

# CERTIFIED MILK INSPECTORS (CMI) TRAINING COURSE

*A Required Course for New CMI's in New York State\**

July 17-20, 2017

Food Science Conference Center, Room 148 Stocking Hall

Cornell University

Ithaca, New York 14853

## Draft Program

### Monday, July 17

12:30 pm	Welcome: CMI Roles & Program Overview – Anika Zuber
1:00 pm	What is Milk? – Composition of Milk – Rachel Evanowski
1:45 pm	Basic Dairy Bacteriology; Definitions, Characterization and Standards – Rachel Evanowski
2:30 pm	<b>BREAK</b> (refreshments provided)
2:45 pm	Raw Milk Pathogens and Risks of Foodborne Illness – Anika Zuber
3:30 pm	Mastitis, Somatic Cells & QMPS Program – Jessica Scillieri-Smith
5:30 pm	Adjourn

### Tuesday, July 18

7:45 am	Questions & Coffee
8:00 am	Farm Milk Systems - Designed for Cleaning – Rick Watters
9:30 am	<b>BREAK</b> (refreshments provided)
9:45 am	<i>Exercise- What do different chemicals do?</i>
10:15 am	Trouble-Shooting High Bacteria Counts – Rachel Evanowski
10:45 am	Drug Residue Testing; Other Raw Milk Tests – Rachel Evanowski
11:15 am	Drug Use on Farms – Jessica Scillieri-Smith
12:00 am	Milk Flavor Clinic – Rachel/Anika/Nancy Carey
12:30 pm	<b>LUNCH</b> (on your own)
1:15 pm	Introduction & Review of Milk Sanitation Regulations – R. Hinz/C. Martin
2:45 pm	<b>BREAK</b> (refreshments provided)
3:00 pm	Review of Milk Sanitation Regulations, cont. – R. Hinz/C. Martin
5:00 pm	Review /Questions - Adjourn

### Wednesday, July 19

7:45 am	Questions & Coffee
8:00 am	Review of Milk Sanitation Regulations – R. Hinz/C. Martin
10:00 am	<b>BREAK</b> (refreshments provided)
10:15 am	Review of Milk Sanitation Regulations, cont. – R. Hinz/C. Martin
12:00 pm	<b>LUNCH</b> (on your own)
1:00 pm	Review of Milk Sanitation Regulations, cont. – R. Hinz/C. Martin
3:00 pm	<b>BREAK</b> (refreshments provided)
3:15 pm	Quality Control Records – R. Hinz/C. Martin
4:45 pm	Review /Questions - Adjourn

### Thursday, July 20

8:00 am	Review of Milk Regulations – Drug Use/Storage – R. Hinz/C. Martin
10:00 am	Farm Tour Inspections (Depart from Stocking Hall)
1:00 pm	Adjourn Questions and Answers/Review

### Instructors:

Rodney Hinz & Chad Martin – NYS Department of Agriculture & Markets

Anika Zuber, Rob Ralyea, Nancy Carey – Cornell University, Department of Food Science

Rachel Evanowski – Cornell University, Milk Quality Improvement Program

Frank Welcome/Rick Watters/ Jessica Scillieri-Smith – Quality Milk Production Services (QMPS)

*\*This Training Course is Required for All New Certified Milk Inspectors in NY State but is open to all interested parties; including current CMI's who desire a refresher and update.*

**Cornell Dairy Foods Extension**

## **Program Syllabus – NY State Agriculture & Markets Certified Milk Inspectors (CMI) School**

### **Instructors:**

Rodney Hinz, Dairy Products Specialist II, NYS Agriculture & Markets: [Rodney.Hinz@agriculture.ny.gov](mailto:Rodney.Hinz@agriculture.ny.gov)

Chad Martin, Dairy Products Specialist I, NYS Agriculture & Markets: [Chad.Martin@agriculture.ny.gov](mailto:Chad.Martin@agriculture.ny.gov)

Anika Zuber, Harvest New York Specialist; e-mail: [adz8@cornell.edu](mailto:adz8@cornell.edu); phone: (585) 813-3539

Robert Ralyea, Senior Extension Associate; e-mail: [rdr10@cornell.edu](mailto:rdr10@cornell.edu); phone: (607) 255-7643

Frank Welcome/Jessica Scillieri-Smith/Rick Watters, QMPS; <http://ahdc.vet.cornell.edu/sects/QMPS>

Additional instructors and contributors to this course may include guest instructors from industry as well as other Agriculture & Markets personnel and Cornell University representatives.

### **Course Contact:**

Louise Felker; e-mail: [lmf226@cornell.edu](mailto:lmf226@cornell.edu) ; phone: (607) 255-7098

### **Overview:**

This course covers the basics of raw milk quality and safety and the specific regulatory and inspection requirements for dairy producers under the Grade “A” milk program as outlined in the Pasteurized Milk Ordinance (PMO). It is required for all NY State Certified Milk Inspectors (CMI) who as industry employees, represent NY State regulatory in inspecting dairy farms under the requirements of the PMO. In addition to this course, NY-CMI applicants must meet *one of the three* criteria for education and/or work experience listed below:

1. An associate degree or higher in an agricultural field and at least one month of supervised field experience in dairy farm inspection.
2. A minimum of six months experience in dairy farm inspection.
3. At least one year of experience in the dairy industry and at least one month of supervised field experience in dairy farm inspection.

This course must be completed within one year of obtaining the inspectors certificate. For all CMIs, an annual educational update is also required. While designed for CMIs, this course may be of value to producers, laboratory personnel and others involved in farm milk quality, sanitation and safety.

### **Learning Outcomes:**

This course will provide attendees with information under the following headings that will assist them in their roles as Certified Milk Inspectors with the objective that they will:

#### **Overview of Basic Dairy Microbiology/Safety/Quality**

- Be able to define milk in terms of its composition
- Know the basic concepts of microbial growth and contamination as it pertains to raw producer milk and be able to understand and interpret quality tests used to assess producer raw milk
- Learn the causes and outcomes of mastitis in dairy animals and the impact of associated raw milk Somatic Cell Counts on herd health and milk quality
- Understand food safety concerns and pathogens associated with raw milk and farm production methods.

#### **Detailed Review of Milk Sanitation Requirements**

- Know the sanitation and inspection requirements for dairy producers shipping milk under the PMO Grade “A” Milk Program.
- Understand the sampling and testing requirements for meeting the standards as specified under Section 6 of the PMO and the related actions when requirements are not met.
- Develop skills in finding sources of high bacteria counts and other related milk quality and safety issues.
- Learn the drug storage and usage requirements for farms under the Grade “A” Milk Program

### **Evaluation:**

In order to become a Certified Milk Inspector, persons must complete this course and meet the requirements outlined above and pass a test administered by NY State Agriculture & Markets.