

# Milk and Milk Product Testing in Saskatchewan

## Milk and Milk Product Testing Requirements in *The Food Safety Regulations*

*The Food Safety Regulations* provide parameters for testing of milk to be pasteurized and for pasteurized milk and milk products. The testing requirements cover both the quality and the safety of the product.

### Testing of milk to be pasteurized (raw milk)

	Bacteria Count	Inhibitor and Drug Residues	Somatic Cell Count	Freezing Point
<b>All species</b>	< 50,000 mesophilic aerobic bacteria CFU/mL OR < 121,000 total bacteria/mL	The milk must not contain any inhibitors (antibiotics) or drug residues*		
<b>Cows</b>			< 400,000 somatic cells per millilitre	below -0.525° Hortvet or -0.507° Celsius
<b>Goats</b>			<1,500,000 somatic cells per millilitre	below -0.554° Hortvet or -0.535° Celsius
<b>Other Species (not cow or goat)</b>			Contact your local public health inspection office for required parameters.	Contact your local public health inspection office for required parameters.

\* as measured in accordance with methods approved by Health Canada, that exceed the Maximum Residue Levels set out in the regulations made pursuant to the *Food and Drugs Act* (Canada).

**NOTE:** Raw milk cheese production is permitted in Canada under federal legislation. This fact sheet will not cover the testing required to make raw milk products. More information on raw milk cheese production can be found in the "Saskatchewan Food Processing Best Management Practice" document – Appendix V.

### Testing of milk and milk products to be sold

Milk and milk products made from pasteurized milk must fall within the testing parameters laid out in *The Food Safety Regulations*. It is prohibited to sell products that do not meet the testing parameters. Compositional standards for milk and milk products (i.e. 1% vs. 2% milk) are covered under separate legislation and can be found through the Ministry of Agriculture.

In addition to the testing parameters the producer must ensure that the milk or milk product has not been adulterated with a product or substance that renders the milk or milk product unsafe for human consumption.

	Bacteria Count*	Coliform Bacterial Count	Phosphatase Test
<b>Parameter (all species)</b>	mesophilic aerobic bacterial content < 25,000 CFU/mL	Less than one bacteria per milliliter in fluid form OR Less than 10 coliform bacteria per milliliter in non-liquid form	Negative reaction to the test.

\*cultured milk products such as yogurt are exempt from this parameter

## Testing by laboratory

Types of tests that are typically done in a laboratory include freezing point, bacteria counts (including somatic cell and coliform counts), and drug residue detection. The methods used to test these parameters often require specialized equipment and/or the application of specific methodology. The laboratory chosen must be one approved for use by the local authority. A person who operates a milk plant or milk product facility should follow this schedule for laboratory testing of samples:

- At weekly intervals submit for testing samples of each type of milk or milk product regularly processed by the milk plant to a laboratory approved by the local authority;  
**and**
- At monthly intervals or as directed by the local authority, submit for testing samples of commingled milk to a laboratory approved by the local authority.

## Testing by milk plant

Some testing (i.e. phosphatase) can be done in house at the milk plant or facility depending on the capacity of the plant or facility and the ability to meet approved testing protocol. A person who operates a milk plant or milk product facility shall conduct tests on each batch of milk or milk product pasteurized or to be pasteurized by the plant.

## Test Methods and Record Keeping

Tests, both at a lab and at a milk plant, must be conducted in accordance with the latest edition of *Standard Methods for the Examination of Dairy Products* published by the American Public Health Association or by another method approved by the local PHI office. The test results should be available to the PHI on request.

Records of test results should be kept for:

- 2 years after the date on which the analyses were done on raw milk; and
- 1 year for analyses done on pasteurized milk and milk products.

## Supporting Guidance Documents

The Milk Plant Standards provide guidance on pasteurization and other milk plant requirements. It should also be noted that provisions of the standards become legally binding when they are attached as a condition of a license to operate. The Standards can be found here: <https://www.saskatchewan.ca/residents/environment-public-health-and-safety/environmental-health/environmental-health-legislation>

The Food Processing Best Management Practices provide guidance on food production, which include milk and milk products. It can be found here: <https://www.saskatchewan.ca/residents/environment-public-health-and-safety/food-safety#food-processing-facilities>

## More Information

Contact your local public health inspector for further information on *The Food Safety Regulations*, The Milk Plant Standards or the Food Processing Best Management Practices. Contact information for SHA public health inspection offices is available at:

<http://www.saskatchewan.ca/residents/health/public-health/public-health-inspector>