CALVING EASE

August 1997 (Revised Dec '03)

Sam Leadley (Attica Veterinary Associates) and Pam Sojda (Offhaus Farms)

The "No-Colostrum" Calf

What to do with the heifer calf that is 24 hours old and hasn't had any colostrum? We would prefer that situations like this just not happen. But, every once in a while Sam gets a calf like this at Noblehurst. A cow hides in the corner of the dry-cow pasture and has twin heifers - three weeks early so they are small and won't get up and nurse. Our breeding date is off one cycle on a heifer and she calves off by herself rather than at the calving barn - then she won't let the calf nurse. We find the calves "the morning-after."

No-colostrum consequences

What do we know about a day-old calf that doesn't get any colostrum during the first 24 hours of her life? First, she will have very few antibodies in her blood to fight off infection - normally, she would get these antibodies from colostrum. Second, this calf will have very low levels of white blood cells that make up the immune system - normally, she would get some of these cells from fresh colostrum. Third, usually at our farm she hasn't had anything to eat at all - so she's running on empty. This calf is starting to get dehydrated and she is drawing down her stored energy reserves. Fourth, we seldom have any idea of the degree she has been exposed to pathogens in that first 24 hours out of our sight. Maybe she was born in the cleanest spot in a pasture. Or, maybe she entered the world in the manure-contaminated mud hole next to the pasture water tank. Fifth, having a very low level of passive immunity, she will probably develop her own immunity somewhat faster than calves that have high levels of immunity acquired from mom's colostrum. But, she is still going to have a critical ten to fifteen days between birth and when she can depend on significant protection from her own immune system.

Alternatives

One choice is to do nothing. That is, raise her just like all the rest of the heifers. Normal housing. Normal diet. Just business as usual. We take our chances that she will come along okay. Who knows? Maybe her exposure to bacteria, viruses, and parasites was so low that she won't become ill before her own immune system kicks in. Also, this assumes she is not going to get sick from the pathogens in the "normal" calf environment.

Another choice is to isolate her; don't put her in the "normal" calf housing. Take her and a bale of straw out to the machinery shed or the shop where there have never been any calves. Feed her there until she is three weeks old and then put her into the mainstream of the regular calf program. This assumes that the dose of "germs" she got during the first 24 hours was small enough for her survival. This isolation may reduce her exposure to "normal calf-raising germs" during the critical first weeks of her life. We do have to remember not to carry infections to her on feeding equipment, our clothes and boots. One particularly effective isolation strategy is to have a "non-calf-feeder" person take care of her - a person that has little animal contact.

An additional choice is to feed her milk containing large amounts of antibodies. This choice will not create passive immunity for her - we lost that chance during the first 24 hours of her life. If we have enough heifer colostrum or "second-milking" milk from cows, we can feed her this good stuff for a couple of weeks rather than our usual calf diet of milk or milk replacer. Continuously washing her gut with this relatively high antibody milk may suppress infections enough to keep her healthy enough to survive. Even a quart or two of this milk a day could make a difference.

A fourth choice is to treat her as if she came from a sale barn - you know, the usual colostrum-deprived, pathogen-drenched calf. Growers who buy our bull calves deal with this situation all the time. Working with their veterinarians, they have established routines to get these calves hydrated and healthy. If this is our choice we need to work with our vet to set up a treatment procedure with electrolytes and antibiotics (which ones, what dose, when to start, how long to continue, etc.). Have the appropriate drugs on hand and use them as prescribed when "no-colostrum Suzie" appears.

Actual practice? Our guess is that lots of folks use a combination of these choices. A "no-colostrum" calf is never a good situation. No single procedure is going to work for everyone for these calves. The best we can do is to work out an economical procedure that works for us on our farm and keeps as many of these calves alive and healthy as possible.

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 or pams91@2ki.net . A limited number of back issues may be accessed on the Internet at www.calfnotes.com and clicking on the link, Calving Ease.