

NAVAN VETERINARY SERVICES – JANUARY 2012 NEWSLETTER

We will be running a CQM training session this month on the afternoon of January 25 at 2 pm. For those with dates this spring you will have to start soon so that 3 months of records are ready prior to validation. Paperwork doesn't thrill me either but starting on time is a better plan than waiting until the last minute. Each of our sessions involves a small group in clinic preparation meeting followed up with an on farm visit to help prepare your own record keeping system.

It is winter and whether calves are housed indoors or outdoors, cold stress is an issue. Calves less than 3 weeks old require additional help maintaining body temperature when outside temperatures drop below 15°C. Calves older than 3 weeks can adapt until 5°C. Newborn calves have only 3% body fat at birth (human newborn babies have 16%). This fat is required to generate heat during cold and is gone in 18 hours when colostrum fed is insufficient. Colostrum antibody absorption is reduced during cold stress. Baby calves require about 2 litres more milk at 0°C than when temperature is 20 C. If calves are shivering after feeding they are cold and not being fed enough.

Kneel Test: Wonder whether bedding is adequate? Kneel on the bedding for 20 seconds. Wet knees – change or add more bedding.

Calves that are raised in pens along outside walls are prone to cold stress. It's always more humid in this area. Try to ensure that calves can't get within 4 feet of outside walls to reduce stress. By their nature calves always lie against walls – a protection instinct.

Young calves utilize energy less efficiently from starter feeds (grains) than milk or milk replacer. Energy and protein from grains must be fermented in the immature rumen prior to digestion – a very inefficient process. Feeding more milk or milk replacer is much better for the calf during cold stress. Calf starter is not the best solution – more milk is better. Avoid abrupt changes in amounts of milk fed as bloat can result.

***The effect of cold stress on potential gain (g/d) for a 45kg calf when they are fed 12.5% DM or 125g of powder in a litre of water.***

Environment	Milk Replacer 26/18	Milk Replacer 26/18	Whole milk	Whole milk
Temp °C	6 litres/day	8 litres/day	6 litres/day	8 litres/day
20	610	930	750	1,100
10	470	810	620	980
0	330	680	480	860
-10	140	520	310	710
-20	weight loss	400	180	600

***The effect of cold stress on potential gain (g/d) for a 45kg calf when they are fed 15% DM or 150g of powder in a litre of water.***

Environment	Milk Replacer 26/18	Milk Replacer 26/18
Temp °C	6 litres/day	8 litres/day
20	800	1,170
-10	680	1,050

From the chart above you can see the huge difference in weight gain when feeding 6 litres versus 8 litres and when feeding milk replacer at 125 grams/litre versus 150 grams/litre at various temperatures. Remember a growth rate of 500 grams per day is required to maintain a healthy immune system in the calf. Calf growth goals are 800-1000 grams per day.

This month you will all receive a letter from the Ontario Dairy Industry Working Group regarding the upcoming move by DFO to reduce the penalty level for SCC in bulk tank to 400,000 cells/ml. Your letter will show your personal BTSCC over the past year indicating the new goal and how it might have affected you in that period. It is also the suggestion of the group that 200,000 be your objective in order that periodic SCC spikes don't lead to penalty issues.