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## NEWBORN CALF CARE

More than 20 percent of Gage County beef cows are fall calving cows. So it is an important time for those farmers to prepare for calving season. Here are some ideas I have adapted from an article written by Bobbi Brockman, ImmuCell Calf Specialist and Dr. Dale Grotelueschen, UNL Great Plains Vet Center Director.

**Time is of the Essence, the beef** calf's ability to absorb antibodies decreases as time passes, declining as much as 50% if colostrum is fed more than 12 hours after birth. Calves should receive at least 100 grams of immunoglobulins from high-quality colostrum within the first six hours after birth. Within minutes after birth, it's not unusual for a calf to take a wobbly nose-dive, subjecting it to environmental pathogens. Colostrum is the primary protection from these intestinal antigens. Work with your veterinarian to be sure pre-calving scour vaccinations are timely and will not inactivate the controlled dose of disease antigen in a vaccine, exactly as antibodies bind and neutralize disease antigens in the gut.

Industry surveys suggest at least 30% of U.S. calves receive sub-standard colostrum, putting them at a greater risk of failure of passive transfer.

Other research shows about 50% of cows have colostrum with an IgG level below 50 milligrams per milliliter. Antibody levels in colostrum cannot be visually detected. Colostrum quality should be evaluated with a colostrometer or refractometer. If that can't be label stored frozen colostrum collected from cows by cow and date and use several sources when feeding. To insure every calf receives a protective dose of antibodies against E.coli and corona- virus, consider administering a USDA-approved antibody product to the calf. These products are available in bolus, gel tube and powder form. They can be fed at the same time as colostrum. There are a number of colostrum replacement products commercially available today. Care should be taken in selection of the product to ensure you are getting a replacement and not a supplement. Although similar, replacements have higher concentrations of immunoglobulins (Ig), specifically IgG, than supplements and are intended to serve as the sole source when fresh colostrum is not available.

A nationwide colostrum study revealed 45% of all samples had a total bacteria plate count of >100,000 cfu per ml. There is no way to collect colostrum from beef cows and eliminate bacteria contamination. You are just lucky if she doesn't knock your head off. You can however make sure it is stored and prepared properly and make sure you follow reasonable sanitization protocols for newborn calf care equipment. Cleaning esophageal feeders, bottles, nipples, and colostrum harvest and storage equipment is important.

It takes a caring eye to ensure all management practices focus on what is best for the newborn calf. Daily chores are the most important factor in animal care. Young animals need to have extra attention in feed, water, health and clean dry housing.

Paul C Hay, Extension Educator

University of Nebraska-Lincoln Extension in Gage County • 1115 West Scott Street, Beatrice NE 68310

(402) 223-1384 • FAX: (402) 223-1370 • email: [phay1@unl.edu](mailto:phay1@unl.edu)

