

DAIRY FOOD SAFETY

The dairy industry takes dairy food safety very seriously. Throughout the years, dairy farmers and processors have worked closely with the Food and Drug Administration (FDA) and state regulatory officials to establish safety regulations and practices including the *Pasteurized Milk Ordinance* and the *Hazard Analysis and Critical Control Point System*. As a result of these efforts, American milk and dairy products are among the safest and most highly regulated foods in the world.

Milk Safety Regulations and Procedures

- The Pasteurized Milk Ordinance (PMO) is a set of requirements for milk production, pasteurization, product safety, milk hauling, equipment sanitation and labeling. It is one of the most effective tools to protect the safety of Grade A milk. Today, less than 1 percent of foodborne illness outbreaks in the U.S. involve dairy products.¹
- Milk is routinely sampled and tested by state regulatory authorities according to procedures outlined in the PMO. In addition, FDA and Environmental Protection Agency (EPA) monitor compliance with the provisions of the PMO.¹
- The Hazard Analysis and Critical Control Point (HACCP) System is a structured and scientific process to help ensure food safety. It is a system of overall process control that identifies potential hazards (e.g., harmful microorganisms or their toxins) and critical situations (e.g., post-processing contamination) and identifies appropriate control steps to be taken before they occur to minimize these hazards. HACCP is used by many food industries, including the dairy industry.²⁻³

The Role of Pasteurization

- Since its introduction over a century ago, pasteurization has been recognized around the world as an essential tool for ensuring that milk and dairy products are safe. It is a simple, effective method to kill bacteria without affecting the taste or nutritional value of milk.¹
- Pasteurization involves heating raw milk according to one of several time and temperature combinations defined in the Pasteurized Milk Ordinance (PMO).¹
 - In the U.S., pasteurized milk must be heated at a minimum of 145°F for 30 minutes or at greater than 161°F for 15 seconds.¹
- The dairy industry, the Centers for Disease Control (CDC), the FDA and many health and scientific organizations strongly support pasteurization of milk.⁵

An Antibiotic-Free Milk Supply

- Every tank load of milk is strictly tested for animal drug residues. In 2003, less than one-tenth of one percent (0.067%) of loads tested positive for animal drug residues, including antibiotics. Any tanker that tests positive is disposed of immediately, never reaching the public.^{1,6}
- The U.S. dairy industry conducts more than 3.5 million tests each year, on all milk entering dairy plants, to ensure that antibiotics are kept out of the milk supply.⁶ If a cow is being treated with antibiotics, she is taken out of the milking herd and not put back into the herd until her milk tests free of antibiotics.

The Facts About Hormones

- Milk from rbST-supplemented cows is safe for human consumption. This has been affirmed and reaffirmed since the use of rbST was approved in the early 1990s.
- Bovine somatotropin (bST) is a hormone that is naturally produced by cows; it directs how energy and nutrients are used for growth and milk production. rbST is a synthesized copy of this naturally occurring hormone. Studies carried out by the FDA, state agricultural departments and scientists have found that there is no significant difference between milk from rbST-supplemented and non-rbST-supplemented cows.⁷⁻⁹
- There are several reasons why bST, which is naturally present in cow's milk, does not have any physiological effect on humans consuming the milk. bST is species-specific, which means that it is biologically inactive in humans. Also, pasteurization destroys 90% of bST in milk. Furthermore, any trace amounts of bST ingested in milk are broken down into inactive fragments (i.e., constituent amino acids) by enzymes in the gastrointestinal tract, just like any other protein.^{8,9}

References

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