

CALVING EASE

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NEWBORN CALF CARE

That's the way life is. Often, we know what should be done for good newborn calf care; but, what we know and what we do are not the same. Let's look at two examples of how this can happen.

Double Whammy

Imagine a wet and cold spring season. Then, the weather turns warm and dry. The earth is ready to plow for corn. "All hands on deck," shouts the Captain of the ship. Everyone is busy plowing, fitting ground, planting or starting the first cutting of haylage. Do the freshening pens get cleaned or bedded less often? Yes. Do calves stay on the dry cow or springer pack longer than usual? Yes. More hours go by before calves are first fed colostrum? Yes. Nobody has a chance to check colostrum quality? Yes. Too busy to feed any more than just the minimum amount of colostrum? Yes. Navel looks okay, don't bother to put iodine on it? Yes. We hope this doesn't sound too familiar but we call it "Spring-Work Blues!" Newborns get abnormally high exposure to pathogens and too low levels of antibodies in their blood from colostrum feeding - that's a double whammy!

Imagine a cattle truck backing up to the barn. Off come a number of nice looking heifers. These new herd additions all have their calves in the next week or two. Extra work from assisted deliveries? Yes. Extra work restraining and retagging the new heifers? Yes. Extra work in the parlor milking the sweet-tempered heifers? Yes. Shortage of high-quality mature cow colostrum? Yes. Have to end up feeding colostrum from the purchased heifers? Yes. Newborn facilities are crowded due to double or triple calving rate during this period? Yes. We hope this doesn't sound too familiar but we call it "Expansion Blues!" Newborns get abnormally high exposure to pathogens and too low levels of antibodies in their blood from colostrum feeding - that's a double whammy!

Difficult Management Choices

What are the challenges? First, too much to do and too few hands to do it. No way to make more than 60 minutes in an hour. It's good to know what is ideal newborn calf care. It may also be essential to our physical and mental health to accept that at times we just are not going to achieve that ideal.

Thus, the second challenge - which compromises to adopt that keep both us and the calves alive. In our opinion, rarely does it pay to quit navel dipping. Infections via the undipped navel are always serious and frequently fatal.

Exposure to pathogens is one place to bend. That is, leaving the calf on the dry cow or springer pack or calving pen extra hours may be an acceptable compromise; IF?

If, what? A well-designed experiment asked the question, "Is there a difference in calf survival rates between calves that swallow manure first and then colostrum and calves that swallow colostrum first and then manure?" In the experiment about three-quarters of the calves that swallowed *E. coli* bacteria first and then were fed the usual amount of good quality colostrum died. None of the calves fed colostrum first and then were fed *E. coli* bacteria died. Moral of the story? If it's a question of moving the calf or feeding colostrum, feed colostrum first even if the calf has to stay in the calving pen extra hours.

Checking colostrum quality vs. timing of first feeding? It has been shown that lower quality colostrum has a poorer rate of antibody absorption than that of higher quality. Say you don't bother to check out colostrum quality. You feed colostrum with a low antibody content (for example, 30 grams per liter). Remember, to make matters even worse it will have a lower rate of absorption than colostrum with a high content. What does this mean for a 85-90 pound calf that we want to protect adequately against early infections? [Our goal would be a blood level of 20gm/L IgG 6 hrs post feeding.] For excellent quality colostrum (70gm/L) we would need to feed only 3 quarts, but for poor quality colostrum (30gm/L) the calf would need nearly 7 quarts for adequate protection. Feeding poor quality colostrum doesn't help either the calf or the calf raiser.

But, what if all this checking for quality means we'll be giving the first feeding of good quality colostrum later? Maybe 3 hours later? Remember, better quality colostrum has a better rate of absorption than poor quality. By our estimates, a ten percent increase in feeding rate could compensate for this delay (assumes 50gm/L content in colostrum). Even if we had to wait until the next milking to get better quality (6 hours), we would prefer to wait, feed twenty percent more rather than feed poor quality colostrum.

But, you say, all I have is so-so quality heifer colostrum. Half a loaf is better than completely loafing. Feed it; lots of it; as early as possible. Don't expect wonders. When possible, keep track of these calves. Aggressive treatment of bacterial scours under three weeks of age may be needed for these colostrum-deprived calves.

Bottom line? Ideal newborn calf care is an excellent goal. When we have to compromise, our goal might be to get the highest survival rate we can by dipping navels, checking colostrum quality consistently and adjusting quantity of colostrum fed to timing of first feeding.

Calf Feeder's Tip

Do you have a problem with windy winter days? Pam Sojda does at Offhaus Farms with her hutches. She arranges to have the farm's heavy equipment (for example, 10-wheel trucks) parked on the up-wind side of the hutches as a windbreak. Peggy Dawley at Lawnell Farms has a

greenhouse oriented with the long axis running north to south. She arranges to have a 10-wheeler parked on the west side of the south opening (end where she goes in and out) to block the strong prevailing west winter winds.

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