

# Artisan Cheese Food Safety Forum: 2015 Conference Summary

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## OVERVIEW

The first Artisan Cheese Food Safety Forum, held in early August of 2015, brought together a diverse group of industry stakeholders (e.g., government representatives, manufacturers, retailers, consumer and industry groups, trade associations, scientists, and food safety educators) to discuss research, education and extension needs and foster collaboration to enhance the safety of artisan and farmstead cheese.

## CONFERENCE SUMMARY

The recent increase of consumer interest in, and demand for, artisan and farmstead cheese is stimulating rapid industry growth. On-farm production of cheese and the use of raw milk, as well as limited resources, capital, and technical expertise to implement robust food safety programs, present unique food safety concerns. The first Artisan Cheese Food Safety Forum was held in Providence, Rhode Island, on August 2–3, 2015 to foster collaborative efforts to enhance artisan cheese safety. Continued production of safe cheese will help to preserve and enhance consumer confidence and thus sustain demand and the long-term economic viability of the industry. Eighty-five participants representing a diverse group of stakeholders, primarily from the U.S., including representatives from governments, consumer and industry groups, and trade associations, as well as producers, retailers, scientists, and food safety educators, came together to address research, education, and extension needs to enhance the safety of artisan and farmstead cheese. Sessions included presentations on topics related to food safety challenges, regulatory approaches, and guides to best practice, as well as artisan cheese food safety research, consulting, outreach, and training.

Several artisan producers were on hand to discuss the importance of small-scale value-added dairying on the economic viability of communities and the impact of food safety and the regulatory environment on their businesses. Training and outreach in states such as Wisconsin and Vermont have contributed to the impressive growth of several artisan cheese companies. Without such support, rapid growth and aging facilities can strain food safety efforts on a number of fronts. Kenny Mattingly, of Kenny's Farmhouse Cheese in Kentucky, explained how his company's focus on growth, along with a lack of cheese food safety education, eventually led to a *Listeria monocytogenes*-related recall.

Seana Doughty, of Bleating Heart Cheese in California, also used a recent recall experience as a case study to detail concerns related to federal food safety policies, programs, and procedures, in addition to training needs. Cheesemaker Andy Hatch, of Uplands Dairy in Wisconsin, explained that although the business is very confident in the quality and safety of its products, the uncertain regulatory climate has made it hesitant to invest in growth, thereby limiting the company's economic impact in its area. Andy Kehler, of Jasper Hill Farm in Vermont, echoed these concerns, explaining that the strained relationship between small producers and regulatory agencies, including the U.S. Food and Drug Administration (FDA), threatens the future of the products on which the business has been built. He explained the business can manage food quality and safety risks but can't manage the risk presented by unpredictable interpretation of policy and science used to guide regulatory approaches. Among other items, Catherine Donnelly, from the University of Vermont, discussed disconnects between international policy, scientific evidence, and recent policy changes in the U.S. regarding non-toxigenic *Escherichia coli* in cheese.

Representing the FDA, Obianuju Nsofor discussed U.S. standards for domestic and imported cheese, the importance of environmental sampling, and food safety concerns associated with artisan cheese production. Allen Saylor, of the Center For Food Safety and Regulatory Solutions, also provided an overview of the Food Safety Modernization Act and its impact on state and federal regulators, retailers, cheesemakers, and the artisan cheese industry as a whole. As previously mentioned, this and other recent FDA activities, has artisan cheesemakers concerned that impending regulation will make it all but impossible to produce many of the raw milk cheeses available today. Alison Lansley, of the Australian Specialist Cheesemakers' Association, described similar concerns within the small but growing, non-traditional cheese industry in Australia. Producers there are concerned that the strict conditions and regulatory oversight detailed under the new standard for the production of raw milk cheese finalized in 2014 will be expensive and hard to meet. It is not clear if the standard can be met successfully and profitably, particularly with respect to the far fewer barriers to raw milk cheese imports. Faced with similar concerns from cheesemakers, Helene Couture, of Health Canada, explained that regulations in Canada

are similar to those in the U.S. and that previous efforts to restrict the use of unpasteurized milk in cheese production were met with strong opposition. In contrast, the province of Quebec recently published its own set of regulations, in which producers have the option of not aging cheese for 60 days as long as they meet stringent requirements and complete mandatory training. Controls over production of raw milk and raw cheese, end-product testing, and labeling to allow consumers to make an informed choice could increase cheese safety. However, there is a need to investigate what kinds of requirements and practices could minimize the risk of contamination.

