

CALVING EASE

December 2006

Sam Leadley, Attica Veterinary Associates

Basics of Feeding More in Cold Weather

It is every calf raiser's nightmare. We make a change intended to improve things and we get just the opposite results. Trying to feed more to calves in cold weather than we were feeding last summer can be just like that if we do not stick to the basics.

The Basics of doing it right

The reasons for increasing the energy and protein fed to calves in winter compared to summer are well known. Calves use up a lot more energy in cold weather maintaining their core body temperature compared to warm weather. Given that we are motivated to feed enough to meet not only these maintenance needs but to have them grow, too, then how do we do it right? We do not want to cause calves to either die or get sick.

Feed Colostrum

Right at the beginning, acknowledge that if a calf that does not get proper feeding of colostrum she is off to a bad start. That is true no matter how we feed later. Therefore, the first basic requirement of doing a good job of feeding more in cold weather is to tune up our colostrum management. I recommend working with your veterinarian to get blood samples from ten or twelve calves between two and seven days of age. Have your vet determine their immune status. One way is by assessing blood serum total protein (see "Testing for Passive Transfer of Immunity" at <http://www.atticacows.com> in the Calf Facts section).

Clean Colostrum

Have you checked your colostrum for bacterial contamination levels since the end of the summer? If not, take four or five samples as you are ready to feed calves. At the very least get a Standard Plate Count run on them. If the samples come back over what you are shipping from the bulk tank, seriously consider resampling and sending the samples to a lab that will both speciate and quantify – know your enemy.

Mix milk replacer properly

All milk replacer is marketed with a tag that has mixing instructions. Mix according to the manufacturer's recommended temperature. Too often I observe milk replacer being mixed with very, very hot water and then cooled down to feeding temperature. None of the manufacturers that I know of suggest this method.

The other important part of mixing milk replacer properly is adding the accurate amount of powder. I frequently find weights to be off by twenty-five to thirty percent. If we intend to mix our winter ration using ten ounces of powder to make two quarts, we really need to be sure that the entire ten ounces goes in every time.

Clean milk replacer or milk

I know this sounds like a broken record. If you have not checked your milk replacer or milk for bacterial contamination since the end of summer, do so now. Biofilms develop gradually on our equipment. We cannot see them until they are far past the point of contaminating our feed. Continuous feeding of even low levels of bacteria as we try to feed more milk replacer frequently leads to persistent scours in seven to twelve day old calves.

Remember, when sampling milk replacer or milk the most useful samples are taken just as we are ready to feed the calves. Like colostrum testing, Standard Plate Counts will work fine as long as the counts are low – just like market milk. Work with your veterinarian if you get higher counts to find out just which bacteria are in your milk replacer or milk.

If you do have higher than desirable bacteria counts, try using the “Washing milk containers checklist” and “Washing milk containers protocol” in the Calf Facts section at <http://www.atticacows.com>. Hard copies are available at the address below.

Feed water

This sounds so obvious. But even today many calves are not fed water in freezing weather. If you plan to feed more than the minimum of one pound of milk replacer powder per day, additional water needs to be fed 365 days a year. Remember, if you are very consistent about feeding water at the same time each day calves will do just fine as long as they have access to water for a couple of hours daily. I prefer to make body temperature water available in cold weather, especially for calves under three weeks of age.

Make feeding changes gradually

As calves grow we can successfully feed a greater volume of milk or milk replacer in order to meet cold weather energy needs. Gradually increasing the volume of milk fed has a lower risk of causing digestive upsets than abrupt changes. I had success making changes of one pint at a time per feeding.

Keep calf health and growth in perspective

We all know that higher rates of milk or milk replacer feeding compared to low rates will delay calf starter grain intake. I prefer to think about the goal of starter grain intake in relation to the goal of keeping the calf healthy and growing especially the first three weeks of life. If my calf is healthy, growing and developing a strong immune system during the first three weeks in the winter, I can live with a short delay in beginning to eat starter grain.

If you know of someone that doesn't currently receive **Calving Ease** but would like to, tell them to **WRITE** to **Calving Ease**, 11047 River Road, Pavilion, NY 14525 or to **CALL** 585-591-2660 (Attica Vet Assoc. office) or **FAX** (585-591-2898) or **e-mail** sladley@frontiernet.net. A limited number of back issues are on the Internet at www.atticacows.com, click on the Resources menu, select Calf Management Newsletter.

Our thanks to AlphaPharma for sponsoring this issue of Calving Ease.