Introduction to Food Science
August 19 - 23, 2013

Rutgers University invites you to transform, broaden and update your food science skills with this highly focused, practical training. Whether you are new to food science or you need to refresh your knowledge, this intensive course will teach both beginners and experienced professionals how to make sense of the numbers -- a great networking opportunity!

By attending our program, you will:
• Gain an appreciation of the scope and breadth of the field of FS
• Improve your understanding of the fundamental chemistry of foods and the major molecular components of foods: lipids, carbohydrates and proteins
• Improve your understanding of the science of food color, food flavor, nutrition, sensory evaluation and food microbiology
• Gain insight into the application of all these areas of food science to improve food safety and quality
• Plus, you’ll meet other food industry professionals from around the country – a great networking opportunity!


Featured Topics include:
• Statistical Process Control (SPC)
• Analysis of Variance (ANOVA)
• Descriptive Statistics and Graphics
• Making Sense of the Numbers: Introduction to Statistics
• Gage Repeatability and Reproducibility Studies
• Regression

This course has helped me understand the numbers I look at and evaluate daily. All aspects of the program will be taken back and applied to my job. I have more than just food scientists – quality control/assurance, production and marketing. All will benefit from what I am learning in the course. I am产品的开发者 -- from chemists who analyze samples to food safety specialists -- should understand how insightful and intelligent data is produced. Refresh your knowledge of fundamental concepts and applications of statistics in food science with this case-based approach.

Sensory Evaluation
September 26 - 27, 2013

Making Sense of the Numbers: Statistics for Food Scientists
September 25, 2013

Office of Continuing Professional Education
www.cpe.rutgers.edu/food

FULL registration - $1,395 before 8/9/13
$1,195 - four days
$995 - three days
$795 - two days
$595 - one day only

Day 1 - Monday, August 19, 2013
Making Sense of the Numbers: Introduction to Statistics
Explore principles of probability and statistics.

Day 2 - Tuesday, August 20, 2013
Exploring the Structures, Properties and Functions of Carbohydrates
Explore the structures, properties and functions of carbohydrates in food production.

Day 3 - Wednesday, August 21, 2013
Nutrition Theory/Applied & Food Microbiology Theory/Applied
Explore principles of human nutrition, including essential macro and micronutrients. Learn how nutrition plays an integral role in food science, including nutraceuticals. Microbes play a critical role in food science, including food safety, spoilage and foodborne diseases. Discover the factors that influence microbial growth and learn how to implement good manufacturing practices and microbial sampling.

Day 4 - Thursday, August 22, 2013
Food Processing & Engineering
Learn the operations and systems used to manufacture and transform food products, and how to achieve desired quality and safety. Examples of current and emerging technologies will be described.

Day 5 - Friday, August 23, 2013 (half-day)
Making Sense of the Numbers: Introduction to Statistics
Review different types of natural and artificial food coloring. Through the application of the numbers, learn the scientific basis for the determination of coloration in food and the materials needed for flavor reactions and descriptions.

By attending our program, you will:
• Gain an appreciation of the scope and breadth of the field of FS
• Improve your understanding of the fundamental chemistry of foods and the major molecular components of foods: lipids, carbohydrates and proteins
• Improve your understanding of the science of food color, food flavor, nutrition, sensory evaluation and food microbiology
• Gain insight into the application of all these areas of food science to improve food safety and quality
• Plus, you’ll meet other food industry professionals from around the country – a great networking opportunity!


Featured Topics include:
• Statistical Process Control (SPC)
• Analysis of Variance (ANOVA)
• Design of Experiments (DOE)
• Regression
HACCP Plan Development for Food Processors

October 2 - 4, 2013

$795 before 9/12; $845 after
Course Code: LF0040CA14

Register with STATISTICS FOR FOOD SCIENTISTS
and save $100 off each individual course!

The sensory quality of a food product is the single most important factor influencing its success in the marketplace. You can increase the chances of a product’s success in today’s competitive food and pharmaceutical markets if you understand and can measure the sensory quality of foods.

In this program, you will review the pros and cons of different sensory tests, examine test protocols, and learn to evaluate test results and identify the best method for your product.

You will participate in lab exercises, taste tests, and complete a survey to evaluate the sensory quality of a product of your choice. Your instructor will guide you through the process of planning, carrying out, and analyzing sensory tests.

Who Should Attend?
• Food/beverage marketers or production employees
• Lab technicians and managers

Sensory Evaluation

Sensory Evaluation

September 26 and 27, 2013

$995 before 9/15; $1,045 after
Course Code: LF0703CA14

According to FDA regulations, each processor of low-acid and acidified low-acid canned foods, including pet foods, must operate with a trained and certified HACCP plan developer, implementer, and instructor. You will learn HACCP planning best by doing it, you will actually write a plan in class.

In working small groups, through hands-on exercises, you will complete, discuss and critique worksheets:

• Conduct Critical Analysis
• Identify critical control points of each process
• Define strategies for verifying that your process is working
• Clarify the necessary components for a successful plan
• Develop a HACCP plan for the food products

Under the guidance of Donna Schallfruth, a gifted and seasoned HACCP plan developer, implementer, and instructor, you will learn how to develop a HACCP plan, and the plan will be reviewed and approved by the instructor.

Applicable FDA/USDA/FSIS regulations

Principles of thermal processing

Aseptic processing and packaging systems

FDA Guidelines and regulation compliance

Practical Food Microbiology

December 5 and 6, 2013

$795 before 11/21; $825 after
Course Code: LF0401CA14

If you develop, process, distribute or sell food for a living, there is a bare minimum you need to know about food microorganisms:

• WHICH pathogens are most likely to cause trouble in your food;
• HOW to organize the information needed for your plan;
• WHAT the results mean for your product.
• HOW to manage and control the risks posed by your products.

If you have never taken a food micro course, Dr. Donald Schaffner and Dr. Richard Yannone will guide you through the latest in food safety applications. Even if you know you will learn when and how your processors can be saved – but often overlooked and misunderstood - tools and methods that are used and/or required by the processors, their suppliers, and your customers.

Learn to make better choices by understanding the limits and applications of statistical process control, and how to utilize with ill-conceived assumptions.

Microbiology and food safety on the job ensures equipment and food processing line will get overwhelmed by the process.

The course of three days, you will learn these key insights:

• The difference between a control point and a critical control point
• How to conduct an insightful hazard analysis of your food process
• The importance of your food process
• The importance of safe food production for consumption

Dr. Donald Schaffner: "If you develop, process, distribute or sell food for a living, there is a bare minimum you need to know about food microorganisms. …HACCP is, and how to implement a HACCP plan" …it got me to rethink our process and look at things differently.”

Past Attendees

www.cpe.rutgers.edu/food

Officie of Continuing Professional Education