

Quick facts and reminders on colostrum

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Colostrum is the first secretion produced by the mammary gland after parturition and contains important antibodies, which supply immunity to the newborn calf consuming it. Because calves are born with an immature immune system, it is important to provide adequate quantities of high-quality colostrum for disease protection. Colostrum is also a valuable source of nutrients for the young animal. Ensuring proper colostrum contributes to improved calf care in the pre-weaning period, thus, decreasing weaning costs and promoting growth thereby increasing profitability.

A few interesting and important facts on colostrum:

- Colostrum production in the cow begins 5 weeks pre-partum, and is secreted for up to 7 days post-partum.
- *Feed colostrum immediately*: The antibodies in the colostrum are absorbed through the small intestine of the calf the rate of absorption begins to rapid drop off after about the first 4 hours of birth but can be absorbed for 24 hours after birth.
- At 24 hours of age, the calves gut matures and tightens, therefore it is no longer able to absorb the large antibody molecules.
- If calves do not receive an adequate amount of antibodies within the first 24 hours of life, they become susceptible to illness and disease; this is called “Failure of Passive Transfer.”
- Failure of Passive Transfer can result in life long and negative impacts on animal health.
- Newborn calves should receive about 10- 15 % of their body weight of clean, high quality colostrum
- Colostrum quality can be measured using a variety of tools including a colostrometer and a brix refractometer; it should contain 50g/L IgG, and calves should consume at least 150 g of IgG at 1st feeding.