

Two Types of Raw Milk: Laboratory Testing of Raw Milk for Pathogens Using Culture-Based Detection

The [BC Fresh Milk Project](#) has produced evidence showing that, by using modern production methods, raw milk can be produced pathogen-free, in other words, free from disease-causing bacteria and thus safe for human consumption. The following table compares test results from raw milk produced by conventional dairying methods with milk produced in the BC Fresh Milk Project by [Raw Milk Institute \(RAWMI\)](#)-trained farmers and farmers-in-training.

Raw Milk Produced Using HACCP-Based RAWMI Methods:								
Study	# milk samples tested	# pathogen tests performed	% Samples Positive for Target Pathogens					% samples with one or more pathogens
			<i>Campylobacter</i>	<i>E. coli</i> STEC	<i>Listeria monocytogenes</i>	<i>Salmonella</i> spp.	<i>Yersinia</i> spp.	
BC Herdshare Association (2023)	265	1060	0.0	0.0	0.0	0.0	N/A	0.0%

Published Research Studies of Raw Milk Produced Using Conventional Dairying Methods:								
Study	# milk samples tested	# pathogen tests performed	% Samples Positive for Target Pathogens					% samples with one or more pathogens
			<i>Campylobacter</i>	<i>E. coli</i> STEC	<i>Listeria monocytogenes</i>	<i>Salmonella</i> spp.	<i>Yersinia</i> spp.	
Jayarao and Henning (2001)	131	524	9.2	4.6	4.6	6.1	5.3	27%
Jayarao et al. (2006)	248	992	2.0	2.4	1.2	6.0	1.2	11%
Rohrbach et al. (1992)	292	876	12	N/A*	4.1	8.9	15.1	33%
Steele et al. (1997)	1720	6880	0.5	0.9	2.7	0.2	N/A	4.1%
Van Kessel et al. (2004)	861	1722	N/A	N/A	6.5	2.6	N/A	9.1%
Van Kessel et al. (2008)	183	183	N/A	N/A	N/A	11	N/A	11%

Notes:

- N/A: test data not available.
- The U.S. Centres for Disease Control and Prevention (CDC) have no record of any foodborne outbreaks caused by *Yersinia* in raw milk. It is also not identified as one of the main four dairy-related pathogens by the BCCDC and thus was not tested for in this project.

References:

- BC Herdshare Association 2023. [BC Fresh Milk Project](#). All testing performed by [MB Laboratories](#), Sidney, BC.
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