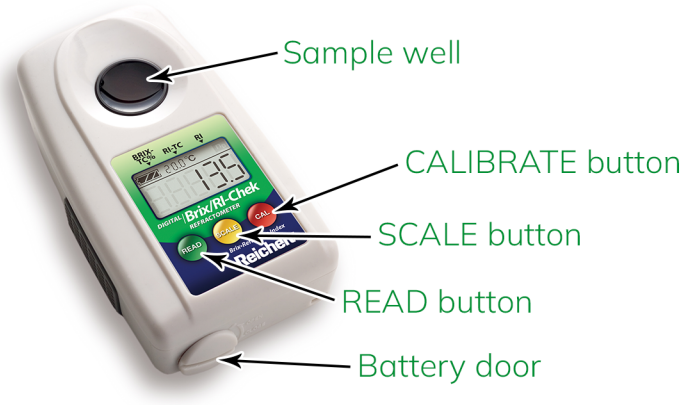
COLOQUICK
FIRST MEAL - BIG DEAL

BRIX TESTER
DIGITAL REFRACTOMETER

Quality colostum testing + Whole milk dry matter determination



This digital refractometer, is an optical measuring instrument, which is capable of measuring the refractive index for both colostrum and whole milk.

The refractive index for both colostrum and whole milk has a close correlation to the content of antibodies and dry matter concentration.

See the scales for this at the bottom of this page.

⚠ Store at a dry location at 10-30 °C / 50 - 86 °F
⚠ Do not remove the serial number on the back

1 Calibration

To ensure the most precise results, the BRIX TESTER should be calibrated at the room temperature that is current, when a measurement is carried out. If the room temperature differs more than 5 °C from the calibration temperature, a new calibration must be performed.

1) The measuring surface and sample well must be clean (i.e. refer to the Cleaning section).
2) Apply distilled water to the measurement surface, and ensure that the glass is fully covered (minimum 0.3 mL).
3) Wait for about 15 seconds for the water to reach the same temperature as the glass in the sample well.
4) Press and hold the CAL-button, until CAL is displayed. While still holding the CAL-button, press the READ-button, and then release both buttons.
5) A series of dashed lines will appear and successful calibration will be indicated when the word END is displayed.

2 Measuring

1) The measuring surface and sample well must be clean (i.e. refer to the Cleaning section). The instrument must be properly calibrated, and set to the BRIX-TC% scale (refer to the Scales section).
2) Apply an adequate amount of milk on the measuring surface, and ensure that the glass is fully covered (minimum 0.3 mL).
3) Wait for about 15 seconds for the milk to reach the same temperature as the glass in the sample well.
4) Press the READ-button to read the measured value. See the corresponding IgG- or dry matter value at the bottom of this page.

Repeat the measuring by pressing the READ-button again. If repeated measurings shows the same result, the milk has reached the same temperature as the glass in the sample well, and the result is accurate.

Colostrum

Brix %	IgG gram/liter
19	12
20	24
21	35
22	47
23	58
24	70
25	82
26	93
27	105
28	116
29	128
30	139
31	151
32	163

The correlation between brix % and the amount of IgG is 0.71.

Bielman et al. (2010), Journal of Dairy Sci. 93: 3713-3721

Whole milk (separated)

Brix %	% dry matter
8,0	10,0
9,0	11,0
10,0	12,0
11,0	13,0
12,0	14,0
13,0	15,0

The correlation between brix % and dry matter content in separated whole milk.

Moore et al. (2009), Journal of Dairy Sci. 92: 3503

3 Cleaning

Cleaning of the measurement surface and well should be performed immediately after each sample reading.

- The BRIX TESTER is properly cleaned with a soft and lint free cloth, and added water and mild soap or isopropyl alcohol.
- When the glass plate is cleaned, rinse with clean water and wipe with a clean, soft and lint free cloth.
- After cleaning, the glass plate must be entirely clean and free from fats etc.

The rest of the BRIX TESTER can be cleaned by wiping using a moist cloth, and an added mild detergent, fx. window cleaner.

⚠ DO NOT wash the BRIX TESTER under running water, or immerse in any fluid.

⚠ DO NOT use strong detergents and/or chemicals for cleaning the BRIX TESTER.

4 Scales

Press the SCALE-button to toggle between the three scales: Brix-TC%, RI-TC and RI.
The actual scale is marked with an underscore at the top of the screen. The milk measuring, BRIX-TC% must be

5 Current temperature

The current temperature for the glass surface is shown, by pressing one time on the CAL-button, after a measuring has been performed.

6 Automatic temperature compensation

The automatic temperature compensation corrects the values for the measurements, according to the temperature.
To ensure that the automatic temperature compensation works optimally, it is necessary for the liquid on the test surface, to have the same temperature as the glass surface. This is achieved by waiting approximately 15 seconds before pressing the READ-button, after the liquid has been applied to the glass surface.

7 Battery condition

The BRIX TESTER uses 2x AAA-batteries (1.5V).

The following display examples represent either a low battery condition or critical low battery condition (where the BRIX TESTER will no longer operate properly). In either case the batteries should be promptly replaced.



Low battery condition
Replace batteries.



Critically low battery condition
Replace batteries.

Warranty and repair information:
We warrant that all our refractometers are free from defects in material and workmanship for one year from the date of purchase. If the product is found to be defective by us, we will repair or replace the unit without charge. And we reserve the exclusive right to determine the cause of failure and advise if a warranty replacement or repair can be made. This warranty does not include shipping costs, collect shipments will not be accepted, or any instrument that has become worn through use, broken from misuse, neglect, tampering, or unauthorized repair. Return shipments will be repaid freight unless other arrangements have been made. We will advise the customer of the repair cost of any refractometer not covered by warranty. Work on such units will not begin until a purchase order is received. There are no other expressed or implied warranties. Please call the dealer prior to returning any products for evaluation.