1. PURPOSE

Calves’ ability to absorb immunity factors from colostrum starts to decrease soon after birth. As a result, producers need to ensure calves receive adequate colostrum as soon as possible to maintain their health, growth and vigor.

2. RESPONSIBILITY

All permanent, casual and student staff.

3. MATERIAL

3.1 Pail
3.2 Refractometer
3.3 Colostrum Quality Readings sheet
3.4 Colostrum bag
3.5 Funnel
3.6 Jug
3.7 Thermometer

4. PROCEDURES

4.1 Harvest Colostrum (Maximum 10 Litres) in a milking pail as per corresponding SOP;
   - DC-609: Milking Pail Cows in a Tie stall or
   - DC-610: Milking Pail Cows in a Box Stall.

4.2 Transport the pail to the lab/necropsy room.

4.3 Test the colostrum quality by placing a small drop of the colostrum on the refractometer.

4.4 Record results on the Colostrum Quality Readings Record (Appendix DC-A-5A: Colostrum Quality Reading Record) and update the Milker Action Sheet with the number of bottles collected.

4.5 GOOD QUALITY COLOSTRUM (≥22 BRIX):
   4.5.1 Reserve 4 liters of colostrum for the calf and store in white nipple bottles.
      4.5.1.1 Identify the bottles with (using a bottle tag)
         - Dam number
         - Calf Number
         - Bottle number
      4.5.1.2 Store in the walk-in refrigerator IMMEDIATELY.

4.6 BELOW GRADE COLOSTRUM (< 22 BRIX):
   4.6.1 Is fed to calves when;
      4.6.1.1 The calf is a bull or a beef breed
      4.6.1.2 There isn’t good grade colostrum available for heifer calves
      4.6.1.3 2nd or 3rd feeding of calf.
4.6.2 Once harvested, identify plastic 4L milk bottles with:
   - Dam tag number
   - Calf tag number
   - Bottle number
4.6.3 Store in the walk-in fridge.

4.7 SUPPLEMENTAL COLOSTRUM STORAGE
   4.7.1.1 Label the colostrum bag with:
      - Dam tag number and name
      - Date
      - Refractometer reading
4.7.2 Fill the colostrum bag using a jug and funnel,
4.7.3 Seal and immediately store the bag in the walk-in freezer. Stored colostrum has a shelf life of 12 months.
4.7.4 Wash all materials used with Della-Clean Extra ("Bulk Tank soap")

4.8 THAWING COLOSTRUM:
   4.8.1 Remove from freezer. Thaw the oldest one first.
   4.8.2 Thaw the colostrum bag in a bucket of hot water (1-1.5 hours). Establish that the colostrum is in liquid form by feeling the bag. However, it will not be at the adequate temperature to feed the calf.
   4.8.3 When completely thawed, transfer colostrum from the bag to the nipple bottle.
   4.8.4 Take the temperature of the colostrum using a cooking thermometer.
   4.8.5 Feed the calf when the temperature reaches 98-100°F
   4.8.6 If below adequate temperature:
      4.8.6.1 Continue to warm the colostrum by placing the bottle in a small pail of hot water.
      4.8.6.2 Take temperature every 5 minutes to avoid overheating.
      4.8.6.3 If overheated, remove the bottle from water and test temperature frequently until it reaches the adequate temperature (98-100°F)

Document Status and Revision History

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<th>PREVIOUS VERSION</th>
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