



DR. MURRAY RUNSTEDLER DR. PAUL SOSTAR DR. ANDREW MACLEOD  
DR. JOHN TOKARZ DR. KELLY HAEZLE DR. IAN BISHOP

3860 Manser Road, Linwood, Ontario N0B 2A0 (519) 698-2610  
1-800-663-2941 Fax (519) 698-2081  
[linwoodvet@linwoodvet.ca](mailto:linwoodvet@linwoodvet.ca)

Clinic Hours: Mon-Fri 7am – 5pm Sat 7am – 12pm

Hwy 89 Clinic: Mon-Sat 7am-1 pm

Orders for Delivery: call by 9:30am for same day local delivery Monday to Friday

24 Hour Emergency Vet Service

### JANUARY 2012 NEWSLETTER

*Happy New Year from your veterinarians and staff at Linwood and Hwy 89*

## Clinic News- January Dairy Producer Meetings

Linwood Veterinary Services and Hwy 89 Veterinary Services invite you to a dairy producer meeting with keynote speaker **Dr. Sam Leadley**, PhD P.A.S. the calf/heifer management specialist from Attica Veterinary Associates. For twelve years Dr. Leadley managed the calf and heifer enterprise on a 1,200-cow dairy in western New York State. He has been an on-site manager of on-farm research trials for feed and pharmaceutical companies. Prior to 1982 Dr. Leadley was on the faculty of The Pennsylvania State University and the Extension staff at Cornell University. He holds B.S., M.S., and Ph.D. degrees from Cornell.

Dr. Leadley consults with dairy farmers and heifer growers with the goal of improving the profitability of raising healthier, faster-growing animals through better management practices. We will be hosting meetings with Dr. Leadley the mornings of **January 19<sup>th</sup> at the Legion on King St in Mount Forest**, and **January 20<sup>th</sup> at the Community Centre in Linwood**. **Doors will open at 9 with Dr. Leadley beginning at 9:30 and Lunch at 11:30.**

If you have not already called the clinic to reserve lunch, please do so as soon as possible so we can prepare lunch accordingly.

## **Storing colostrum for optimum passive immunity**

Cow calf producers are aware that a calf needs to ingest colostrum within 6-8 hours of birth to acquire satisfactory passive immunity. There are some calves which do not have an opportunity to receive colostrum. A couple example of this is the thin, two-year-old heifer that does not give enough milk or the calf being stressed by a long difficult delivery and is too tired to get up and nurse in time to get adequate colostrum. Hand feeding stored colostrum is required to give the calf the best opportunity to survive a scours infection and/or respiratory disease. Therefore, stored frozen colostrum from a dairy or from other beef cows must be on hand to meet these needs.

Colostrum can **ONLY** be refrigerated at 33-35°F, 1-2°C to prevent bacterial growth for only about 1 week before quality (immunoglobulin or antibody concentration) declines. If the colostrum begins to show signs of souring, the quality of the colostrum is reduced since the immunoglobulin in the colostrum has been broken down by the bacteria therefore reducing the amount of immunity that the colostrum can provide.

Colostrum may be frozen for up to a year without significant breakdown of the immunoglobulin. However, be aware that frost-free freezers are not the best for long-term colostrum storage since they go through cycles of freezing and thawing that can allow the colostrum to partially thaw. This greatly shortens colostrum storage life. Freezing colostrum in 1 or 2 quart bottles or 1 quart in 1 gallon zip-closure storage bags is an excellent method of storing colostrum. Many producers have had great success using the zip-closure bags. Use two bags to minimize the chance of leaking, and lay them flat in the freezer. By laying the bags flat, the rate of thawing can be increased, thereby reducing the delay between time of calving and feeding. The freezer should be cold (-20°C, -5°F) and it is a good idea to check your freezer regularly.

## Colostrum Basics for Starting Calves

Calves need to be born in a clean, dry environment. These calves must spend the first two, four, eight or 16 hours of their life in an environment where they will not eat cow manure.

One of the most important management steps for reducing diarrhea in young calves is to minimize manure in a calf's mouth before she drinks colostrum.

This is what we term, "fecal- oral" transmission of pathogens in calves. When calves get bacteria and parasites into their mouths, these pathogens ends up in the gut and promptly set up house.

Partial list of potential "bugs":

- E coli and other coliforms
- Salmonella
- Crypto
- Coccidia
- Enteric Viruses (Rota and Corona)
- Johne's

The calf **MUST** not get manure in her mouth before drinking colostrum. This unprotected gut has no defenses against the bacteria – especially coliforms in manure. Even plenty of good-quality colostrum following the manure meal cannot keep these coliforms from setting up colonies on the gut surfaces. That is why it is so important to protect the calf's mouth from manure and other dirt before she drinks her colostrum.

Practical steps to take at calving:

- Provide a clean place on grass to calve or if inside, plenty of clean dry bedding. Clean means the absence of manure or just plain dirt. Dry means the absence of both urine and calving fluids (amniotic fluids). All these contaminants contain bacteria and support the growth of more bacteria.
- Once the calf is able to stand, minimize her contact with dirty surfaces. The most common place newborn calves consume manure before drinking colostrum is the hair of the dam or other cows. Only a small amount of feces is needed to start a seven- to 10 day-long episode of scours when the calf is about a week old.
- Provide clean safe colostrum at a rate of 10% of body weight as soon as possible and follow up with another equal dose of colostrum prior to 16 hour of age since the gut is closed by the time (24 hours) or the passage of sufficient colostrum.