



Innovation Center for U.S. Dairy Food Safety Committee Overview

2024

Food Safety Committee

Strengthen manufacturing practices in all dairy processing facilities and advance science-based tools to diminish food safety risks that could compromise the reputation of the U.S. dairy industry



Core Strategies



Pathogen Control



Supply Chain



Artisan



Guidance Documents



Research



Traceability

Industrywide Sharing of Best Practices to Drive Continuous Improvement

- Regular sharing of leading-edge and best practices via leadership group and pools of experts
- Targeted summits and expert best practice sharing groups
- Food Safety Culture Programs, Assessment, and Dashboard

Disseminate Best Practices via Training, Tools, & Guidance Documents

- Dairy Plant Food Safety & Supply Chain workshops
- Pathogen Controls Guidance Document, Traceability Guidance Document, tools/checklists
- Presentations by industry and academic experts on behalf of the IC (Conferences, Webinars)
- Share results and progress as appropriate with regulatory partners

Support Artisan, Farmstead, and Small Dairy Manufacturers

- Tailored training classes, online courses, and resource websites
- Hands-on food safety plan support and free 1:1 coaching (USDA NIFA Grant)

Identify New Solutions Through Research

- Listeria Research Consortium to develop new tools and leverage academic thought leaders
- Pathogen research through NDC, utilize Dairy Research Centers to aid small/farmstead dairy processors



Jeremy Travis
Chair



Ron Dunford
Vice Chair



Food Safety Operating Committee



Tim Stubbs
Food Safety Staff Lead



Chad Galer
Food Safety Staff



Rich, Adam, Dave
Consultants
Training, Best Practice Teams



Mary Wilcox
Consultant
Artisan Cheese & Ice Cream



Jim Mueller
Consultant
Supply Chain, Cheese, Brine

**Pathogen Controls
Tools & Workshops**

**Best Practice
Sharing Groups**

**Artisan Cheese &
Ice Cream Teams**

**Guidance
Documents**

Research Consortium

- Dry Dairy Best Practices
- Pathogens Guidance
- Brine Best Practices
- Foreign Material
- Workshops

- SafeIceCream.org
- SafeCheeseMaking.org
- Artisan Workshops
- Simplified Guides
- Hispanic Cheese

- Traceability
- Pathogen Controls
- Hygienic Separation
- Supplier Controls
- Self-Audits

- Listeria Controls
- Advanced Sanitation
- Artisan/QF research
- Brine Research
- Cold Plasma

120+ Subject Matter Expert Volunteers

Operating Committee

- Jeremy Travis - **Hilmar Cheese & Ingredients**
- Ron Dunford – **Schreiber Foods**
- Karen McCarty – **Agropur USA**
- Staci Champaign - **CDI**
- Alejandro Mazzotta - **Chobani**
- Open- **DFA**
- Rory McCarthy - **Grande**
- Ryan McDonnell - **Foremost Farms**
- Jonathan Fischer - **HP Hood**
- Phil McMillan - **Land O'Lakes**
- Mike Cureton - **Leprino Foods**
- Sudeep Jain - **MMPA**
- Brad Suhling - **Prairie Farms**
- Don Pagh - **Saputo**
- Brent Mann – **Sargento**
- Staci Richardson - **Schreiber Foods**
- John Boortz - **Tillamook**
- Dave Kedzierski - **UDA**
- Brian Kraus – **Wells Enterprises**
- Steve Ballard - **Ballard Cheese**
- Tim Stubbs, Chad Galer, John Allan, Clay Detlefsen, Jonathon Gardner - **DMI, IDFA, NMPF, USDEC**
- Jim Mueller, Mary Wilcox, Rich Holtquist, Adam Bolain - **Facilitators**



Innovation Center Food Safety – Teams & Partnerships

Innovation Center Committee



Artisan Cheese Advisory Team



Artisan Ice Cream Advisory Team



Strategic/Activation Partners

Listeria Research Consortium



Food Safety Guidance Documents

www.usdairy.com/foodsafety

2013/2020 Traceability

Guidance for Dairy Product Enhanced Traceability

Voluntary Practices and Protocols for
Strengthening the U.S. Dairy Supply Chain

Sept. 10, 2013



2017 *Listeria* Guide in Spanish

CONTROL DE *Listeria monocytogenes*

GUÍA PARA LA INDUSTRIA LÁCTEA DE EE. UU.



Framework for Establishing Hygienic Separation in Continuous Dairy
Powder Systems in the Event of a Pathogen Positive in Finished Product

Artisan Guides



Resources for Growing Your
Cheese Business Safely



Recursos para acrecentar su
negocio de producción de quesos
de manera segura

2015/2016 *Listeria* Controls Guidance for the U.S. Dairy Industry



Issued: October 15, 2015
Revised: June 14, 2017

2019/21/24 Pathogen Controls

CONTROLLING PATHOGENS IN DAIRY
PROCESSING ENVIRONMENTS

GUIDANCE FOR THE U.S. DAIRY INDUSTRY



HEALTHY PEOPLE • HEALTHY PRODUCTS • HEALTHY PLANET

Issued: Draft

Supplier Controls Packet



Innovation Center for U.S. Dairy
June 15, 2022 - Version A



Resources for Growing Your Business Safely
Ice Cream Inclusions
Food Safety Guide



Developed in collaboration with a team of small business owner, processor, trade
association, and academic volunteers.

