



**Cornell University**  
**College of Agriculture**  
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**To:** Dairy Processors December 9, 2013  
**From:** Steve Murphy, Sr. Extension Associate  
Department of Food Science, Cornell University  
**Re:** **HACCP/Food Safety Systems Workshop for the Dairy Industry; NCIMS Core Curriculum**  
**January 28-30, 2014 in Ithaca, NY**

Cornell University's Department of Food Science is offering a *Hazard Analysis and Critical Control Point* (HACCP) /Food Safety Systems Workshop for the Dairy Processing Industry, January 28-30, 2014 in Ithaca, NY. This workshop is designed to provide comprehensive instruction on the development of HACCP based food safety programs for dairy operations that should apply to juice and other foods as well. It will provide practical information, forms and exercises designed to enhance HACCP and food safety program development. Throughout the course, the relationship of traditional HACCP concepts with the proposed **Preventative Controls** rule under FDA's **Food Safety Modernization Act (FSMA)** will be discussed. Interpretation of the proposed rule implies that companies will be required to have food safety programs in place that are in line with traditional HACCP concepts (*please note – the rule is not final*).

For Grade "A" Dairy processors, this course will meet the core training requirements of the **NCIMS Voluntary HACCP Program** for dairy plants. FDA Juice HACCP compliance requirements applicable to dairy operations that process juice will also be covered. Successful completion of this workshop should equip attendees with the tools necessary to build a new or re-invigorate outdated HACCP/Food Safety Programs that meet NCIMS and FDA Juice HACCP requirements. It should also serve as a foundation for the *Global Food Safety Initiative's* 3rd party certification schemes such as SQF, BRC, IFS & FSSC 22000. SQF examples will be provided. A full agenda for the workshop is included in this mailing.

Preregistration is Required. Enrollment is limited to 30 participants. The early registration fee is \$450 per person for NY companies and \$540 for those out-of-state. Registration fees paid after January 14 will be higher. Materials, breaks and lunches are included. Payment and parking permit information is on the attached registration form. Be sure to complete all sections of the form. Payment can be submitted **on-line at:** <https://cbs.cornell.edu/ccbilling/billing.aspx?eventid=8734FC2A-5B49-4B0B-A274-AA57141A0AC2> or **by check** made out to CORNELL UNIVERSITY. Please return completed registration form & payment to:

**Janene Lucia**  
**Dept. of Food Science**  
**Stocking Hall**  
**Cornell University**  
**Ithaca, NY 14853**  
**607-255-2892**

*Return form by Fax: 607-255-7619 or E-mail: [jgg3@cornell.edu](mailto:jgg3@cornell.edu)*

*If paying on-line, completed registration forms are required to be sent in separately. If you have trouble with CC payment, please contact Janene.*

*If paying by check include copy of the registration form in the mailing; please send the registration form by fax or e-mail prior to issuing the check.*

*Registration form and payment must be received by January 20, 2014.*

Confirmation of registration will be sent to each attendee via e-mail on receipt of registration / payment. A listing of area hotels is also attached; we recommend that you make reservations ASAP.

Cancellation Policy: No refunds can be given if not cancelled by COB January 20. Substitute registrants will be accepted at any time, but doing so before the January 20 is appreciated.

The course will be held in the new Food Science Conference Center, Room 148 Stocking Hall on the Cornell University Campus in Ithaca, NY (maps & directions attached).

*Please feel free to call Steve (607-255-2893) or Janene (607-255-2892) if you have further questions.*

