

National Environmental Health Association Position Regarding

Sale or Distribution of Raw Milk

Adopted: January 28, 2008

Editor's Note: The NEHA Board of Directors recently adopted this position in opposition to any legislation that would allow the sale or distribution of raw, unpasteurized milk to the consumer. NEHA strongly supports pasteurization before sale to the consumer. In addition, NEHA strongly supports consumer education about the dangers of consuming raw, unpasteurized milk. Below is the full text of the NEHA position.

The Cornell University Department of Food Safety has stated that "milk is a natural food. It is nutrient-rich: it contributes high-quality protein, essential vitamins and minerals including calcium to the diet" (Scott, 2002). Milk in its raw state contains a number of bacteria, some of which may be pathogenic such as enterotoxigenic *Staphylococcus aureus*, *Campylobacter*, *Escherichia coli*, *Listeria*, *Salmonella*, *Yersinia*, *Brucella*, and *Mycobacterium tuberculosis* (Headrick et al., 1998). This is the case for all dairy animals, including cows, goats, and sheep. The process of pasteurization has been used for a hundred years to destroy pathogenic bacteria that are present in raw milk (International Association for Food Protection [IAFP], 2008). The Centers for Disease Control and Prevention (CDC), the U.S. Department of Agriculture (USDA) (U.S. Food and Drug Administration, 2006), and the World Health Organization (WHO) (WHO, 2006) endorse the process of pasteurizing milk as a public health control measure.

Milkborne disease has been reduced greatly by the use of pasteurization. Prior to 1938, milkborne illness represented 25 percent of all foodborne illness outbreaks. As a result of efforts by the U.S. Public Health Service and individual states requiring the mandatory use of pasteurization, milkborne illness represents less than 1 percent of foodborne illness outbreaks. Cases of illness caused by the consumption of raw, unpasteurized milk have continued to occur (Headrick et al., 1998). FDA and CDC have noted the following outbreaks:

- December 2007: Three counties in North Carolina reported cases of *Listeria monocytogenes* from the consumption of illegally produced soft Mexican type cheeses made from raw milk (State of North Carolina, 2007).
- 2007: CDC reported 29 cases of *Salmonella typhimurium* infection that were associated with the consumption of raw milk and cheese made from raw milk in York County, Pennsylvania (CDC, 2007b).
- 2007: CDC's *Morbidity and Mortality Weekly Report* for the week of March 2, 2007, noted that from 1998 to May of 2005 CDC identified 45 outbreaks of foodborne illness that implicated unpasteurized milk, or cheese made from unpasteurized milk. They noted: "These outbreaks accounted for 1,007 illnesses, 104 hospitalizations, and two deaths" (CDC, 2007b).
- 2005–2006: The U.S. Food and Drug Administration recorded more than 10 outbreaks caused by the consumption of raw milk or raw milk cheese (FDA, 2007).
- 2004: The National Association of State Departments of Agriculture (NASDA) survey indicated that 29 states have recorded milkborne outbreaks traceable to raw milk consumption (FDA, 2007).
- 2002–2003: Two children were hospitalized in Ohio for infection with *Salmonella enterica* serotype *typhimurium*. These children and 60 other people in Illinois, Indiana, Ohio, and Tennessee developed bloody diarrhea, cramps, fever, chills and vomiting from *S. typhimurium* tracked to consuming raw milk (CDC, 2003).

- 2001: An outbreak of *Campylobacter jejuni* infections from drinking raw or unpasteurized milk occurred in Wisconsin associated with milk procured through a cow-leasing program (CDC, 2002).
- 2000–2001: In North Carolina, 12 adults were infected with *Listeria monocytogenes* linked to homemade, Mexican-style fresh soft cheese produced from contaminated raw milk sold by a local dairy farm. Ten of the 12 victims were pregnant women, and infection with the bacterium resulted in five stillbirths, three premature deliveries, and two infected newborns (CDC, 2001).
- 1998: In Massachusetts, 66 people received injections to protect against potential exposure to rabies after drinking unpasteurized milk from a local dairy. A cow that died at the dairy was found to be infected with rabies. Transmission of the rabies virus through unpasteurized milk, although not the common route of infection, is theoretically possible according to the Centers for Disease Control and Prevention (CDC, 1999).

Moreover, the occurrence of outbreaks due to raw milk has been found to correlate with the legal status of raw milk sale within a state. In a review of raw milk-associated outbreaks reported to CDC during 1972–1992, Marcia L. Headrick, D.V.M., M.P.H., and colleagues found that the rate of raw milk-associated outbreaks was higher in states in which the sale of raw milk was legal. The authors concluded that banning the intrastate sale of raw milk could reduce the number of milk-associated outbreaks (Headrick et al., 1998).

Recently, advocates of the consumption of natural food have approached legislators in a number of states to allow the sale of raw milk to the consumer. They have contended that the pasteurization process destroys the nutritional benefits of milk. In some instances they have pushed for the adoption of legislation that would allow individuals to purchase a portion of the production of a milk cow through an arrangement known as “Cow Share.”

John Sheehan, Director of the U.S. Food and Drug Administration’s Division of Dairy and Egg Safety, stated that research showed that there is no significant difference in the nutritional value of pasteurized and unpasteurized milk. He indicated that the caseins, the major family of milk proteins, is largely unaffected and any modification in whey protein that might occur is barely perceptible (Bren, 2004). Sheehan further stated: “Raw milk is inherently dangerous and should not be consumed. Raw milk continues to be a source of foodborne illness and even a cause of death within the United States.... Pasteurization destroys pathogens and most other vegetative microbes which might be expected and have shown to be present in milk” (Testimony of John F. Sheehan, 2007).

A number of regulatory, educational, and public health organizations have issued position papers regarding the dangers associated with the consumption of raw milk. These include:

- Association of Food & Drug Officials (AFDO),
- American Public Health Association (APHA),
- American Medical Association (AMA),
- American Academy of Pediatrics,
- U.S. Animal Health Association,
- National Association of State Public Health Veterinarians,
- Council of State and Territorial Epidemiologists,
- House of Delegates of the American Veterinary Medical Association,
- U.S. Food & Drug Administration, and
- International Association for Food Protection (IAFP).

The National Environmental Health Association recognizes the nutritional value of milk, and it further recognizes the overwhelming scientific evidence that raw milk can transmit pathogenic bacteria to the consumer. The National Environmental Health Association further recognizes the overwhelming scientific and public health evidence that pasteurization of milk has been proven to be a sound method of preventing milkborne disease. NEHA therefore

- Opposes any legislation that would allow the sale or distribution of raw, unpasteurized milk to the consumer. NEHA further opposes arrangements such as “Cow Shares,” “Herd

Sharing," bartering, exchange, or any other action that would allow the consumer to obtain a portion of the production of raw, unpasteurized milk from a bovine, ovine, or caprine animal.

- Supports legislation that requires pasteurization of milk prior to sale or distribution to the consumer.
- Supports efforts to educate the consumer about the dangers inherent in consuming unpasteurized milk or products made from raw milk.

The National Environmental Health Association has long supported preventive measures to protect the safety of food for the public. NEHA acknowledges the importance of milk as source of nutrition and is concerned about the safety of milk and products made from milk. NEHA's position regarding raw milk is consistent with sound, science-based, preventive public health measures.

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