Dairy Plant Food Safety Workshops

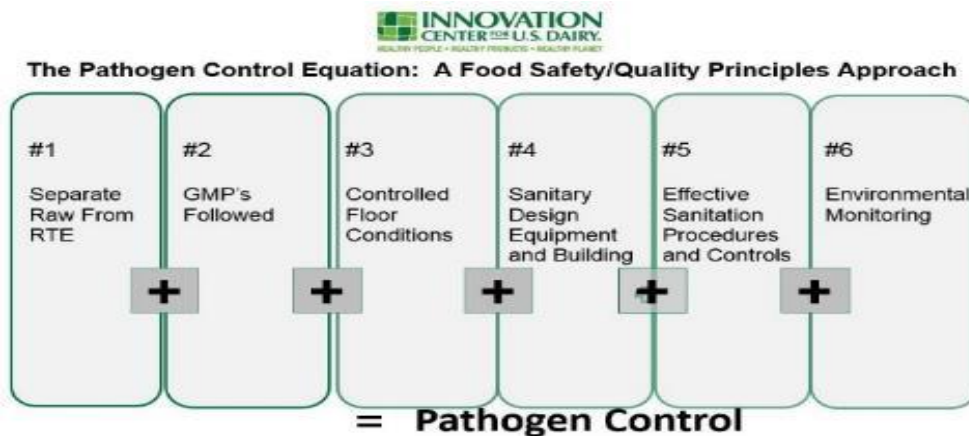
- Two-day workshops
- Over 2878 trained at 53 workshops
- Volunteer industry expert trainers
- Lectures, hands-on exercises, peer Q&A
- Traditional and “Dry / Powders” content
- Online tools, guides, checklists

The Innovation Center Food Safety Committee Announces 2024
Dairy Plant Food Safety Workshop

April 30 - May 1 | **Greeley, CO**
Hosts: Leprino Foods & Hilmar Cheese

July 30 - 31 | **Madison, WI**
Hosts: Foremost Farms USA & Sargento Foods

October 1 - 2 | **Batavia, NY**
Hosts: HP Hood & Wells Enterprises



Additional information at - www.usdairy.com/foodsafety



Supplier Food Safety Management Workshop

- One or Two-day workshops
- Volunteer industry trainers
- Started 2011, 18 sessions, 317 trained
- Audience of supplier quality, quality, purchasing, and suppliers
- Risk identification and mitigation tools
 - Helps create FSMA Supplier Controls
 - Risk Assessments and case studies
 - Food Safety Guidance Document



Overall Supplier Risk	
Overall Supplier Risk	Low
Material Development	Supplier
Ingredient	Physical
Chemical	Biological
Microbiological	Hazard
Supplier	Location
Food Safety	Quality
Hazard	Overall Risk

Artisan Dairy Food Safety Platforms

Deliver accessible training and tools for small, artisan, & farmstead dairy

➤ Artisan Cheese Advisory Team

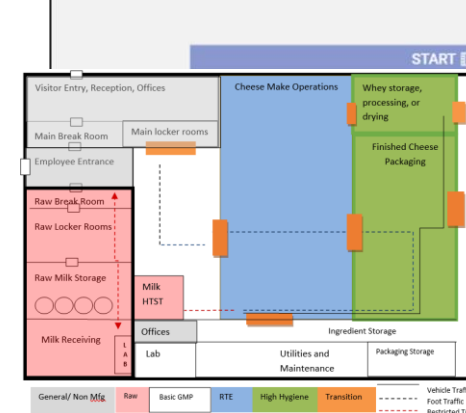
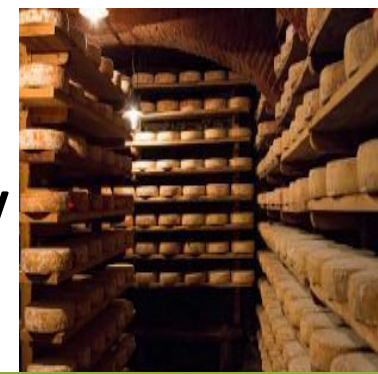
- 2012 - 2016, 21 sessions, 750 Artisans and Regulators trained
- Online class launched 2017 bit.ly/3vtOOyM
- Consolidated guides and resource website www.safecheesemaking.org
- Online training and resources www.usdairy.com/artisan

