in, and we Thank you very much for caring for animals and supporting us!