

NAVAN VETERINARY SERVICES – MAY 2016 NEWSLETTER

The Lactation Curve Starts 60 Days Before Freshening

Recently we have been privileged to have two speakers give presentations on transition cow health management. While both sessions were from different points of view there were common themes to each, regarding management providing dry cows the best chance to succeed in lactation.

1) Nutrition

One group diets work very well provided cows have access to quality feed. Cows on a pack need 150 sqft. of space per cow and 30" space at the feed rail. Tie stall cows need chain length of 36" to allow easy access to feed and the ability to lunge when rising to eat.

The biggest error in one group diets is allowing far off cows to over consume feed. If allowed free choice access these cows can and will over eat by as much as 60% leading to fat deposits in the liver. These fat cows will eat less after calving, and have a much higher risk of ketosis and worse, fatty liver disease. On a percent body weight basis, far off dry cows should eat only 1.85% dry matter.

These low energy, high bulk diets feed a controlled amount of corn silage, straw, hay and supplement. Most often little or no grain is required.

2) Heat Stress

Dry cows are often a forgotten group as far as comfort is concerned. Their needs for cooling are actually very high – especially the growing fetus. At temperatures above 20°C and 50% relative humidity cows need additional cooling fans alone or fans and sprinklers.

3) Water Access

In free stalls it is important to have 2 watering locations so all cows have access. Timid cows should not be blocked away from the water. For the same reason there should be no dead ends in the dry cow group or any group for that matter where timid cows can be trapped.

4) Dry Period Length

Cows need at least 45 days and heifers should have 60 days. Less than 45 days significantly affects milk production as does greater than 80 days. The risk for long days dry are fat cows. If you want to see what your 1st test projections are, based on days dry get the following graph printed from DHI:

GRAPH FSTPJ BY DDPY FOR DDPY = 25-180

Dry cows have social stressors as well. Of the biggest concern are pen moves or group changes. Every time there is disruption to the group by additions, there is increased competition for 2 days, less lying time, and feed intake reduction. Lameness in cows milking between days 60-90 can be the result of more standing and activity in the dry period. Overstocking dry cows can have the same effect. Ideally this group should be 85% stocked providing bunk space of 30" (as mentioned earlier).

Pen moves around the time of calving have significant consequences to post calving health.

Close up dry cows dry matter intake drops slowly over the last 7 days precalving. At big decrease within 24 hours of calving is normal followed by a slow rise in intake over the next two weeks. Anything done to cows in the prefresh period can affect her feed intake. A pen move, or a tie stall move between 2 days prefresh and 10 days prefresh will cause an intake drop similar to what occurs to unhealthy or fat cows prefresh. The possible consequences of poorly timed pen moves day 2-7 pre calving has been shown to be

- an increase in ketosis by 2.5 x
- an increase in twisted stomachs by 2x
- an increase in culling in the last 60 days fresh by 3x

These results were found in a study done in Wisconsin with a group change occurring 3 days prior to calving. They are also very similar to the result of overstocking dry cows.

The take-home message – move close up cows for the last time either at the time of calving or more than 10 days before due date.