CALVING EASE

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Feeding Colostrum – Do It Right!

- We all know about the Quickly, Quality, and Quantity rules for feeding colostrum.
- Actually getting the colostrum into the calf correctly is important, too.
- When bottle feeding, adapt feeding rate to her ability to swallow. No choking.
- When tube feeding, adjust feeding rate to avoid backflow up esophagus. No choking.
- When tube feeding, time insertion and removal of esophageal tube to avoid any colostrum discharge in the back of the mouth.

Quickly, Quality and Quantity are Important

In order to achieve good passive transfer of immunity from colostrum it continues to be important to feed colostrum as soon as practical after birth. Feed high enough quality colostrum in adequate quantity to deliver 200 grams of antibodies (IgG) in the first four hours of life.

The Three Q's are not the whole story

Yes, we want to deliver the correct volume of colostrum at the right time. However, let's take a moment to focus on our delivery. Think about bottle feeding. Sure, it's simple. Fill bottle with calf-body-temperature colostrum. Stick nipple in mouth. Let her nurse until the bottle is empty. No problem, right?

Well, maybe no problem or maybe not so problem free. As a calf manager one of my duties was to train inexperienced workers to bottle feed colostrum. I actually preferred to train persons that had never fed a calf compared to the "know-it-all" experienced persons.

One of the feeding protocol points was observing the calf's progress swallowing the liquid. The ideal situation was a flow of colostrum from the nipple balanced by her ability to swallow. An absence of choking and coughing was the ideal that I stressed with my trainees. I always asked them, "Why do you choke?" [Recall that the definition of choking is the action or sound of a person or animal having difficulty breathing.]

Then, I always asked them, "Why would a calf choke when you are feeding her a bottle of colostrum?" That's when the light bulb would come on – they would reply, "Oh, the calf has colostrum in her mouth when she tries to breathe."

The solutions? (1) Position the bottle lower – usually below the topline of her back. That makes her nurse uphill. And, yes, I do know that this position is harder on the feeder's back than standing upright. (2) Change the bottle nipple. Select a nipple with a smaller opening so that the colostrum flows more slowly. I always carried an extra nipple with me when feeding colostrum. I started my calves on a "fast" nipple; if they got too much volume I could easily change nipples.

What about using an esophageal tube feeder?

Our goals for tube feeder use are (1) no colostrum flowing as the tube is being inserted and (2) no colostrum flowing as the tube is being removed. Thus, in our ideal case there is no colostrum spilled in the back of the calf's mouth ready to be sucked into her windpipe (trachea). Newborn calves face enough challenges without us causing her to pull thick, high-fat colostrum into her trachea and bronchial airways.

Regardless of the style of esophageal tube feeder being used all the tube feeders can be handled such that the flow of colostrum does not begin until after the tube is in the calf's esophagus. Some folks have complained to me that they only have two hands. Well, that is obviously true – but what they are saying is that if they are working by themselves it is difficult to hold the calf upright or still and have two hands free to hold and manipulate the tube feeder.

One probably unrealistic solution is to have more help. A better solution for keeping a calf that is lying down up on her belly is something heavy but yet portable – if I did not have a couple of small straw bales handy I used two 5-gallon pails filled with water – one on each side of the calf. Restraining calves that are already standing is mostly finding a corner into which she can be backed.

If you have dedicated individual calving pens this is the time to be innovative. Think about mounting a swinging bracket on the top rail of the pens. If you mount it with a compression-type clamp the bracket can be moved around the pen or from pen to pen. The swinging part allows the bracket to be out of the way until you need to use it. For the bag-type feeders have a hook low enough to hold the bag while you insert the feeding tube into the calf. Think of this as a challenge for the guys working in the farm shop!

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Remember to Google "Calves with Sam" blog for profit tips for calf rearing.