

SOUTH COUNTRY VETERINARY P.C. INC.

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To Our Valued Clients,

As we draw near to our very busy calving season, I wanted to reach out with some valuable information regarding colostrum, and also to tell you about a new service that I am proud to be able to offer to my clients.

Colostrum is the nutritious and vital first milk that calves suck after being born. We are learning more and more about just how important it is that calves receive good quality and sufficient amounts of colostrum as soon after birth as possible. We know that calves must receive some level of passively-acquired immunity through colostrum in order to remain healthy and productive. We also know that failure to receive colostrum will result in devastating mortality, 39 -50% of pre-weaned calf deaths can be attributed to a failure of transfer of passive immunity. Lower serum IgG levels, the levels of antibodies found in colostrum, predisposes the calf to an increased risk of illness, decreased growth rate and reduced milk production in first calf heifers.

There are 4 major components to colostrum that are key to a calf achieving adequate immunity; cleanliness, timing of collection & feeding, quantity and quality.

Cleanliness

Bacteria in the colostrum has a negative impact on the antibody absorption by the calf. To minimize bacterial contamination of the colostrum;

- Wash your hands and the udder of the cow
- Milk into a clean, sanitized container
- Feed calves using clean, sanitized bottles and nipples
- Do not let colostrum sit at room temperature – feed it, refrigerate it & use within 24 hours, or freeze it within one hour of collection

Timing of Collection & First Feeding

The cow rapidly re-absorbs the antibodies present in the colostrum & the calf's ability to absorb the antibodies also declines within hours of birth. So ideally a cow should be sucked or milked within 2 hours of calving and no later than 6 hours after calving, and we have to be sure that the calf is fed within the first 2 hours after birth, and no later than 6 hours after birth. If the calf is unable to suck the cow, you have to feed the calf either using a clean bottle or an esophageal feeder.



Quantity

The amount of colostrum that should be consumed by the calf in the first 6 hours of life is a volume that supplies between 100g to 200g of IgG. The amount of IgG in colostrum varies – but good quality beef cow colostrum usually has about 100g of IgG per liter. Beef calves **must** receive 150g – 200g of IgG within the first 12 hours of life.

Quality

Immunoglobulin G (IgG) concentration tends to be used as the primary indicator of colostrum quality. The concentration of IgG varies according to many factors, including a cow's disease history, her vaccination history, the volume of colostrum produced, the season of the year and the breed of the cow. A good way

to increase the quality of the colostrum is by having a proper vaccination program for your cows. It is important to remember that a cow's immune system takes one week to respond to the vaccine. It is also important to remember that a cow transfers the highest number of antibodies into her colostrum about 4 weeks before calving, and by two weeks before calving that dwindles down to very little antibody transfer. This is why it is recommended that we give our scour vaccine at 6 weeks or more before calving. It allows for the cow to respond, and then transfer the highest number of antibodies into her colostrum.

Which brings me to the new service that we are proud to be offering for you. We have newly purchased a device that allows us to measure the concentrations of IgG in colostrum.

Appearance alone doesn't reliably predict IgG content or allow you to determine accurately the quality of the colostrum. This device will also allow us to measure the passive transfer of immunity by testing the blood serum total protein of the calf. **We feel like this device will be very beneficial in helping our clients manage colostrum quality and monitoring colostrum feeding practices.**

How do I know if I need to test my colostrum?

IF YOU HAVE ANY HISTORY OF NEONATAL DISEASE (THIS COULD BE SCOURS, PNEUMONIAS ETC.) IN YOUR CALVES.

ANY SICKNESS IN YOUNG CALVES MAY BE ATTRIBUTED TO THEM NOT RECEIVING QUALITY COLOSTRUM OR THE PROPER AMOUNT OF COLOSTRUM.

We invite you to come into the clinic to get some clean collection tubes, and then milk out a little bit of colostrum from some of your heifers or a selection of cows, refrigerate or freeze the colostrum and then bring it into the clinic. With just a few drops of colostrum we can measure the quality of colostrum and provide you with valuable insight into the health of your herd. We can also collect a little bit of blood from some calves and measure the amount of immunity that those calves have received.

We are proud to offer this service to you, free of charge, and we are excited to give you a glimpse into the quality of your herd's colostrum. Testing the quality of colostrum in your herd allows you to help your calves reach their full potential.

Stop in and see us if you have any questions or if you would like more information. As always, we are happy to have all of the calving supplies that you need. We hope that you all have a productive and successful calving season, and we are excited to test some

colostrum for you and provide you with some valuable information for your herd and your future.

Sincerely,

Dr. Bonnie Brandt & Staff



Even when practiced discreetly, raised eyebrows and disapproving glances still meet with those who dare to udder-feed in public.