



# UNIT-11

## Implementation and Maintenance of the HACCP Plan

### Learning Outcomes

By the end of this unit the learner will be able to:

- Understand the most important elements that contribute to the successful implementation of an HACCP plan
- Discuss the four main stages in the HACCP implementation process
- List and explain several major benefits of HACCP and its relevance in the modern workplace

## Unit 11

### Implementation and Maintenance of the HACCP Plan

The successful implementation of a HACCP plan is facilitated by commitment from top management. The next step is to establish a plan that describes the individuals responsible for developing, implementing and maintaining the HACCP system.

Initially, the HACCP coordinator and team are selected and trained as necessary. The team is then responsible for developing the initial plan and coordinating its implementation. Product teams can be appointed to develop HACCP plans for specific products.

An important aspect in developing these teams is to assure that they have appropriate training. The workers who will be responsible for monitoring need to be adequately trained. Upon completion of the HACCP plan, operator procedures, forms and procedures for monitoring and corrective action are developed.

Often it is a good idea to develop a timeline for the activities involved in the initial implementation of the HACCP plan. Implementation of the HACCP system involves the continual application of the monitoring, record-keeping, corrective action procedures and other activities as described in the HACCP plan.

Maintaining an effective HACCP system depends largely on regularly scheduled verification activities. The HACCP plan should be updated and revised as needed. An important aspect of maintaining the HACCP system is to assure that all individuals involved are properly trained so they understand their role and can effectively fulfill their responsibilities.

#### Implementation of HACCP

Once the HACCP plan has been completed it should be properly implemented to ensure that all of the identified hazards are being effectively controlled.

#### Key Stages to Implementation

There are four key stages in the implementation of HACCP:

- Initial verification to ensure that the HACCP system is working in practice
- Training
- Ongoing verification
- Maintenance

#### 1. Initial verification to ensure that the HACCP system is working in practice

This may include a review of resources to ensure that, for example, all equipment and materials identified in the HACCP study have been adequately provided. There should also be adequate contingency plans put in place to ensure that supplies of such equipment and materials are maintained in future. For example, if the HACCP plan identifies the use of a disinfectant at a process point then adequate management arrangements must be put in place to guarantee that

the disinfectant will always be available and set out appropriate action to take should supplies run out.

All food safety procedures should be achievable and workable and so it is good practice to seek the views of persons working in the food production process on the practical aspects of performing tasks identified by the HACCP team. This may be achieved through one to one meetings, team meetings or through questionnaires

People and equipment may not behave as predicted by the HACCP team and so a series of measurements and observations, particularly at critical control points may be appropriate. These might include temperature measurements and food samples taken throughout the food production process and at an increased frequency than set out in the HACCP plan. Once reassurances that the system is behaving as expected then the frequency of such actions can be reduced or stopped altogether.

### 2. Training

All staff should be supervised and instructed and/or trained in matters commensurate with their work activity. In particular, those involved in the HACCP team should be trained in the application of HACCP principles. On the job training can be very effective and should focus on the implementation of the HACCP plan at critical control points but also cover the prerequisites.

### 3. Ongoing verification

It is recommended that the HACCP system is subjected to an ongoing audit process. This may be achieved in-house or by means of a third party accredited scheme such as by SALSA (Safe And Local Supplier Approval). The benefits of a third party audit scheme are:

- Increased confidence in the effectiveness of the HACCP system.
- To receive regular updates in practices and procedures.
- Impartial assessment of the system.
- Demonstration to customers and others that the HACCP system is rigorous.
- Reinforces the importance of the HACCP system with staff.

Audits should be documented and the use of pro-forma checklists is recommended.

### 4. Maintenance

In practice the ongoing verification of the HACCP system by means of audit is part of the maintenance of the scheme. However there are several additional maintenance tasks which need to be performed which are in addition to audit. These include:

**1. Regular reviews:** Frequent reviews should be carried to identify any significant changes that may be anticipated or have occurred already with the purpose of assessing the impact of such changes on food safety. For example, the sorts of changes that may have an effect on food safety include:

- Use of new ingredients
- Change of suppliers

- Changes to existing ingredients
- New equipment or amendment of existing equipment
- New processes or amendments to existing processes
- Significant changes in staff
- New products or supply of existing products to new customer
- New packaging or labelling

**2. Ongoing training:** Refresher and update training of staff should be programmed.

**3. Investigation of complaints:** Checks should be carried out to determine whether deficiencies in the HACCP design or in implementation have contributed to any complaints that have been received.

**4. Product development:** A new HACCP plan should be established for all new products.

### Need for HACCP

In the past few years the food industry has faced new challenges such as the increasing number of emerging pathogenic bacteria (ex: E. coli O157:H7), increasing public concern of chemical contamination of food (ex: lead in food, allergens). HACCP prevents and controls these and other major food safety concerns; minimizing food safety risks of the product. HACCP allows food processors to offer a safer product to the consumers, protecting their health and life.

### Benefits of HACCP

- Although the main goal of HACCP is food protection, there are other benefits acquired through HACCP implementation, such as:
- Increase customer and consumer confidence
- Maintain or increase market access
- Improve control of production process
- Reduce costs through reduction of product losses and rework
- Increase focus and ownership of food safety
- Increase business liability protection
- Improve product quality and consistency
- Simplify inspections primarily because of the recordkeeping and documentation.

### Further Reading:

- ✓ *Haccp, a Systematic Approach to Food Safety Paperback – January 1, 2006* by Virginia N. Scott
- ✓ *Food Safety Lessons for Cannabis-Infused Edibles 1st Edition* by Kathy Knutson 2020