

BEEF SOLUTIONS

Calving considerations: Tips for management and early calf nutrition

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I recently sat down with Dr. Shelby Roberts, Alltech technical sales support, to take a closer look at calf gut health, the importance of nutrition during the first weeks of the calf's life, and some other calving season considerations. Here are a few points to keep in mind before and during spring calving.

1. Management of your process and facilities is half the battle for a healthy calving season.

Nutrition is a major player in the success of a calf's life, but proper management of your herd is essential to the health of your cattle. Dr. Roberts shared some management tips to keep in mind as calving season progresses.

- Inspect your facilities before and throughout calving season. Ensuring that fences are mended and gates and latches are in working order can keep those sneaky calves from sliding through — thus avoiding that dreaded call from the neighbor that you have one out!
- Develop a vaccination schedule with your veterinarian. A solid vaccination schedule for the cow and, eventually, for the calves is an important step to a healthy herd.
- Manage your calving areas. They should be kept clean and dry. Also, avoid overcrowding. Overcrowding of pens can lead to lots of manure buildup, which increases the pathogen load within the pen. It can be easier said than done to keep things clean and dry when you're calving in mud, snow, rain and whatever else nature throws at you, but do your best. Putting out straw, or moving cattle who are close to calving to a drier area (a calving barn, if available), will pay back in spades, giving those calves the best start possible.
- Avoid constant commingling of older and younger calves. Younger calves are more susceptible to scours than older calves. Try to keep your groups separate for as long as you can to ensure that those calves have had a chance to get adjusted, with their immune systems fully up and running.
- If facilities allow, manage first-calf heifers separately. First-calf heifers, in general, have lower-quality colostrum compared to older cows. This can leave calves susceptible to pathogens if managed in a larger group.

2. Keep the essentials on hand and easy to access.

What constitutes as "essential" will vary by operation. Think about your operation and consider what you need to have stocked for the season — especially if you don't have easy access to the store in a pinch. A few things that are handy to keep near and on hand are:

- Ear tagger and ear tags (with numbers prewritten, if you can!)
- Portable scale and sling if taking birth weights
- Record book or record-keeping app
- Iodine spray for the calf's navel
- A sorting stick to keep mom at bay while you help her calf
- Bottles and tubes
- Colostrum powder, milk replacer and electrolytes
- Pulling chains and any attachments
- Access to hot water
- A calf warmer, or a place to warm them up
- Clothes of varying weights and warmth for varying weather
- Caffeine — and maybe whiskey!

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3. Colostrum is critical for the calf's immune system.

Colostrum is the mother's first milk and the calf's first source of immunity and nutrients. Antibodies from colostrum protect calves until their naive immune systems are fully functional. Calves are susceptible early on to a host of potential illnesses, so ensuring that they nurse and/or are supplemented with colostrum in the first hours after birth is crucial to their lifelong success. That's an important fact to consider, especially when many beef producers don't have access to a calving barn — or an easy way to get to the calf — when the calf first hits the ground.

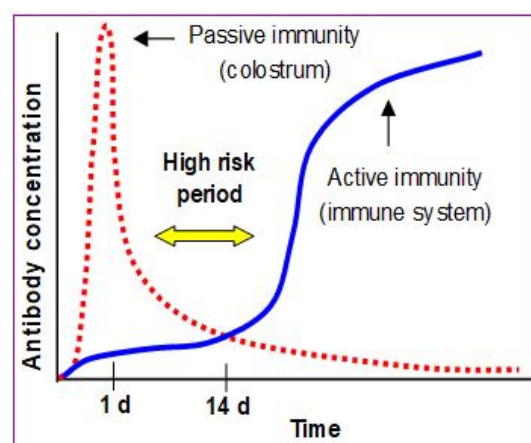
Once the calf nurses, not only is getting that colostrum in their system critical, but the quality of the colostrum can affect the success of the calf as well. For better colostrum quality, the rancher needs to look toward the dam. Cows start producing colostrum around five weeks before they give birth, so it is essential to consider the dam's nutritional needs well before birth to enhance her colostrum quality and, subsequently, the health of her calf. Choosing from the Bio-Mos range of nutritional technologies is one great way to give your calves a strong start to a healthy life.

4. A balancing act is happening in the gut.

Dr. Roberts and I took time to talk about how the antibodies the calf consumes by way of colostrum affect its health and immunity. What it comes down to is a balancing act happening in the gut.

Good bacteria are constantly fighting to keep the pathogenic bacteria in check. Simultaneously, the animal's immune system is fighting the pathogenic bacteria. The immune system and the good bacteria work together to keep the animal healthy and to suppress the pathogenic bacteria. When antibiotics are used, this clears out the pathogenic bacteria AND the good bacteria. When the gut recolonizes, the animal is at risk for pathogenic bacteria recolonizing at a quicker rate than the good bacteria, leaving the immune system as the last and only line of defense when antibiotics are removed.

The first couple weeks after birth can remain a period of elevated risk as the maternal antibodies disappear and the calf's immunity is still maturing, as shown in the diagram. In fact, according to Dr. Roberts, "Mortality data shows that most calf death occurs within the first two weeks of life."



5. There are so many options, but all nutrition products are not created equal.

When producers are considering nutrition strategies, Dr. Roberts encourages them to think holistically about dam nutrition by considering the seasonal changes in the dam's nutrition needs. Her needs — and the needs of the calf — will vary throughout the seasons.

Nutritional solutions like [Bio-Mos®](#) are beneficial pre-calving and beyond. Since the 1980s, Alltech has been conducting studies on these technologies, and the calf research has shown the following results:

- Maintenance of gastrointestinal health
- Alteration of intestinal microbial populations
- Stimulation of immune activity
- Stimulation of the natural defenses of the animal

Bio-Mos has also been tested in different life stage changes — like transitional receiving diets. In a study conducted in a commercial feedlot in Southern Alberta in Canada, 902 mixed-breed, newly weaned beef cattle were split into two groups, one fed a control and one supplemented with Bio-Mos. Cattle fed Bio-Mos showed improved average daily gain and maintained a healthy immune response.

Calving season is a critical time of year for producers, as healthy calves on the ground directly affect the success of the operation throughout the whole year. Consider utilizing these tips and tools to put your cattle in the best position for a successful start and a successful life. Best of luck, and happy calving!