Katherine Coale
University of Vermont
UVM Student Research Conference
James M. Jeffords Center
Department of Nutrition and Food Science

Raw Milk: The Nutritional, Economic, and Public Health Impacts

Raw milk is defined as fluid milk that has not undergone a mild heat process (pasteurization) to destroy human pathogens. Raw milk advocates believe that this food is complete with carbohydrates, proteins, and fats that have not been degraded by pasteurization. The sale of raw milk is also described as a source of much needed economic activity for independent dairy farms. On the other hand national public health agencies site that raw or unpasteurized milk containing pathogenic bacteria such as *Salmonella*, *E. coli* 0157:H7, *Listeria*, *Campylobacter*, and *Brucella*, have caused outbreaks of illness leading to serious and sometimes life-threatening complications. My research compiled information from across the country on pending raw milk legislation and existing state laws. Further, unbiased science-based information on potential dangers associated with raw milk consumption was evaluated.

The debate over whether raw milk produces positive or negative health outcomes has been a topic of many recent legislative sessions. New laws surrounding the control of raw milk carry profound public health, economic, governmental consequences. There is little unbiased scientific information available for this political sphere.

A review of the scientific literature indicates that pasteurization does not substantially degrade the nutritional quality of milk. Pregnant women, children, and the immuno-compromised, etc. are at an increased risk to contract a food borne illness with the potential for long term consequences and should avoid the consumption of raw milk. Future work will evaluate the merits of testing protocols specified in raw milk legislation and whether required testing adequately addresses the presence/absence of pathogens of public health concern.