**- Hazard Analysis and Critical Control Point / Food Safety Programs -  
HACCP for the Dairy Industry**

January 28-30, 2014

*Cornell University, Department of Food Science*

*Program Draft*

Tuesday, January 28, 2014

Instructors

8:00 am	Registration	Staff
8:30 am	Welcome and Introductions – Course Objectives	Steve Murphy
9:00 am	HACCP Overview & Background - HACCP Defined - <i>NACMCF Document</i> - HACCP in the Regulatory System – Dairy/Juice/other - Food Safety Modernization Act (FSMA) overview - HACCP & Food Safety Systems in GFSI overview	Kim Bukowski
9:45 am	Hazards in Dairy and other Foods – <i>Why HACCP?</i>	S. Murphy
10:45 am	BREAK	
11:00 am	HACCP Program Development – Preliminary Steps - Assemble Your Team - Describe Each Product, Its Use & Consumer Base - Create & Verifying a Flow Diagram	K. Bukowski
11:45 am	Team Exercise – Product Description & Flow Diagram	Participants
12:15 pm	Lunch (provided)	
1:00 pm	Team Exercise – Continued	Participants
1:30 pm	Prerequisites to HACCP – Supporting Programs - Prerequisite Programs (PP's), “Required 8” & more - Sanitation Standard Operating Procedures - Monitoring PP's and Records	S. Murphy K. Bukowski
2:30 pm	Break	
2:45 pm	Prerequisites to HACCP (continued) - FSMA Preventive Controls - GFSI Third Party Certification Requirements	
3:15 pm	Team Exercise – Documentation of PP/SSOP's	Participants
4:15 pm	Team Presentations: Prod. Descrip./Flow Diagram/PPs	Participants & Staff
5:15 pm	Questions & Answers/ Adjourn	

*This program meets the requirements of the NCIMS HACCP Core Curriculum, developed and supported  
by the NCIMS HACCP Implementation Committee  
Cornell Dairy Foods Extension Programs are Supported by the NY State Milk Promotion Order*

# HACCP / Food Safety Systems for the Dairy for the Dairy Industry

## Program Draft

(Continued)

Wednesday, January 29, 2014

Instructor

8:15 am	Day 1 Overview; Questions & Answers	Staff
8:30 am	Hazard Analyses (HA) & Critical Control Points (CCP) <ul style="list-style-type: none"><li>- HA at Each Step of the Flow Diagram (<i>Principle 1</i>)</li><li>- Defining “Reasonably Likely to Occur” &amp; using prerequisites &amp; other programs in HA justification</li><li>- Determining CCP’s (<i>Principle 2</i>)</li><li>- <i>Hazards &amp; Control Guide for Dairy Foods HACCP</i></li></ul>	S. Murphy
10:00 am	Break	
10:15 am	Team Exercise – HA & CCP Determinations	Participants
11:30 am	Team Presentations – HA & CCP Determinations	Participants & Staff
12:15 pm	Lunch (provided)	
1:00 pm	CCP’s – the “HACCP Plan Summary” <ul style="list-style-type: none"><li>- Establishing Critical Limits (CL) (<i>Principle 3</i>)</li><li>- Establishing Monitoring Procedures (<i>Principle 4</i>)</li></ul>	K. Bukowski
1:45 pm	CCP’s – the “HACCP Plan Summary” <ul style="list-style-type: none"><li>- Corrective Actions for CL Deviations (<i>Principle 5</i>)</li></ul>	S. Murphy
2:15 pm	Break	
2:30 pm	CCP’s – the “HACCP Plan Summary” <ul style="list-style-type: none"><li>- Verification &amp; Validation (<i>Principle 6</i>)</li><li>- HACCP Plan Records (<i>Principle 7</i>)</li></ul>	S. Murphy
3:30 pm	Team Exercise – “HACCP Plan Summary” <ul style="list-style-type: none"><li>- CCP’s, CL’s and Monitoring Procedures</li><li>- Corrective Actions for CL Deviations</li><li>- Record Keeping</li></ul>	Staff
4:45 pm	CCP’s – the “HACCP Plan Summary” <ul style="list-style-type: none"><li>- NCIMS Pasteurization CCP Model, others models</li></ul>	K. Bukowski
5:00 pm	Questions & Answers	Participants & Staff
5:15 pm	Adjourn	

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# HACCP / Food Safety Systems for the Dairy for the Dairy Industry

## Program Draft

(Continued)

Thursday, January 30, 2014

Instructor

8:15 am	Review Days 1-2: Questions & Answers	
8:30 pm	Team Presentations – “ <i>HACCP Plan Summary</i> ”	Participants & Staff
10:00 am	Break	
10:15 am	NCIMS HACCP Program Overview/Orientation - Review of Appendix K Requirements - FDA Web Site – forms and information	S. Murphy
11:00 am	Food Safety Modernization Act - Recap of key concepts & proposed requirements	S. Murphy
11:30 am	HACCP Review – Participant Teams	Participants & Staff
12:30 pm	Program Summary, Questions & Answers; QUIZ	
1:00 pm	Adjourn – Class Certificates	

*This program meets the requirements of the NCIMS HACCP Core Curriculum, developed and supported by the NCIMS HACCP Implementation Committee.*

This course also meets the HACCP Requirement of the **Dairy Foods Certificate Program**. An application form for our Dairy Extension Certificate Program is included. If you have not already enrolled and are interested please return the completed enrollment form to Janene with your registration.

