HACCP

Principles and Applications

Edited by
Merle D. Pierson
and
Donald A. Corlett, Jr.

*Based on a short course developed and presented
by the Continuing Education Committee of the
Institute of Food Technologists*

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Preface

The Institute of Food Technologists (IFT) sponsors each year a two-day short course that covers a topic of major importance to the food industry. "Hazard Analysis and Critical Control Points" was the title for the short course which was held May 31–June 1, 1991, immediately prior to the 51st Annual IFT Meeting. These short courses have been published as a proceedings in previous years; however, the current and future importance of the Hazard Analysis and Critical Control Point (HACCP) system prompted publication of the 1991 short course as a book. This book is designed to serve as a reference on the principles and application of HACCP for those in quality control/assurance, technical management, education and related areas who are responsible for food safety management.

The National Advisory Committee on Microbiological Criteria for Foods (NACMCF) published in November 1989 a pamphlet titled "HACCP Principles for Food Production" (Appendix A). This document dealt with HACCP as applied to the microbiological safety of foods; however, the principles can be modified to apply to chemical, physical and other hazards in foods. The principles recommended by the NACMCF have been widely recognized and adopted by the food industry and regulatory agencies. Implementation of these principles provides a proactive, preventive system for managing food safety. HACCP should be applied at all stages of the food system, from production to consumption. In order for HACCP to be effective, however, specific plans must be designed for each stage of the food system, specific food products, different food operations, etc.

This book is based on the seven principles recommended by the NACMCF. However, the topic has been broadened to include all biological, chemical, and physical hazards. The first three chapters provide an introduction to HACCP,

HACCP principles and definitions, and an overview of biological, chemical, and physical hazards in foods. The next seven chapters give an in-depth discussion and analysis of each of the HACCP principles. HACCP as presented by the NACMCF relates to food safety concerns only; however, some government agencies and companies use control points other than those relating to safety within the context of HACCP. Therefore, a chapter is included on safety, quality and regulatory control points. Next, an action plan for implementing HACCP is given as well as an overview of the adoption of HACCP by federal regulatory agencies. Several specific examples for the application of HACCP principles are provided in the last chapter.

The general concept of HACCP as applied to food safety management has not changed since it was first publicly introduced at the 1971 Conference on Food Protection. Practical experience and a wider application of HACCP over the years has led to revisions in principles, definitions, and methods of application. This book, as explained above, is based on the November 1989 principles recommended by the NACMCF. In June, 1991 the Codex Committee on Food Hygiene HACCP Drafting Group developed a *draft* report on HACCP. This draft report is given in Appendix B. The NACMCF proposed in July, 1991, revision of the HACCP principles and their application. The revised HACCP document that was approved on March 20, 1992 by the NACMCF is given in Appendix C. The principles of HACCP as provided by the NACMCF gives an excellent framework and common approach for industry and regulatory to manage food safety. At the same time, it needs to be pointed out that the principles serve as guidelines in developing HACCP plans for food products and the application of these principles may need to be modified based on advances in technology, practical experience, etc. The discussion presented in this book is based on the NACMCF November 1989 principles document Appendix A. This information will continue to serve as a valuable reference when adopting revisions of the HACCP principles.

We thank Dr. Robert Price, Chairman, and the members of the IFT Short Course Committee for their assistance and suggestions in developing the 1991 HACCP Short Course. Appreciation is extended to Dr. Daryl Lund, 1990–91 IFT President; Howard Mattson, former IFT Executive Director; John B. Klis, IFT Director of Publications; and members of the IFT staff who provided publicity, facility planning, and numerous other details for a successful meeting. Special recognition is given to Anna May Schenck for her skillful copy editing of the manuscripts. Finally, we are grateful to the contributing authors for taking time from their demanding schedules to prepare manuscripts for this book.

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