For an international perspective, Bronwen Percival, of the Specialist Cheesemaker Association (SCA) and Neal's Yard Dairy (NYD) in the United Kingdom, provided an example of an open and collaborative relationship between industry and regulators to achieve food safety. The SCA promotes cheesemaking through the development of a third-party audit standard for cheese businesses (SALSA plus SCA), training for health inspectors, and working with government scientists and regulators to help identify, understand, and control risks. As an example, the Assured Code of Best Practice (COBP), developed by the SCA, defines standards that producers and regulators agreed on and has been adapted for use as a legal document. Regular new additions are released and made available to cheesemakers and distributed freely to health inspectors. Retailers such as David Lockwood, of NYD, help suppliers assess and revise their quality systems through using the SCA COBP and the SALSA SCA standard. Based on the quality and success of the SCA COBP and the potential to move in a similar collaborative direction, the American Cheese Society (ACS) Regulatory and Academic Committee created a COBP to provide consistent and current information to cheesemakers and regulators across the U.S. According to Ranee May, of Ranee May Consulting, the guide was released this year and exists as a living document to be reviewed and modified on the basis of input from the committee, industry experts, food safety officials, and final users. Neville McNaughton, of Sanitary Design Industries, LLC, provided a comprehensive overview of the food safety risks and challenges in facility design and construction, based on his experience working with the artisan cheese industry. This important information, which is rarely included in food safety training, is to be incorporated into the ACS COBP. Tom Hedge, of the Innovation Center for U.S. Dairy, discussed the development of a *Listeria* Control Guidance Document that could serve as a reference for best practices as well.

Although many artisan cheese producers may be exempted from the preventive controls rule of FSMA and subject to modified requirements on the basis of size or scope, there is a continuing need for assistance in the development of food safety plans. The Food Safety Preventive Controls

Alliance (FSPCA) is one way for food safety educators to get involved. Purnendu Vasavada, of PCV & Associates, LLC, explained the FSPCA curriculum layout and the potential role of stakeholders in the development of artisan cheese-focused FAQs and technical outreach. The development of an artisan cheese-specific training module was also discussed. Catherine Cutter, from the Pennsylvania State University (PSU), described preliminary results of a needs assessment addressing food safety issues associated with farmstead dairy establishments in Pennsylvania for use in the development of a food safety/sanitation training tool. The assessment identified issues with sanitation, personal hygiene, and cross-contamination, but also identified the need and desire for cheese food safety training. Several educational opportunities are currently offered through the national dairy centers under Dairy Management Incorporated, land grant colleges, and other institutions. In addition to the classes that comprise the Basic and Advanced Cheese Certificate programs, Cornell University currently offers a Food Safety Plan Development Workshop tailored to artisan producers, as described by Senior Extension Associate Rob Ralyea. A unique partnership of Wegmans Food Markets and Cornell University, established to develop the New York State artisan cheesemaking industry, has also led to development of food safety templates and forms available to the public online. PSU has also made several resources, including downloadable training materials and tip sheets, available online free through its dairy food processing website. Kerry Kaylegian, at PSU, also conducts custom training, annual workshops and short courses, and provides technical support to processors in the state. Cheese-specific food safety training in Canada is relatively scant according to Art Hill, from the University of Guelph, but the program offered through the Institut de Technologie Agroalimentaire in St. Hyacinthe, Quebec is required for all cheese makers in Quebec producing soft and semi-firm cheese from raw milk without mandatory aging, as previously mentioned. The only training currently offered in multiple locations is the Artisan/Farmstead Cheesemaker Food Safety Program. This one-day workshop, developed and taught by Dennis D'Amico of the University of Connecticut, in collaboration with the Innovation Center for U.S. Dairy, is offered regionally throughout the U.S., with additional support from Whole Foods Market (WFM), regional dairy promotional boards, and State Departments of Agriculture, among others. To date, 20 regional workshops have been held, with over 750 attendees.

