

# Acidified Foods Manufacturing School

**Operating Supervisor  
Certificate Training Course**  
*Segment 2*  
*January 23, 2015*



Department of Food, Bioprocessing and Nutrition Sciences  
Schaub Hall, Raleigh, NC  
919.515.2951



Schaub Hall, Food Science Building  
NC State University, 400 Dan Allen Drive, Raleigh, NC

## Acidified Foods Manufacturing School

The **Acidified Foods Manufacturing School** provides instruction in food handling techniques; food protection principles; personal hygiene; plant sanitation; pH controls; critical factors in acidification, and more.

This **two-part school** is intended for and directed at the level of Operating Supervisors of acidified foods processing and packaging systems in acidified food establishments. It will qualify individuals producing acidified foods (fresh packed pickles, acidified peppers, pickled eggs, salsa, etc.) to meet the requirements of the umbrella GMP and specific GMP for acidified foods (21 CFR Part 114).

By definition, an **“Operating Supervisor”** is a person who is in the plant at the time product is processed and packaged. The Operating Supervisor is responsible for the use of adequate pH and time and temperature processes for rendering the product safe and for proper record keeping and control programs which will detect deviations from safe operating procedures. The Operating Supervisor may be the same person who conducts the processes and controls. However, each operation during each hour of plant operation must be under the supervision of a person who has been certified as having satisfactorily completed an approved course of instruction. In determining the number of persons to be certified, company management must consider the number of operating shifts per day, vacations, sick leave replacements, and other situations such as promotions and transfer of certified supervisor personnel.

## Segment 1 – Online Modules

Randomized 10-question, multiple-choice examinations will be given after each of **nine online modules**. Students must pass with 70% correct. One make-up exam (if needed) will be allowed for each module. Any student who has failed any module may not participate in a Segment 2 course. To be certified, completion of ALL modules and passing of ALL examinations given after that module are mandatory. Those passing the examinations given during the Segment 1 curriculum AND completing a face to face Segment 2 course will be certified as supervisors under 21 CFR, Sections 108.25 (f) (Acidified Foods) and 114.10 (Acidified Foods).

## Segment 2 – Classroom Lectures

**\*\*SEGMENT 2 MUST BE TAKEN AFTER COMPLETION OF SEGMENT 1 \*\***

**Next Class:** January 23, 2015 • 9:00 am – 5:00 pm  
Schaub Hall, Food Science Building  
NC State University Campus  
400 Dan Allen Drive, Raleigh, NC  
Class begins at 9:00 am in Room G40.

This **one-day course** completes the requirements to become a certified operating supervisor for acidified foods manufacture and includes both lectures and hands on laboratories.

### Lectures

- **Lecture 1 • pH, Buffering Capacity, Measuring pH**  
pH measurements and pH meter calibration, sample preparation and measurement, including examples of acid penetration and buffering capacity.
- **Lecture 2 • Thermal Processing and Process Filing**  
Process authority letters and FDA registration/filing, overview of D-values, z-values and F-values.
- **Lecture 3 • Container Closures**  
Review of common and uncommon containers, inspection for integrity and common defects, pull-up and security, and examples of defects.
- **Lecture 4 • How to Register and File** (*optional*)

### Exercises/Laboratories

- **Lab 1:** pH measurements, calibration, sample records
- **Lab 2:** Process authority letters, paper filings and online filings, sample records
- **Lab 3:** Container closure evaluation, sample records

### Accommodations

A block of rooms have been reserved until January 14 at:

**DoubleTree by Hilton Hotel Raleigh - Brownstone - University**  
1707 Hillsborough St, Raleigh, NC 27605  
(919) 828-0811  
[www.brownstonehotel.com](http://www.brownstonehotel.com)

### Registration

For more information and to register for both Segment 1 and 2 courses:

<http://foodsafety.ncsu.edu/acidified-foods-manufacturing-school-ncsu/>

### Registration Questions:

Allison Sain, 919-515-3344, [allison\\_sain@ncsu.edu](mailto:allison_sain@ncsu.edu)

### Technical Questions:

Fletcher Arritt, Ph.D., 919-513-0176, [fletcher\\_arritt@ncsu.edu](mailto:fletcher_arritt@ncsu.edu)