

## **Dangers of Raw Milk**

Whether you love or hate milk, you should be able to trust that it won't make you or your children sick. And that's precisely why the pasteurization of milk, a process that heats the milk for a few seconds to kill any organisms that may be present, is a highly-effective public health measure. It is parallel to the disinfection of drinking water: it is not left up to drinking water system operators or consumers to choose. It is mandatory. Like water, it is not easy to tell if milk has been treated to make it safe to drink. When we turn on our kitchen taps, we expect that the water is safe to drink. That is also the case when we buy a litre of milk at our local grocer.

Some believe that consumers should have the right to choose whether to drink pasteurized or raw milk. They believe that good dairy practices alone can eliminate the threat of disease from milk. Although it may be hard to believe that something as nutritious as milk can be dangerous, prior to pasteurization, milk was responsible for massive human illness: Typhoid, Tuberculosis, Brucellosis, Listeria, Yersinia, Salmonella, Toxoplasmosis, Hemorrhagic Colitis, Campylobacter and Q Fever, among others, were all transmitted to humans through cow's milk. The harm caused by unpasteurized milk included acute illness such as fever, bloody diarrhea, and vomiting and chronic conditions such as weight loss, weakness, osteoarthritis, miscarriage or stillbirth, birth defects, renal failure and death.

Prior to pasteurization, in 1938, milk-borne outbreaks of human disease accounted for 25% of all food and water-borne outbreaks in the U.S. Since pasteurization, these have become rare. Although the outbreaks have virtually disappeared, the diseases are not merely historical; they persist in our environment, in the fields and on the farms. As recent as 2002, tuberculosis discovered in dairy cattle in Peterborough, Ontario led to the destruction of the entire herd and a quarantine of all farms in a 10 kilometer radius.

A 2003 review of milk-borne outbreaks in England and Wales, where raw milk can be sold, found that unpasteurized milk continued to play a significant role in the spread of *E. coli* and *Campylobacter* infections to humans. Closer to home, public health units continue to report human illness linked to the consumption of unpasteurized milk. Since the introduction of a web-based infectious disease reporting system in Ontario, there have been human cases of *E. coli*, *Campylobacter*, *Listeria*, *Yersinia* reported. In many of these outbreaks, young children and infants have been among those sickened.

The recent crusade of an Ontario farmer for the right to sell raw milk has rekindled the debate about pasteurization. Most, if not all, of the purported benefits of drinking unpasteurized milk remain unsubstantiated or have been refuted. The health claims made by those who would seek to undo our current public health legislation are pure fiction. In England and Wales, where the sale of raw milk is still permitted, interventions such as registration, inspections, and testing have failed to eliminate the risk of infection. In Britain, raw milk, like packages of cigarettes, bears a health warning. The trouble with that approach is that smokers can read. Infants, toddlers and young children can not.

Pasteurization of milk is only one of the measures taken by society to ensure that milk is safe to drink. But it is a fundamental one. It can not guarantee that all milk and milk products are completely safe, just as immunization cannot guarantee that a child is 100% protected from measles or chicken pox. However, thanks to the pasteurization of milk, dairy products have become an important part of the Canadian diet. The inclusion of dairy products has contributed to the health and well-being of those who consume them. Canada's Pediatric Society warns parents that children should only be given pasteurized milk to drink. National Medical and Veterinary associations in the U.S. assert that only pasteurized milk and dairy products be sold for human consumption. Turning the clock back on such an easy and effective public health measure such as the requirement that all milk be pasteurized in order to be sold would be a reckless act, open to subsequent legal action.

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