

From hazards to safety in the manufacture of dairy products

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Milk and milk products can be important source of foodborne pathogens therefore different kind of processing technologies are applying for consumers' health protection. Usually milk is pasteurized, but the question - why the dairy industry should be concerned about the microbial quality of raw milk? – is still actual.

There are several reasons, including (1) outbreaks from the consumption of unpasteurized milk, (2) unpasteurized milk is consumed directly by dairy producers, farm employees, and their families, neighbours, and raw milk advocates, (3) unpasteurized milk is consumed directly by a large segment of the population via consumption of several types of cheeses manufactured from unpasteurized milk and supply chain is difficult to trace, (4) entry of foodborne pathogens via contaminated raw milk into dairy processing plants can lead to persistence of these microorganisms in biofilms, and subsequent contamination of processed milk products, (5) pasteurization may not destroy all foodborne pathogens in milk, and (6) inadequate or faulty pasteurization will not destroy all foodborne pathogens. Furthermore, some pathogens can survive and thrive in post-pasteurization processing environments, thus leading to recontamination of dairy products. These pathways pose a risk to the consumer from direct exposure to foodborne pathogens present in unpasteurized dairy products as well as dairy products that become re-contaminated after pasteurization.

One of the tools for providing safe products production in dairy industry is a implemented food safety management system. Which is a most perspective and valuable system for maintenance of food safety these questions will be analysed and evaluated during the planned seminar?

The purpose of the seminar is to discuss advantages and disadvantages of milk processing as well as to analyse the application of novel technologies and processes in dairy industry for dairy products quality maintenance. The seminar also explores the link between food quality and nutritional value of milk and milk products.

The following questions will be discussed during the seminar:

1. Raw milk quality, its influencing factors
2. Influence of milk processing technologies (including thermal treatment and novel non-thermal methods for milk processing) on milk and milk products quality
3. Traceability and monitoring procedures for safety assurance.
4. Food safety management systems in milk and milk products production enterprises.