

KRUUSE Cow-side BHB Strips is a dipstick test to determine the level of Beta-hydroxybutyrate (BHB) in the milk. It is useful tool for determining if individual cows are experiencing elevated levels of ketone bodies in the milk.

Close the bottle cap immediately after removing test strips, and keep the vial tightly closed between tests. Do not remove desiccant from bottle. Do not touch test areas of reagent strips. Do not open container until ready to use. Discoloration or darkening of the test pads may indicate deterioration. If this is evident, check that the strips are reacting properly using known negative and positive control materials. Do not use after the expiry date.

Note once the canister has been opened, the remaining strips remain stable for up to 3 months.

CHEMICAL PRINCIPLES OF PROCEDURE

KRUUSE Cow-side BHB Strips are dip-and-read test strips.

Beta-hydroxybutyrate in the milk passes through the reagent part of the test strip and is converted by Beta-hydroxybutyrate dehydrogenase (BHDH) to acetoacetate (AcAc). The NADH produced from NAD in the process reduces nitroterrazolium blue (NTB) to formazan, which is purple in color.

SPECIMEN COLLECTION AND PREPARATION

Collect fresh milk in a clean, dry container that allows complete immersion of all the fields on the test strip. Test the specimen as soon as possible, with the sample well mixed but not centrifuged. If immediate testing is not possible, the sample should be stored in the refrigerator, but not frozen, and then brought to room temperature before used in the test. Do not use milk samples containing preservatives.

VISUAL TEST PROCEDURE

The procedure must be followed exactly to achieve reliable results. Do not compare strips with color chart before the strip is dipped in milk.

- 1: Dip the strip into the milk up to the test area for no more than two seconds.
- 2: Draw the edge of the strip along the brim of the vessel to remove excess milk, don't let the test areas touch the brim of the vessel.
- 3: Turn the strip on its side and tap once on a piece of absorbent material to remove excessive milk on the strip as this may cause the interaction of chemicals between adjacent reagent pads, which could lead to an incorrect result.
- 4: Compare the colours of the reagent pads after 1 minute with the color chart on the vial label under good light.

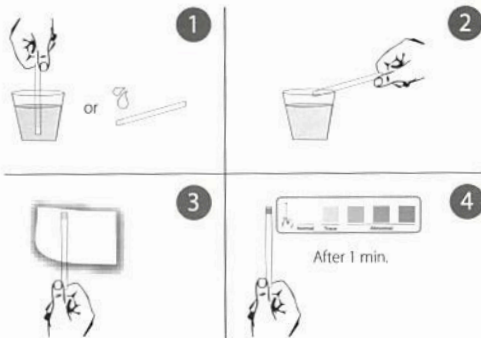
INTERPRETATION RESULTS

BHB concentration in milk:

| | |
|-----------------------------------|--------------------------|
| 0 $\mu\text{mol/L}$ (0 mg/dl) | Normal |
| 100 $\mu\text{mol/L}$ (1 mg/dl) | Doubtful (+/-) |
| 200 $\mu\text{mol/L}$ (2 mg/dl) | Positive (+) |
| 500 $\mu\text{mol/L}$ (5 mg/dl) | High positive (++) |
| 1000 $\mu\text{mol/L}$ (10 mg/dl) | Very high positive (+++) |



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50/pk
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