Given the widespread geographic dispersal of artisan cheesemakers and the limited number of locations for training opportunities, new methods to reach cheesemakers in remote areas are needed. Clint Stevenson, of North

Carolina State University, described the benefits of distance learning and provided examples of how it could be applied to training artisan cheesemakers in food safety. Michelle Lee discussed the ways in which the ACS delivers food safety education through its newsletter, webinars, and education sessions at the annual conference, as well as through a body of knowledge maintained on its website. From a consulting standpoint, Michael Kalish, of Food Safety Guides, discussed the challenges associated with the current two-day training model and potential alternative approaches. Suggested improvements to the current approach include using Internet tools to enable collaboration anytime and anywhere, hosting remote meetings so as to eliminate travel time and site expenses, and sharing of templates and resources with real-time editing.

Perhaps the most comprehensive cheese food safety program is in place in Wisconsin, where aspiring cheesemakers must become licensed cheesemakers before they can produce cheese for retail markets. Matt Mathison, of the Wisconsin Milk Marketing Board, described the industry-led Committee for the Assurance of Wisconsin Dairy Product Safety, formed in 2001 to address food safety issues with the understanding that food safety is not competitive. The WI Dairy Food Safety Manual serves as a reference for developing a Hazard Analysis Critical Control Point Plan (HACCP) and describes an audit program to dairy plants. Marianne Smukowski described the Wisconsin Center for Dairy Research, which provides technical assistance to Wisconsin companies in the areas of safety and quality audits, preparation for regulatory audits, sanitation program reviews, and overall Good Manufacturing Practices reviews. The Center also assists in development of HACCP plans and programs, provides technical support, serves as regulatory liaison, and provides education through workshops and on-site visits. Although such an organization is not possible in all states, participants agreed that this is certainly an example of a model program.

The need for enhanced food safety education is also linked to impending requirements originating in the supply chain. Major retailers of artisan cheese, including Wegmans Food Markets, WFM, and Lund's & Byerly's, are also encouraging compliance of small suppliers to reduce risk through education, to help ensure consistent product and brand protection for both suppliers and retailers. This group formed the Retailers Consortium in 2013 to establish a uniform audit for local producers. Completion of a basic food safety for cheesemakers audit (level one, available online) is required for products to be sold in the stores comprising the Consortium, according to Cathy Strange (WFM) and Cathy Gaffney (Wegmans). Martin Fowell, of Mérieux NutriSciences, also emphasized the importance

of audits and the benefits of auditing and consulting services to the artisan cheese industry. Distributors of artisan and specialty cheese, including Sysco Corporation, are also working to establish requirements for suppliers, as described by Jean Fuchs of Sysco. As this sector grows, Sysco is encouraging suppliers to attend food safety workshops highlighting the need for a harmonized program. To tie all this together, Debra Garrison, from Primus Labs, described the Local Farmer program as an opportunity for artisan cheesemakers to showcase their efforts at food safety implementation to buyers, thereby motivating change. Through this program, procurers can create profiles where they can publicly post food safety compliance requirements, allowing producers to identify steps needed to be eligible to sell to the procurer. Procurers can also use the program to search for producers and see any food safety-related documents, including those related to audits and training.

The Forum showcased the work being done to support cheesemakers and to enhance the safety of artisan cheese. Although effective local and regional food safety education exists for some stakeholders, there are variations across programs and most areas remain underserved. There is a need to develop a unified plan that can be offered on a regional basis but that shares the same core components, as well as a single clearinghouse for resources that can be coordinated on a national level. As an adjunct to in-person workshops, distance learning would help reach additional stakeholders. Future forums will continue this dialog and build on these collaborations to help ensure the viability of this burgeoning industry.

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