For questions/more information, contact Janene at: 607-255-2892; [jgg3@cornell.edu](mailto:jgg3@cornell.edu); or go to:

<http://foodscience.cornell.edu/cals/foodsci/extension/dairy-foods-extension-programs.cfm>

*Cornell Dairy Foods Extension Programs are Supported by the NY State Milk Promotion Order*

**- Hazard Analysis and Critical Control Point -**  
**HACCP for the Dairy, Juice & Food Processing Industries**  
*With Concentration on NCIMS Dairy HACCP, FDA Juice Regulation and FSMA Requirements*

January 28-30, 2014

Cornell University, Department of Food Science, 148 Stocking Hall

Program Outline

OVERVIEW:

This course is designed to provide a broad-based, practical approach to developing HACCP systems for dairy, juice and other food operations. It is targeted at those who need an introduction to HACCP as a comprehensive food safety system, but is designed to provide more advanced perspectives. For those who have not had recent training stressing current HACCP concepts and requirements, this workshop will serve as an updated refresher and as a source of new ideas to revitalize your HACCP system.

Based on the National Conference of Interstate Milk Shipments (NCIMS) Hazard Analysis and Critical Control Point (HACCP) Training Core Curriculum, the workshop will cover the core HACCP concepts as outlined in the *Hazard Analysis and Critical Control Point Principles & Application Guidelines* developed by the National Advisory Committee on Microbiological Criteria for Foods (NACMCF, 1997). The specific requirements of the NCIMS Voluntary HACCP Program outlined in Appendix K of the Pasteurized Milk Ordinance (PMO) and the FDA Juice HACCP regulations will also be covered, with a strong emphasis on *Prerequisite Program* requirements. Throughout the course, specific examples will be provided and the participants will conduct practical team exercises designed to provide experience in the steps required to develop strong prerequisite programs and effective HACCP plans.

Addressed throughout the course will be the HACCP based requirements of the **FDA Food Safety Modernization Act (FSMA)** of 2011 as described in the proposed Preventive Controls rule issued January 4, 2013 (*note* - the rule is not final). Successful completion of this workshop should also meet the HACCP training requirements for the Global Food Safety Initiative (GFSI) schemes (e.g., Safe Quality Food - SQF Practitioners, British Retail Consortium - BRC). The goal of this program is that through active participation, attendees will gain the knowledge and tools needed to build new or enhance existing HACCP programs and serve as effective members of the plant's HACCP team. The program for the two and a half day course is attached.

INSTRUCTORS:

**Steven C. Murphy, Sr. Extension Associate**

Department of Food Science, Cornell University

Steve Murphy has an active training role in the Department's Milk Quality Improvement Program. He is directly involved in planning, organizing and implementing educational programs designed for all segments of the dairy industry and in developing written informational materials and peer-reviewed publications. Areas of expertise include dairy microbiology & safety; fluid milk quality and shelf-life; plant GMP and HACCP procedures; and regulatory testing under the NCIMS laboratory program. Steve is a member of the NCIMS HACCP Implementation Committee (HIC) and is chair of the HIC training sub-committee.

**Kimberly Bukowski, Dairy Foods Extension Professional**

Department of Food Science, Cornell University

Kimberly Bukowski has been in the Dairy and Food Industry her entire career, with roles in quality and plant management in the ice cream and milks industries. As manager of the Cornell Dairy Plant she developed and implemented a HACCP system modeled under the NCIMS HACCP program. Kim has expertise in dairy processing, plant auditing, and food safety and quality programs and is certified in Better Processing Controls. She has worked as a consultant to several food companies and is a certified SQF auditor in categories 10, 15 & 16. Kim is a member and past-president of NY State Association for Food Protection.