

## National Mastitis Council, Inc.

### Position Statement on the Consumption of Raw Unpasteurized Milk

The current growth in consumer demand for raw milk reflects a steadily expanding market for a range of locally produced, natural, unprocessed foods. To meet this increased demand, more dairy producers are becoming involved in the sale and/or distribution of raw milk.

Raw milk is milk from cows, sheep, goats and other animals that has not been pasteurized. Pasteurization of raw milk was introduced several years ago to prevent the spread of zoonotic milkborne diseases, especially tuberculosis and brucellosis. Enhanced nutritional qualities, better taste, and health benefits have all been advocated as reasons for consuming raw milk. However, there is a lack of science-based data to substantiate these claims. On the other hand, health risks have been associated with consumption of raw milk. A number of disease outbreaks have been reported in people following consumption of raw milk. For example, 12 documented outbreaks associated with raw milk consumption occurred in the U.S. between 2000 and 2008. From these outbreaks, 435 persons were diagnosed with foodborne bacterial infections traced back to the product, with more than 60 people hospitalized and five deaths including stillbirths due to listeriosis. During this same time period, there were only two documented outbreaks associated with consumption of pasteurized milk products; one involved *Listeria monocytogenes*, the other, *Salmonella* Typhimurium. Post-pasteurization contamination was implicated in both of these outbreaks although the specific mode of contamination was not identified.

Despite numerous studies that demonstrate risks associated with consumption of raw milk, people continue to consume raw milk. Based on recent and historical illnesses associated with consumption of raw milk, several organizations, agencies and associations including the U. S. Food and Drug Administration, the U. S. Centers for Disease Control and Prevention, the American Medical Association, the American Academy of Pediatrics, the American Public Health Association, the American Veterinary Medical Association, the U. S. Animal Health Association, the U. S. Department of Agriculture, the National Environmental Health Association, the International Association for Food Protection, Health Canada, European Food Safety Authority, Food Standards Australia New Zealand, and the World Health

Organization all have formal statements regarding the hazards associated with consuming raw milk and advocate that milk be pasteurized.

In the U. S., it is a violation of federal law to sell raw milk for consumer use across state lines and intrastate sale of raw milk is illegal in approximately 20 states. Among states that allow intrastate commerce in raw milk intended for human consumption, regulations and standards vary considerably. In some countries such as Canada, raw milk is not allowed to be sold.

Where raw milk is sold legally, strategies to reduce human health risks are needed. Appropriate regulatory minimum standards should be in place to ensure that labeling, sanitation during milking and levels of microbial contamination are effectively monitored and maintained. Targeted education alerting consumers to the potential foodborne hazards in raw milk (and other dairy products) are also needed. Regulations requiring that unpasteurized milk products meet specific hygiene and microbiological standards have worked effectively in other countries. Development of microbiological standards for raw milk appear to have merit but require methods that can detect a variety of different pathogens and will likely be cost prohibitive. Furthermore, testing of raw milk cannot be used as an effective alternative to pasteurization since the inability of a method to detect a pathogen does not indicate its absence.

A requirement for health warnings to be added and prominently displayed on the labels of raw milk may be a useful mechanism to warn consumers of the inherent risks associated with their consumption. Some U.S. states already require warning labels. However, intensive educational programs are needed to insure that vulnerable populations (the elderly, pregnant women, immunosuppressed people, and children) truly understand the risks that are associated with consumption of these products. From the standpoint of reducing risks at the farm level, development of pre- and post-harvest control measures to minimize fecal contamination of milk is critical to the control of pathogens. Some foodborne pathogens of humans are endemic, commensal organisms in dairy cattle and further research efforts to identify on-farm risk factors related to contamination of raw milk are

needed. It is likely that bacterial contamination could be reduced by improving hygiene during milking, although complete elimination of these risks is not feasible.

Of primary importance is the need to provide educational programs and materials that bring awareness of microbial safety hazards to dairy farmers, dairy workers, milk processors and consumers. Dairy producers supplying raw milk must also be well-informed of the risks and liabilities associated with the raw milk they sell, and their insurers should be informed of the activity. Enhanced educational efforts targeting consumers is essential to protect them from potential hazards associated with the consumption of raw milk. Efforts to educate policy makers, regulators and legislators are also necessary so that appropriate and necessary regulations and microbial standards for raw milk to be sold for human consumption can be established.

**The NMC, along with several other public health organizations, agencies and associations supports consumption of pasteurized milk and discourages the sale and consumption of raw milk. In states where raw milk is legally sold, NMC encourages strategies to reduce human health risks that are inherent in the consumption of these products. Such strategies include development of uniform regulations and safety standards; and consumer and producer education concerning production, sales and consumption of raw milk. Educational programs are needed to insure that vulnerable populations (the elderly, pregnant women, immunosuppressed people, and children) truly understand the risks that are associated with consumption of these products. While these efforts may be able to reduce risks associated with raw milk consumption, the only sure way to prevent raw milk-associated foodborne illness is for consumers to drink milk that has been pasteurized.**

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*The National Mastitis Council, Inc. (NMC) is a professional organization dedicated to the production of high quality milk. The NMC provides a forum for the global exchange of information related to udder health, milking management, milk quality, and milk safety. Founded in 1961, the NMC has members from more than 40 countries representing all segments of the dairy industry. For additional information: NMC, 421 S. Nine Mound Rd., Verona, WI 53593 USA. Phone: (608) 848-4615 Fax: (608) 848-4671. [nmc@nmconline.org](mailto:nmc@nmconline.org) [www.nmconline.org](http://www.nmconline.org)*