

Colostrum is GOLD, don't be fooled by anything less!

Presented by: Cheyenne River Animal Hospital, Edgemont, SD

Studies have proven that good colostrum at birth can affect the immunity of a calf for the rest of its life. Failure of passive transfer is the condition caused by not absorbing good quality colostrum. Since so much is riding on giving the proper product in such a short window, let's make sure all the questions are answered to help eliminate a "wreck" later.

True Colostrum is GOLD: What is Colostrum?

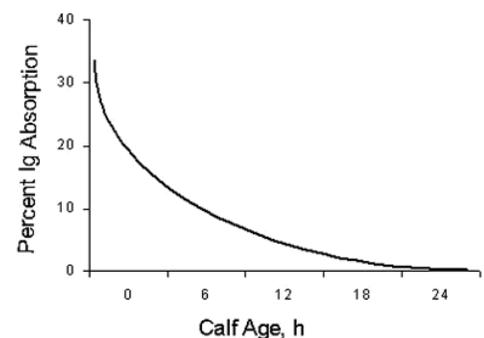
The word "colostrum" has been used for many different products, from just a milk replacer to a product with different proteins. **GOOD COLOSTRUM must contain quality antibodies (which is also called IgG) and be given to the calf as soon as possible after birth in order to be effective at helping the calf fight diseases.** The cow naturally produces milk with higher IgG levels after birth for the calf. The colostrum from the cow is usually very thick (almost 22% solids versus 12% in whole milk) and sometimes hard to milk by hand. The total amount of colostrum a calf needs is 5 – 6% of its body weight, so an 80 lb calf would need 4 lbs of colostrum.

FOOLS GOLD: What ISN'T Good Colostrum?

- Colostrum is **not** milk replacer. Milk replacer can be given **after** the first 24 hours. Products with Colostrum will have an IgG quantity on them.
- Good Colostrum is **not** anything with less than 60 grams IgG present (read the label). Anything over 100 grams of IgG is best if using a commercial product.
- Colostrum is **not** a tubed product for newborn calves, these a supplement to help give calves energy and help them get up and nurse faster.
- Not all cows will produce good colostrum, but most of the time healthy cows will produce much better colostrum than commercial products.
- Colostrum is **not** milk from a cow that already calved more than 12 hours prior. This cow will no longer have antibodies in the milk.

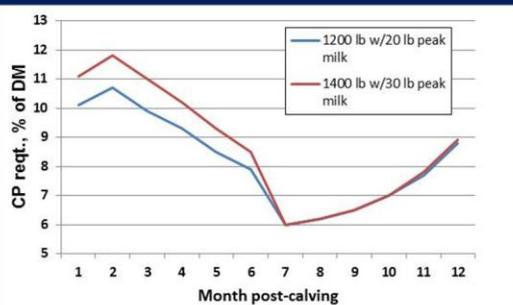
Where do you get Good Colostrum?

The best source for great colostrum for the calf is from its mother, if she is healthy and in good condition. Cows will start to produce colostrum about 5 weeks before calving. The cow's natural antibodies are transferred to the milk from the bloodstream. Cows do not make much colostrum (about ½ gallon) but that is more than enough for the newborn calf to absorb. The calf's gut will start to close to the absorption of these antibodies quickly after birth, that is why it is so important to get the quality IgG into the calf's belly right away. Typically they need the colostrum between 4 & 6 hours after birth.



The best way to insure you are getting colostrum into a newborn calf is to help the mother cow and baby calf stay connected and create a bond. In extreme cold temperatures, the calf may need to be briefly brought inside to be warmed up (98 degrees is ideal for absorption of the gut), but then you should get the calf back to the mother and nursing within the 4-6 hour window. The calf needs to learn

CRUDE PROTEIN REQUIREMENT OF BEEF COWS IN RELATION TO CALVING



to suck, and giving it commercial products may “fill him up” to where he isn’t hungry. Sometimes milking the cow to give the baby a little warm colostrum may be necessary, but you never want to give excess or the calf may not learn to nurse adequately.

The amount of antibodies in cattle can decrease if they are not in good condition themselves. The third trimester before birth (last 3 months), and lactation are times when the cow’s energy and protein requirements are higher so this is a time that extra protein and energy must be supplemented with feedings. To ensure good colostrum, you must keep your cattle in good condition, with their

blood protein equal to or greater than 7 gm/dL. (A veterinarian can test this for you at any time).

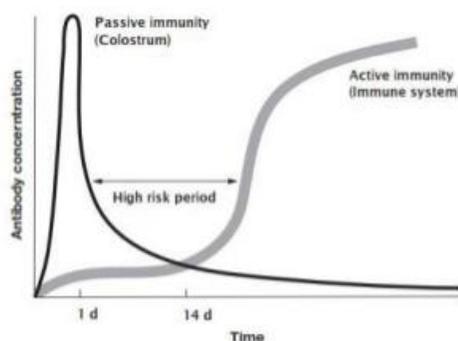
What are some Alternative sources for Good Colostrum?

If for some reason, the cow isn’t available to give colostrum or the cow has poor quality of colostrum, an alternative source should be considered to make sure every calf has quality antibodies. The list above talks about poor choices as a True Colostrum alternative. The following is a better way to have colostrum available for those calves that can’t nurse on the mother cow.

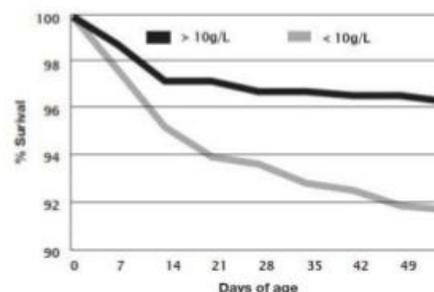
- Milk Colostrum from another cow in your herd that has calved within the last 6-12 hours. Colostrum can be collected, frozen and reused later, so this means you can milk a cow early in the calving season to keep some “on hand”. You can freeze the colostrum in Ziploc bags and thaw in warm water when needed (do not microwave, as that can kill the antibodies). Frozen colostrum can be stored for up to 1 year. Once thawed, do not re-freeze colostrum. A veterinarian can test the quality of the colostrum saved to insure it is a good quality source.
- Commercial Colostrum can be an alternative source but please READ THE LABELS. Not all newborn products are the same or contain quality IgG levels. If you don’t see IgG levels listed (such as 115mg) then it is best to assume it isn’t colostrum.

Colostrum and Survival

Antibodies from colostrum protect animals until active immunity



Calf survival rates by IgG Levels



Source: USDA National Animal Health Monitoring System, 1993.