

## **Project Developers**

This Food Safety Regulatory Essentials (FSRE) Shelf-Stable course was prepared through a Cooperative Agreement between the Food Processors Institute (FPI) and the FSIS Center for Learning. The materials were developed by staff of FPI, the Food Products Association (formerly the National Food Processors Association), and an outside industry consultant.

### **Food Products Association**

The Food Products Association (formerly the National Food Processors Association (NFPA)) is the voice of the \$500 billion food processing industry on scientific and public policy issues involving food safety, food security, nutrition, technical and regulatory matters and consumer affairs. FPA's three scientific centers and international office (Bangkok, Thailand), its scientists and professional staff represent food industry interests on government and regulatory affairs and provide research, technical assistance, education, communications and crisis management support for the Association's U.S. and international members. FPA members produce processed and packaged fruit, vegetable, and grain products, meat, poultry, and seafood products, snacks, drinks and juices, or provide supplies and services to food manufacturers. To learn more about FPA call 1-800-355-0983 or visit our website at [www.nfpa-food.org](http://www.nfpa-food.org).

### **Food Processors Institute**

The Food Processors Institute (FPI) is the education provider for the Food Products Association and presents seminars and workshops that support food industry programs. FPI develops publications and other instructional materials for the continuing education of food industry and associated personnel. FPI custom designs workshops for specific company training needs. Product and course information can be accessed on our website [www.fpi-food.org](http://www.fpi-food.org) or call 1-800-355-0983 for more information.

## **How to Use This Material**

This notebook was designed to provide FSIS inspectors with the science-based information and process familiarization necessary to understand the HACCP control procedures for the broad product class of shelf-stable meat and poultry products.

Included in your manual is the text and supplemental workshops for the eight sections listed below. The eight sections of the course are:

1. Introduction
2. Microbiology of thermally processed foods commercially sterile and shelf stable meat and poultry products

3. Principles of thermal processing
4. Thermal processing systems for commercially sterile meat and poultry products (
5. Microbiology shelf-stable dried meats
6. Processing procedures: dried meats
7. Principles of preservation of shelf-stable dried meat products
8. Identification and control of food safety hazards for commercially sterile and other shelf stable meat and poultry products

Please note that the examples presented in the training are not all inclusive of industry practice.

## TABLE OF CONTENTS

Introduction	1
Microbiology of thermally processed foods commercially sterile and shelf stable meat and poultry products	5
Principles of thermal processing	41
Thermal processing systems for commercially sterile meat and poultry products	57
Microbiology shelf-stable dried meats	109
Processing procedures: dried meats	127
Principles of preservation of shelf-stable dried meat products	157
Identification and control of food safety hazards for commercially sterile and other shelf stable meat and poultry products	173

