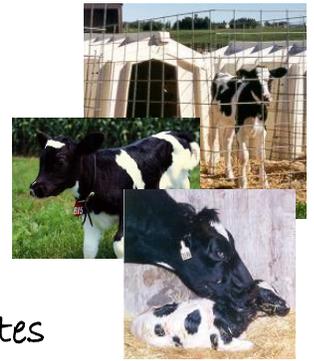


Calving Ease

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How to Save a Penny and Lose a Dollar

- **Not dip the umbilical cord on newborn calves.** Navel dipping, as we call it, has a return on investment of approximately 10:1 (see calffacts.com “Dipping Navels: Dollars and Sense.” See also at www.atticacows.com in the Calving Ease section, select “December 2011 Naval dipping: Advantages and Alternatives.”
- **Not milk fresh cows soon after calving.** See what happens when you delay colostrum collection. Let’s set colostrum quality at 100% when collected at 2 hours post calving. Then this is what we find:

Hours post calving – collection	Loss of antibodies (percentage)
6	17
10	27
14	33

If you expect to have an adequate supply of high quality colostrum collecting it soon after calving is a best management practice.

- **Not check colostrum quality colostrum before feeding it to newborn calves.** In a study including 919 cows from one farm, on the low side 5% of cows had antibody concentrations of less than 20grams/liter. On the high side 3% had antibody concentrations over 96. More recent data suggest from 3 herds (507 cows) that 10% of the cows had low quality (under 50g/L) colostrum. In contrast, about 45% of cows in this study had over 100g/L antibodies in their colostrum.

Bottom line? Wide variation in colostrum quality from cow to cow. Best management practice? Check quality before feeding – see calffacts.com, select “Colostrum testing using a Brix refractometer.” See www.atticacows.com, select Calving Ease and click on “August 2011: Colostrum Quality and Quantity.”

- **Not use human health standards for colostrum cleanliness.** Survey reports from both Québec and Pennsylvania herds show that nearly one-third of colostrum fed to newborn calves was contaminated with bacteria at levels high enough to predict diarrhea in the first two weeks of life. Following best management practices in the collection and handling of colostrum is essential when providing clean wholesome colostrum for newborns. For resources on keeping colostrum clean see calffacts.com “Colostrum: Reducing coliform counts - a checklist” and “Washing milk containers: checklist”

- **Not feeding colostrum to a newborn calf as soon as practical after birth.** Studies have repeatedly shown that the capability of a calf to move colostrum antibodies from the gut into her blood (technically, pinocytosis or transendothelial vesicular transport) goes down rapidly after birth. At 6 hours after birth up to one half of a calf's ability to absorb antibodies may be gone.
- **Not feed enough good quality colostrum soon enough after calving.** By 4 weeks one estimate is a loss of \$48/calf (See calffacts.com "Colostrum: Calf raising profit starts with good management").
- **Not quantify the immunity levels in young calves.** An inexpensive blood test is available to estimate immunity levels among calves between 1 and 7 days of age. The blood serum is used with a clinical refractometer. One study of 400 calves showed that the highest rates of treatment for both scours and respiratory illness were among calves with the lowest levels of immunity. In addition, age at breeding was 30 days higher for the low-immunity calves. For a resource on immunity testing see calffacts.com "Transfer of Immunity: How to test for."

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