



Guidelines for Colostrum Collection

Colostrum should only be collected from healthy cows within 1 to 6 hours after calving. This timing is crucial - colostrum quality decreases by approximately 3% per hour

Measuring Colostrum Quality

- **Brix Refractometer:**

The Brix refractometer measures colostrum quality on a 0-32% scale. A reading of 22% or higher indicates high-quality colostrum suitable for first feedings. Colostrum with readings between 15-21% can be reserved for second feedings.

- **Colostrometer:**

A Colostrometer is sensitive to temperature and requires colostrum to be at approximately 20°C (72°F) for accurate readings. The device measures quality using a densimeter scale:

- **Green zone:** High-quality colostrum
- **Red zone:** Low-quality colostrum

To use, float the glass cylinder in the colostrum and read the indicated level.

Labeling Collected Colostrum

After collecting colostrum in a **calf PROS** bag, label the bag with its quality rating and the collection date. This ensures the best batches are reserved for the calf's initial feedings.

Pasteurization and Storage of Colostrum

Pasteurization Process

Pasteurize colostrum promptly after collection to minimize the risk of spreading contagious pathogens. For effective pasteurization:

- Heat the colostrum to **60°C (140°F)** for **60 minutes**.

This process eliminates harmful pathogens while preserving the integrity of immunoglobulin (Ig) molecules and maintaining the colostrum's viscosity. Proper pasteurization reduces illness and mortality risks in calves, enhances weight gain, and supports future productivity.

Storage Guidelines

1. **Preparation for Storage:**

- Cover the colostrum with a lid to prevent contamination from flies or dirt.
- Use a filter to remove impurities such as contaminants or teat sealants.

2. **Refrigeration and Freezing:**

- Refrigerate or freeze the colostrum immediately to prevent bacterial growth. Note that at room temperature, bacteria levels double every 20 minutes.
- **Refrigeration:** Store raw or pasteurized colostrum for up to **48 hours**.
- **Freezing:** Store colostrum in the freezer for up to **one year**. **calf PROS** bags are made without foil to prevent cracking.

These steps ensure the colostrum remains safe and high-quality for calf feedings.

Feeding Colostrum to Calves

Colostrum Temperature for Feeding

The temperature of colostrum before feeding is critical for proper nutrient absorption:

- **Optimal Range:** 90-110°F (32-43°C)
- **Reheating:** Use a water bath and ensure the water does not exceed **140°F (60°C)** to avoid damaging the immunoglobulins. Check to ensure no frozen pieces remain in the colostrum bag before feeding.

Timing and Quantity

- **Timing:** Feed colostrum as soon as possible after birth, ideally within **60 minutes**.

Convenience with calf PROS Bags

- **Single-Use Design:** calf PROS bags eliminate the need for labor-intensive cleaning.
 - Colostrum's high fat and protein content makes it difficult to clean from traditional plastic bottles and nipples.
 - Reusable items like nipples and esophageal tubes are also hard to sanitize thoroughly.
- Each calf PROS kit includes a fresh set of feeding attachments, streamlining the feeding process and maintaining hygiene.

By following these practices, and using **calf PROS** bags, you can ensure calves receive high-quality, hygienic colostrum efficiently.



