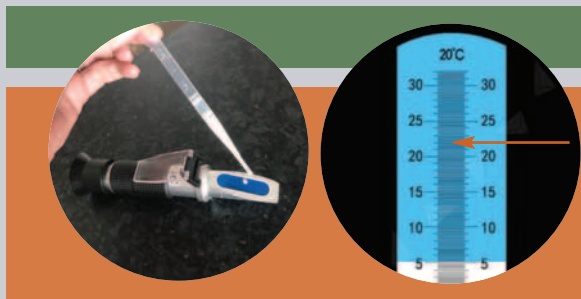


MONITORING COLOSTRUM QUALITY (ANTIBODY AND CLEANLINESS)

	HOW	TARGET	WHY
ANTIBODIES	<p>Sample the colostrum at the point of feeding and use a Brix Refractometer</p> <ol style="list-style-type: none"> Clean the Brix slide and calibrate to zero using water. Wipe dry. Place 1-2 drops of colostrum onto the slide Lower coverslip so colostrum spreads across slide Look through eyepiece and read off scale <div data-bbox="385 671 1391 970" style="text-align: center;">  <p>> 22 % Brix = good quality</p> <p><22 % Brix: A larger volume of the colostrum will have to be fed or discard the colostrum if higher quality colostrum is available.</p> </div>	<p>> 22 % Brix (This equates to > 50g/L)</p>	<p>Measuring antibody concentration is important to ensure there are enough antibodies available to provide good passive immunity to the calf.</p> <p>If poor quality colostrum is identified, steps can be taken to mitigate its impact and improve quality going forward.</p>
CLEANLINESS	<p>Take a sample of colostrum at the point of feeding³ and ask your vet to send to a laboratory to measure total bacterial count and total coliform count.</p>	<p>TBC <100,000 CFU/ml¹ TCC < 10,000 CFU/ml²</p>	<p>Bacteria can reduce the absorption of antibodies. These bacteria can also cause disease in their own right (e.g. <i>E. coli</i>, <i>Johnes</i>, <i>Mycoplasma bovis</i>, <i>Salmonella spp</i>)</p>

Glossary: 1. TBC = Total Bacterial Count. Estimate of the number of bacteria present in the sample. 2. TCC = Total Coliform Count. Estimates the number of coliform bacteria present in the sample. Coliforms are specific type of bacteria (e.g. *E. coli*) and are a good measure of hygiene. 3. 'At the point of feeding' means a sample taken from the feeding equipment (e.g. the bottle or stomach tube) as it is fed to calves. This accurately represents the colostrum that is actually being fed to calves.

Reference: Godden, S.M., et al., 2019. Colostrum Management for Dairy Calves. Veterinary Clinics of North America - Food Animal Practice.

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