



FOOD SAFETY

Risk Assessment

Course Objectives:

- ✦ Describe the fundamental reasons for doing risk analysis
- ✦ Identify key developments in the role of risk assessment in international food safety
- ✦ Define what screening and ranking tools are
- ✦ Rank a list of pathogens
- ✦ Demonstrate familiarity with the wide range of formal definitions of risk assessment and list the steps of the Codex risk assessment definition
- ✦ Build a simple event tree
- ✦ Differentiate variability and uncertainty in risk assessment
- ✦ List and discuss the steps in the basic approach to food safety assessment
- ✦ List and define the steps of the Red Book paradigm
- ✦ Identify at least three kinds of uncertainty that can be present in a risk assessment
- ✦ Discuss the significance of uncertainty and variability to the risk assessor
- ✦ Discuss the significance of uncertainty and variability to the risk manager
- ✦ Discuss the role of probability in quantitative risk assessment
- ✦ Identify several of the more frequently used probability distributions in risk assessment
- ✦ Describe the differences between chemical and microbial risk assessment
- ✦ Identify aspects of bioterrorist risk assessment that distinguishes it from other risk assessments
- ✦ Outline the conduct of a whole food risk assessment

Who Should Attend?

Anyone working in a food manufacturing setting where food is being prepared, cooked and handled.

Course Outline:

Context of Food Safety Risk Assessment

- ✦ Historical Development
- ✦ Tolerable Risk
- ✦ International Food Safety
- ✦ Communication with Decision Makers
- ✦ Formal Definitions

The Risk Assessor's Toolbox

- ✦ Screening and Ranking Tools
- ✦ Generic Processes
- ✦ Probabilistic Scenario Analysis
- ✦ Bayesian Methods
- ✦ Red Book Paradigm
- ✦ Monte Carlo Analysis

Applications

- ✦ Food Additives
- ✦ Microbial Risks
- ✦ Food Security
- ✦ Biotechnology
- ✦ Food Contaminants

Components

- ✦ Dealing with Variability and Uncertainty
- ✦ Hazard Identification
- ✦ Dose-response
- ✦ Risk Characterization
- ✦ Common Probability Distributions

Course Fees:

this rate includes participant's manual, Hands-Outs, buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Course Methodology:

- Based on case studies (30%); Techniques (30%); Concepts (10%) and Role Play (30%)
- Pre-test and Pro-test
- Variety of Learning Methods
- Lectures
- Case Studies and Self Questionnaires
- Small Group Work
- Discussion
- Presentation

Course Timings:

Daily Course Timings:

08:30 - 08:50	Morning Coffee / Tea
08:50 - 10:20	First Session
10:20 - 10:40	Coffee / Tea / Snacks
10:40 - 12:20	Second Session
12:20 - 12:40	Coffee / Tea / Snacks
12:40 - 14:30	Last Session

