# Using a colostrometer



Less than 20mg/ml of immunoglobulin A

More than 50mg/ml of immunoglobulin

10.0 20.0 30.0

40.0

50.0

60.0

70.0

80.0 90.0

100.0

110.0

130.0

Poor quality colostrum

Good quality colostrum

Testing colostrum is an important task that should be completed at every collection. The test results help you to make an informed decision as to whether the colostrum is good enough to be fed or stored, or needs to be discarded.



#### Procedure

- Use a clean dump bucket and transfer the colostrum to a clean bucket with a lid on
- Take a sample of the colostrum, using a very clean jug
- Pour the colostrum into the measuring cylinder
- The colostrum should be tested at a fixed temperature, ideally room temp of 22°C

   not body temp or direct from the refrigerator
- There should be no froth on the colostrum
- The colostrometer should be floated in the colostrum leave for one minute before taking a reading.

### Taking a reading

- Read the value where the colostrometer is floating at the surface of the colostrum
- Readings in the green zone indicate good quality more than 50mg/ml of immunoglobulin

This colostrum can be used or stored

• Readings in the red zone indicate poor quality - less than 20mg/ml of immunoglobulin

This colostrum should be discarded

• Readings in the amber zone indicate marginal quality.

For more information on calf management, please visit the web: dairy.ahdb.org.uk/calves

## Using a Brix refractometer

Testing colostrum is an important task that should be completed at every collection. The test results help you to make an informed decision as to whether the colostrum is good enough to be fed or stored, or needs to be discarded.

### Equipment

- Refractometers should be free from any visual dirt and contaminants such as manure, you should also check for any cracks or breaks in the glass
- Refractometers should be calibrated before each use
- You will need:
  - Clean refractometer 0-32% scale
  - Distilled water
  - Clean cloth
  - Jug very clean
  - Colostrum at room temperature.

## Procedure

- The refractometer should be calibrated before every use. Put 2-3 drops of distilled water on the glass surface
- Lower the cover over the sample so the water spreads across the entire surface without any air bubbles or dry spots
- Allow 15 seconds before taking a calibration reading this allows the sample to adjust to room temperature
- Hold the refractometer up to natural light while looking down the eye piece avoid fluorescent light sources
- As you look down the eye piece you will see a circular field with graduations down the centre. The scale should read zero where the light and dark areas meet. If not adjust using the calibration screw
- Wipe clean the surface with a clean soft cloth
- Once dry place a couple of drops of colostrum onto the glass surface and repeat the process
- Take a quality reading for the colostrum
- Once you are happy with the reading ensure you clean the slide and glass ready for the next time.

## Taking a reading



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