**NAVAN VETERINARY SERVICES – APRIL 2018 NEWSLETTER**

We’re not there yet, but soon enough we will see temperatures that will cause heat stress in your herd. Cows can exhibit signs of heat stress at 22°C if the humidity is high enough. Their upper critical temperature is around 25°C. She can physically regulate her temperature to this point. Above this temperature cows need help keeping cool.

Their normal temperature is 38.5°C and normal breathing rate is 12-35 breathes per minute.

Signs of heat stress are:

1. Depressed appetite
2. Slug feeding – acidosis and laminitis
3. Increased respiration
4. Reduced breeding efficiency
5. Poor stall usage – more time standing
6. Reduced milk production

Ways to mitigate heat stress:

1. Provide adequate water – cows can drink 12-15 litres per minute up to 200 litres per day. Water bowls and troughs must provide for this need.
2. Shade – keep sun from cows especially on south and west sides of barns.
3. Air velocity – cooling fans. Research shows that 400-600 feet per minute air speed is necessary to provide environmental temperature relief. This is at cow level.
4. Air exchange – tunnel ventilation.
5. Water – evaporation cooling.

If you are going to provide water for cooling you must provide fans to remove the water by evaporation using body heat. Heat stressed cows try to regulate their temperature by increased breathing rates. Sufficient cooling can take cows breathing rates from 100 per minute to 50.

Dry cows are NOT immune to heat stress and are quite often housed in conditions less ventilated than lactating cows.

Cooling dry cows provides:

1. Improved immune function.
2. Improved colostrum yield and antibody content.
3. Improved antibody uptake by new born calves.
4. Increased birth weights and weaning weights of calves.

Heat stressed dry cows often calve 1-2 weeks early.

Teat Dips

The role of teat dip is to remove the milk film from teats post milking and leave a protective germicidal barrier on the teat until the next milking. Bacteria grow well in a milk environment. Coverage of the full teat is necessary to provide adequate protection.

Teat sprayers rarely provide adequate coverage to the whole teat and they actually use more dip than proper dipping, often not applied to teats at all. A recent article in Dairy Herd Management showed the following usage amounts of various teat dipping systems.

1. Sprayers – 20 ml/cow.
2. Slosh Cups – 15 ml/cow.
3. Non Return Dippers – 6-8 ml/cow.
4. Foaming Dip – 4-6 ml/cow.
5. Properly maintained “Thrifty Dipper” – 4 ml/cow.

No matter what system you use – ensure that each functional teat has been covered 100% after each milking.

*RUSSELL DHI BANQUET*

*April 20, 2018*

*Limoges Community Centre*

*$30*

*Tickets available from Robert Hamilton, Bert Molenaar or Thomas Meyerhans*