

Off to a healthy start

# Instructions for the Brix refractometer

Follow the steps below to test colostrum quality after collection and before feeding.



#### 1. Calibrate

- Follow manufacturer instructions for calibration.
- Distilled water placed on the refractometer should produce a reading of zero.
- Ensure the sample well is clean.

### 2. Place a few drops of colostrum on the sample well

- Digital refractometers will read the sample.
- Optical refractometers need to be held up to a light source and read manually.

#### 3. Clean the sample off the sample well

• Residue from previous samples can reduce accuracy.

#### 4. Feed colostrum if the reading is 22% or more

- Lower quality colostrum can be saved for later feedings, but should not be given at the first feeding.
- Individual farms may wish to increase their cut-point for colostrum quality.

Test colostrum quality every time. Only feed colostrum that is high-quality.

Brix Refractometer reading	IgG concentration per litre (g/L)	Amount of colostrum to feed (L)	Total IgG fed (g)	
18%	40	-	-	This quality is too poor for a first feeding, but could be used for second or third feedings.
22%	50	4	200	This is the minimum quality and amount to feed for a first feeding.
28%	95	4	380	This is very high-quality colostrum, however, don't feed less quantity – the calf still needs the calories.

## **BRIX OPTICAL REFRACTOMETER**



- Optical Refractometer gives quick and accurate measurements of colostrum quality by testing a drop of colostrum. The quality of the colostrum is a good indication of immunities and absorption by the newborn calf.
- The sample of the colostrum will give a reading of its quality using a Brix scale (0 to 56).
- Read under incandescent light or daylight. A reading of 22 or above means the colostrum quality is good.
- This optical-type Refractometer features automatic temperature compensation which means the unit may be operated between 50 and 86F without needing recalibration, a great convenience when testing a number of cows.
- Refractometer has an all-metal body, polypropylene grip, focusing eyepiece, and drop-tested daylight plate with hinge.
- The unit is packed in a nylon padded zipper pouch and includes a pipette, a screwdriver and complete instructions for use and care.

## **DIGITAL REFRACTOMETER**



- Test your colostrum with the Milwaukee digital BRIX refractometer. Colostrum readings of 22% or higher is top quality, 18-21% should be used for second feeding and readings of 17% or lower are for regular feedings.
- For whole milk the reading should be 10.5% or higher, if it is lower than 10.5% supplement with Milk replacer.
- This refractometer automatically compensates for temperature with a 0 to 85 percent BRIX range and +/- 0.2 percent accuracy.
- It is easy to use with simple two button operation and fast with a response time under 2 seconds.
- Maintenance is a breeze also with an easy-to-clean sealed flint glass prism and stainless steel well.

Two year warranty. CSA approved.