➤ Artisan Ice Cream Team since 2018

- Launched online Ice Cream FS November 2019 bit.ly/36tUPQh
- Consolidated guides and resource website www.safeicecream.org
- Online training and resources www.usdairy.com/artisan

➤ Food Safety Plan writing sessions & National Support Center

- 2x3 year, \$400K USDA NIFA Grants for nationwide classes & virtual
- National Artisan FS center at Cornell
- FREE Support /consulting at DairyFoodSafety@Cornell.edu



Small Ice Cream Maker Outreach



Learning from outbreaks - Understanding your ingredients and supplier control

In June 2005, four people in Minnesota became ill from eating a food that was contaminated with a rare Salmonella strain. The state department of health began their outbreak investigation with the normal questions: "Where did you eat?", "What did you eat?", and "Did you eat any of these things?". All four people had recently visited one of two locations of a national ice cream retail shop and all four had eaten the same flavor of ice cream: cake batter. As the investigation expanded, a total of 25 people in 9 states were confirmed to be infected with the same Salmonella strain over a period of 6 weeks. All had eaten cake batter ice cream from the same retail chain. What is special about cake batter ice cream?

This cake batter ice cream was made using a prepackaged yellow cake mix that included spray-dried egg whites and flour, among other "low risk" ingredients like sugar, salt, etc. The cake mix was simply blended in with a standard ice cream base, with no additional processing steps, and then frozen to create the new flavor. While the resulting ice cream may be delicious, a standard cake mix is not considered ready-to-eat - it was designed to be made into a complete cake batter and baked. This new and unintended use of the cake mix led to consumer illnesses linked to the ice cream retailer.

What can we apply from this outbreak?

1. Innovation is an important component of your business strategy; however, any new ingredients should be evaluated for the hazards that they might introduce into your product.
2. If you want to introduce new ingredients to your products and process, think about how the ingredient is typically used, how your usage is different and what that could mean for food safety.
3. Develop a relationship with your supplier to benefit from their food safety knowledge and find an acceptable strategy to minimize risk.

INNOVATION CENTER FOR U.S. DAIRY.
HEALTHY PEOPLE • HEALTHY PRODUCTS • HEALTHY PLANET





Jenita Krasovic, Zylitha Cook, Jeni Cole
Specialist of Food Safety and Technology, Dairy Innovation

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growing your business safely

Growing Your Business Safely



National Map of Food Safety Resources

FOOD SAFETY SUPPORT HOT-LINE FOR SMALL/ARTISAN DAIRY PROCESSORS

Not sure where to start? Our network of food safety experts from Universities across the US are here to help you take the next step by providing free one-on-one plan consultation and review.

 315-787-2600

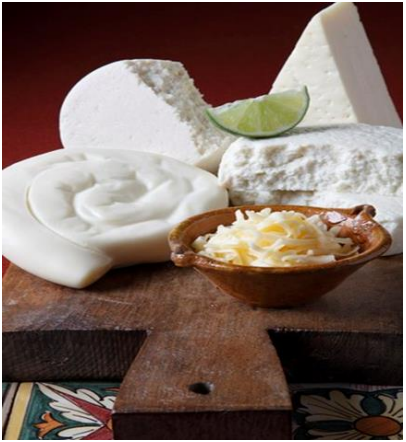
 Dairyfoodsafetycoach@cornell.edu



Contacts Include:

- ✓ University, Extension, Guilds, College Creamery/Fsci Depts, USDA Regional Food Safety Centers
- ✓ State/Regional Check-Off, and Scale-up Assistance Organizations





Hispanic Latino Style Cheese Best Practice Team

www.usdairy.com/spanish

- Sub-team focused on outreach and providing tools in English and Spanish to drive awareness and adoption of food safety practices
- Fresh, higher moisture, near neutral pH cheeses are inherently more susceptible to growth from post pasteurization contamination
- Hispanic/Latino style varieties are growing and fall into this higher risk category. **Mainstream retail volumes grew from 94M lbs. to 133M lbs. outpacing overall cheese growth (IRI Data, 2016 vs. 2020)**
- Since 2010, 15 outbreaks with 149 illnesses and 13 deaths were attributed to Hispanic/Latino Style Cheese food safety issues. (<https://www.foodindustrycounsel.com/recalls>)



Listeria Research Consortium



Established January 2015, ~ \$1.1MM funding from

- Core companies, IC BOD, and National Dairy Council
- 14 projects funded to date

Research Targets

- *Listeria* controls for products and plant environments
- *Listeria* virulence research
- Critical risk mitigation - surface ripened & fresh cheeses



Global experts convened '14, '16, '17, '19



Industry Scientists



Food Safety Culture – Assessing Your Unique Needs

Plant level Culture surveys run by Innovation Center and Cultivate



SHARED DAIRY INDUSTRY FOOD SAFETY CULTURE DASHBOARD

(Scorecard: Your sortable results plus anonymized industrywide reference ranges)

Interactive tool for each company to analyze their results internally and against industry benchmarks

