HARVESTING & STORING COLOSTRUM

1 COLLECT IT EARLY – WITHIN 6 HOURS

- Cows should be milked within 6 hours after calving.
- The concentration of immunoglobulins is highest immediately after calving and decreases over time because of the dilution by the milk produced after calving.





CLEANLINESS IS KEY!

- Make sure that cows' teats are clean by pre-dipping and drying before starting milking.
- Ensure milking equipment is clean before collection. If possible, designate buckets for colostrum harvesting only. Always keep the buckets covered tightly, both before and after collecting colostrum.

CHECK QUALITY IMMEDIATELY - GOAL BRIX ≥ 21!

- Colostrum should be tested for quality with a refractometer before further processing or storage.
- The refractometer indirectly measures immunoglobulins. Aim for colostrum with Brix values of equal or higher than 21.
- Use colostrum with lower Brix values for second colostrum feeding.



FREEZE IT IN SINGLE SERVINGS

- Freeze colostrum as soon as possible to avoid bacterial growth.
- Use single-serving containers/bags to store colostrum. It will reduce the time for colostrum to freeze, and when frozen lying flat, gallon bags with a quart of colostrum will be thin and thaw quickly.
- Freezer temperature should be -5°F. Frost-free freezers are not optimal; the freeze-thaw cycles reduce the colostrum storage life.



COLOSTRUM MAY BE FROZEN FOR UP TO A YEAR



BEST PRACTICES FOR THAWING FROZEN COLOSTRUM

HOW TO THAW FROZEN COLOSTRUM

- The best way to thaw colostrum is using a water bath with a controlled temperature between 104 and 140° F (40 to 60° C).
- The colostrum bag should be placed in the water and allowed to thaw completely. If set at 125° F, a bag of 3 quarters of colostrum would take 30 min to thaw.
- After completing thawing, homogenize the colostrum and check its temperature before feeding.
- The colostrum should be fed at the temperature of 102 degrees Fahrenheit (39° C).

ATENTION:



Water baths should not be set at temperatures above 140° F (60° C).
At temperatures above 140° F (60° C), denaturation of immunoglobulins can occur, compromising the passive immunity transfer process.



 Microwave can be used to thaw colostrum. However, it can result in an unevenly heated colostrum, leaving some frozen parts and overheating others, possibly denaturing immunoglobulins. If used, is essential to heat using low power and short cycles, constantly removing the thawing fraction to avoid overheating.



 Thawing colostrum at room temperature or in a refrigerator is not recommended since it can take long periods of time, allowing bacteria to grow.



 Always keep the thawing unit, water, and utensil (funnels, bottles and nipples) clean.

THE STORAGE OF COLOSTRUM IN SMALL PORTIONS ALLOWS A QUICK-FREEZING PROCESS AND FASTER THAWING.

