

#### QUICKLY 1<sup>st</sup> feeding: < 2 h

2<sup>nd</sup> feeding: < 2 h 2<sup>nd</sup> feeding: 8 - 12 h post birth



STORAGE

Cool / freeze quickly Cow ID & Date Thaw / heat gently (max 122°F) QUALITY > 22 % Brix > 50 g IgG/L

AVI63

#### SAFETY

Exclude Johne's, salmonella and mycoplasma cows **QUANTITY** Feed 3-4 L or 10% of body weight

# **COLOSTRUM MANAGEMENT**

The future of your herd starts with today's healthy calf, and the key to a healthy calf starts with its first feeding. Maternal colostrum is nutrient-dense, with unique colostral proteins and fats designed specifically for your newborn calf. For your calves to thrive, it's important to deliver colostrum timely and carefully to optimize their health and development. Optimize your colostrum management by setting targets, developing a protocol, and measuring and recording results.

## KEYS TO SUCCESSFUL COLOSTRUM MANAGEMENT:



#### QUICKLY

- 1<sup>st</sup> feeding as soon as possible after birth, ideally within 2 hours.
- 2<sup>nd</sup> feeding within the next 8-12 hours to assure 2 feedings within 12 hours.

Calves have immature immune systems and limited energy reserves at birth. Colostrum gives them immunity and energy to adapt to the environment. The sooner after birth the bottle is offered, the more likely they are to suck.



### QUALITY

• Feed good quality colostrum containing minimally 50 g lgG/L.

Test for quality using an optical or digital Brix refractometer with a 0-32% Brix scale:

- > 22% Brix indicates adequate quality colostrum > 50g/L lgG.
- < 22% is considered poor quality and is not recommended to feed as a 1<sup>st</sup> feeding unless enriched with SCCL colostrum powder (see enrichment guide)

#### QUANTITY

- Adequate = 2-3L (100-150g lgG)
- Excellent = 3-4L (150-200g lgG)

Feed 10% of the calf's body weight as a 1<sup>st</sup> feeding (40 kg calf = 4L). If tube fed, a minimal volume of 3L should be fed. With tubing, colostrum goes in the rumen first and not directly into the abomasum as when fed by bottle. The rumen has a capacity of about 1 liter, and extra volume allows for overflow into the abomasum to start passive transfer of antibodies into the bloodstream.

#### SAFETY

- Do not feed colostrum from cows with Johne's, mycoplasma or other diseases.
- When storing excess colostrum in the freezer, make sure the container is labelled with cow ID, % Brix and date.

The MAP bacteria causing Johne's disease can be transmitted through colostrum. If the cow was negative when she was last tested but became positive after you froze her colostrum, you can identify her colostrum with the ID label and discard it.



### HYGIENE/STORAGE

- Feed colostrum directly after the cow is milked.
- Store colostrum in the fridge in a container with a lid when you use it later in the day.
- Store colostrum in the freezer when you use it at a later time.
- When thawing colostrum use a heated water bath with a maximum water temperature of 122°F.
- Feeding temperature should be close to the calf's body temperature of 101.5°F.

Bacteria can double every 20 minutes. Cool storage of colostrum reduces bacterial growth. Use a lid to avoid contamination of the colostrum in the parlor, the barn or in the fridge. Carefully heat up cooled or frozen colostrum using a heated water bath. Do not rush the heating of colostrum and do not microwave. IgG is a protein easily damaged by heat. Once damaged, it loses its immune function.