



2009 Food Safety Summit Packaging for Food Safety

Session Leader: John Spink, PhD, Director & Instructor, Packaging for Food and Product Protection (P-FAPP) Initiative, Michigan State University

Session Deliverables:

- Provide an overview of the principles of packaging, how the package protects the product, and the role of packaging in food safety.

Abstract: This “backgrounder” session is based on the Michigan State University graduate course *Packaging for Food Safety*. The overview is intended to introduce the audience to the key principles of packaging that apply to food and to food safety. The session includes a review of the packaging materials and designs, the food safety threats that are specific to inside a package, a review of some current issues such as traceability and C.O.O.L. labeling, and then explores future trends.

Packaging for Food Safety has been taught by John Spink, PhD, since 2003 and was also expanded to the Rochester Institute of Technology’s Packaging Science undergraduate program. John also developed and teaches the packaging module of Food Protection and Defense (VM/CJ 821) and Anti-Counterfeit Strategy and Product Protection (VM 813). All programs are offered to non-MSU students through the MSU Lifelong Education program.

Outline

1. Narrow topic
 - Governing Bodies and Regulations
 - Continuum: Food Quality/ Food Safety/ Food Fraud/ Food Defense
2. Basics: Food Safety Packaging 101
 - FS: Pathogens in the Package
 - FS: How Packaging Systems Fail
 - Pkg: Objectives of Packaging and Materials
 - Pkg: Package components
3. Basics: Advanced Packaging and Packaging Interaction
 - “Pathogens fight BAC (bacteria)”
 - Migration
 - Advanced Packaging
 - Systems Violation: Intentional Adulteration
4. Advanced Topics and Problem Solving
 - Active and Passive Protection
 - Traceability and Authentication