

# CALVING EASE

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## NURSING

Colostrum management, again? Recently Dr. Jim Quigley from American Protein Corporation in Calf Notes ([www.calfnotes.com](http://www.calfnotes.com)) asked us to think about calves nursing their dams. Do they nurse soon enough? Do they get enough colostrum? Do they eat stuff other than colostrum in their search for food?

First, do the calves nurse soon enough?

Well, soon enough for what? Do you recall earlier discussions about rates of antibody transfer and time after birth when colostrum is fed? Roughly, for every half hour after birth that colostrum feeding is delayed, antibody transfer decreases five percent. A calf that doesn't get colostrum until she's six hours old has already lost the opportunity for thirty percent of the possible antibodies going into her bloodstream. Calves that don't get colostrum for twenty-four hours after birth have virtually no chance for antibody transfer.

The answer for soon enough for what? Soon enough to take advantage of as much antibody transfer from colostrum to bloodstream as possible. ASAP - as soon as possible. If you prefer to feed colostrum by having the calf nurse, then you could follow the procedure used in some recent university research when your calves don't get up to nurse. The technicians lifted the newborns who were unable to stand up after one-half hour to the dam's teat so they could nurse.

This does not answer the question for dystocia calves - ones suffering from birth trauma severe enough so they can't or will not nurse. Some of these calves still have difficulty eating from a bottle at 24 to 36 hours. If left to nurse on their dams, these little girls will surely suffer from a severe lack of antibodies. Sam and Pam tube-feed these shortly after birth to increase their chances for survival.

Second question is do the calves eat enough colostrum?

How much is enough? For sure, zero is too little. We have more cows that we want anyone to count that have udders a wee bit close to the ground. No way other than lying flat on the ground is a calf going to nurse one of these dams. We have a few heifers that are less than hospitable to their calves. These calves never get close to a teat much less get any heifer colostrum. And, we have some hard calvings where the calf can't get up or has a badly swollen muzzle. They fall into the "zero" group, too.

You say, "Well, everyone has a few like that. What about all the rest of the births?" Okay, what about the rest of the births? How much is enough colostrum? The correct answer is enough colostrum in order to transfer plenty of antibodies into the calf's bloodstream. The lower the quality of the colostrum (which has fewer antibodies against bacteria, viruses, parasites), the greater the quantity the calf needs to eat. An example of lower quality would be colostrum from a heifer rather than a mature cow. The greater the delay after birth when she eats the colostrum, the greater the quantity the calf needs to eat. An example of this delay would be a calf born at 1:00 AM that we don't find until 5:00 AM. The higher her exposure to pathogens (bacteria, parasites, viruses), the greater the quantity the calf needs to eat. An example of this exposure would be a set of twins that arrive three weeks early on a "not-so-clean" manure pack in the dry-cow barn.

Many of us have observed a healthy calf nurse shortly after birth. They just never seem to get full! More than one of us has picked up a calf like this that just bulged from "pigging-out" on momma. They are not much interested in eating for the next eighteen to twenty-four hours. How much did they eat? Who knows the quantity but since they usually stay healthy, it was "enough." If you feel nursing is best, then you need to learn how to feel of a calf after nursing - learn how a "full tummy" feels - learn when to leave the calf alone, she's had enough - learn when to supplement nursing with colostrum fed by hand. Some of us prefer not to let calves nurse unsupervised but hand feed all calves with two to four quarts of mature cow colostrum. Either way, the calves need "enough."

The third question deals with contamination. New-born calves attempting to nurse nuzzle anything and everything that stands still. Momma's front end, side, back end, even the udder once in a while. If the dam is clean (that is, coat is relative free of manure and udder and teats have been wiped off), baby will probably get her colostrum before she gets a huge dose of bacteria. Under other conditions (let's not spoil our lunch by describing them in detail), our baby will probably get a huge dose of bacteria before the colostrum. That's bad news. Even if colostrum follows the bacteria, the damage is done. This calf is starting life with a severe handicap - probably a bad case of E.coli scours. If you prefer to have calves nurse, the important word is clean, clean, clean. Clean dam, clean udder and especially clean teats.

What's the last word on nursing? Calves that nurse enough colostrum from a clean cow with clean teats shortly after birth do well. This usually means supervised nursing rather than just "leaving the calf with the dam." Our challenge is to see that all calves get enough good quality colostrum soon enough after birth, before they consume bacteria. Nursing or hand-fed, it's the same challenge for every calf.

### **Calf Feeder's Tip**

We recently saw something on DAIRY-L that seemed worth sharing since most of us use modified-live virus vaccines. The question posed this situation: the person mixes a 10 dose vial of a vaccine. The doses that are not used right away are frozen immediately, then thawed for use at a later date. Does freezing like this decrease the effectiveness of the vaccine? A Pfizer rep's answer was "The freezing and thawing would most likely cause the desiccation of the viruses and inactivate the vaccine. For a more definitive answer contact Pfizer Animal Health Tech. Services at 1-800-366-5288." So, freezing doesn't look like the thrifty-person's answer to left-over doses.

A second answer did suggest a possible use. "Have them use the leftover doses on adults or calves that look like they need a little extra boost. Herd dynamics show that not all animals respond equally at the same time, so going back with leftover doses will increase the chances of some of the poor responders of catching up." Food for thought. By the way, if you have a computer with a modem, maybe you should think about subscribing to DAIRY-L. It's as easy as sending the e-mail message `subscribe Dairy-L yourfirstname yourlastname` to `listserv@umdd.umd.edu` You receive confirmation via e-mail that you have been added.

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.calfnotes.com](http://www.calfnotes.com) and clicking on the link, Calving Ease.