

# CALVING EASE

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## COLOSTRUM: THE 4 QUART MYTH

(Second of Two Parts)

The myth says: “If you feed four quarts of colostrum to a Holstein calf shortly after birth she will live and be healthy.” In the first of two parts we pointed out several reasons why the myth was false. What can we do to turn the myth into reality?

### **Get newborn calves away from adult cow manure**

One reason the myth was false is that too many calves get coliform bacteria into the gut before they receive colostrum. The only way to prevent that problem is to keep adult cow manure out of newborn calves’ mouths.

If you are a practical dairy farmer you probably react to this statement with disbelief! “Oh, come on now. Where have you been when a calf is born? No adult cow manure? That will be the day!”

Hold on for just a minute. Adult cow manure on a calf’s foot or back is not the problem. It’s when the manure gets into her mouth headed for her gut. That’s the dangerous situation. Whatever it takes to keep even a teaspoon of manure out of her mouth is what’s needed. Dirty hair coats on dams, dirty teats or soiled bedding all represent threats to newborn calf health.

### **Harvest clean colostrum and keep it clean**

This is easy to say but hard to do. Consider monitoring the bacteria content of your colostrum. Just as you are about to feed colostrum to a calf fill a milk sample bottle (the kind the milk hauler uses) up to the line with colostrum. Write the date on the top and toss it in the freezer. The lab that analyzes the hauler’s samples can give you a standard plate count. If it’s over 10,000, colostrum sanitation needs to

be fixed. Some vet clinic labs can both quantify and sort out species of bacteria. If the dominant species is coliforms, colostrum sanitation needs to be fixed.

Remember that even if colostrum is harvested with a low bacteria count slipups in cooling it may undo all your attention in the parlor. Coliform bacteria numbers double every twenty minutes at a cow's body temperature. Rapid cooling is the only way to keep colostrum from having a high bacteria count. As summer approaches search for a way that fits your farm to quickly chill colostrum. Maybe you can bottle it and promptly put it into a refrigerator. Maybe you can freeze water in two or three liter soda bottles that will fit into your bucket milker – which will chill the colostrum as it is being milked. Naturally, the outside of the ice bottles should be clean.

### **Warm colostrum slowly, don't cook the antibodies**

Very hot water is the enemy of antibodies. To be really safe, warm colostrum only in water into which you can put your hand. If you are in a hurry, use a thermometer to be sure the warming water is not over 140°. Either way, the antibodies needed to give the newborn calf passive immunity will survive.

### **Feed the highest antibody colostrum to heifers for their first feeding**

Use dairy farmer ingenuity to come up with some system to sort out colostrum with the highest antibody concentration. The simplest plan is to feed heifer colostrum to bull calves and cow colostrum to heifer calves. A more effective plan sorts cow colostrum into two classes: “gave less than 25 pounds (3 gallons)” and “gave more than 25 pounds.” Use the “less than 25 pounds” for first feedings for heifer calves. With less dilution the antibodies are more concentrated. The most effective system is to test the colostrum. Midland Bioproducts (sales@midlandbio.com) has a test kit that signals 50 grams/liter antibody content (that's a good level). A Colostrometer® will help sort out the really low antibody content colostrum (customer\_response@colostrometer.com).

### **Are you up to the challenge? Following these procedures will turn the myth into reality!**

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** either 585-591-2660 (Attica Vet Assoc. office) or 585-343-8128 (Offhaus Farms Office) or **FAX** (585-591-2898) or **e-mail** [sleadley@frontiernet.net](mailto:sleadley@frontiernet.net) or [pams91@2ki.net](mailto:pams91@2ki.net). A limited number of back issues may be accessed on the Internet at [www.calffnotes.com](http://www.calffnotes.com) and clicking on the link, Calving Ease.