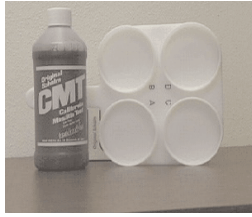


California Mastitis Test (CMT) Fact Sheet 1

Equipment



Milk samples from each quarter are collected in a clean CMT Paddle. The CMT paddle has four shallow cups marked A, B, C, and D to help identify the individual quarter from which the milk was obtained. The CMT solution should be reconstituted according to package instructions.

How to use CMT

Step 1:

Take about 1 teaspoon (2 cc) milk from each quarter.



This is the amount of milk that would be left in the cups if the CMT Paddle were held nearly vertical



Step 2:

Add an equal amount of CMT solution to each cup in the paddle.



Step 3:

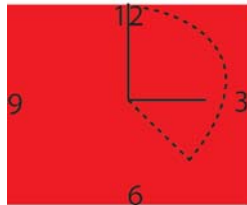
Rotate the CMT Paddle in a circular motion to thoroughly mix the contents.

Do not mix more than 10 seconds.



Step 4:

Read the test quickly. Visible reaction disintegrates after about **20 seconds**. The reaction is scored visually. The more gel formation, the higher the score.



California Mastitis Test (CMT) Fact Sheet 1

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Reading the CMT



N = Negative

No infections. No thickening of the mixture.
 100,000 SCC



T = Trace

Possible infections. Slight thickening of the mixture.
 Trace reaction seems to disappear with continued rotation of the paddle. 300,000 SCC

Example: If all four quarters read trace there is no infection.
 If one or two quarters read trace, infections are possible.



1 = Weak Positive

Infected. Distinct thickening of the mixture, but no tendency to form a gel. If CMT paddle is rotated more than 20 seconds, thickening may disappear.

900,000 SCC



2 = Distinct Positive

Infected. Immediate thickening of the mixture, with a slight gel formation. As mixture is swirled, it moves toward the center of the cup, exposing the bottom of the outer edge. When motion stops, mixture levels out and covers bottom of the cup. 2.7 million SCC

3 = Strong Positive

Infected. Gel is formed and surface of the mixture becomes elevated (like a fried egg). Central peak remains projected even after the CMT paddle rotation is stopped. 8.1 million SCC



Rinse Paddle

Remember to rinse the CMT paddle after each test.

Interpretation of CMT scores

CMT scores are directly related to average somatic cell counts. The following table shows how they are related.

Any reaction of T (trace) or higher indicates that the quarter has subclinical mastitis.

CMT Score	Somatic Cell Range	Interpretation
N (Negative)	0 – 200,000	Healthy Quarter
T (Trace)	200,000 – 400,000	Subclinical Mastitis
1	400,000 – 1,200,000	Subclinical Mastitis
2	1,200,000 – 5,000,000	Serious Mastitis Infection
3	Over 5,000,000	Serious Mastitis Infection

Other examples of CMT readings



Clinical Infection



Toxic Milk

(No reagent was added to the CMT paddle.)