



## Principle 2:

# UNIT-5 Determine the Critical Control Points (CCPs)

### Learning Outcomes

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

- Determine critical control points to eliminate or reduce food safety hazards to acceptable levels
- Use the decision tree method for establishing CCPs
- Provide various everyday examples of CCPs and explain their applications

## Unit 05

### Principle 2: Determine the Critical Control Points (CCPs)

A critical control point is defined as a step at which control can be applied and is essential to prevent or eliminate a food safety hazard or reduce it to an acceptable level. The potential hazards that are reasonably likely to cause illness or injury in the absence of their control must be addressed in determining CCPs.

Complete and accurate identification of CCPs is fundamental to controlling food safety hazards. The information developed during the hazard analysis is essential for the HACCP team in identifying which steps in the process are CCPs. One strategy to facilitate the identification of each CCP is the use of a CCP decision tree (Examples of decision trees are given in Appendices E and F). Although application of the CCP decision tree can be useful in determining if a particular step is a CCP for a previously identified hazard, it is merely a tool and not a mandatory element of HACCP. A CCP decision tree is not a substitute for expert knowledge.

#### APPENDIX E

##### **Example I of a CCP Decision Tree**

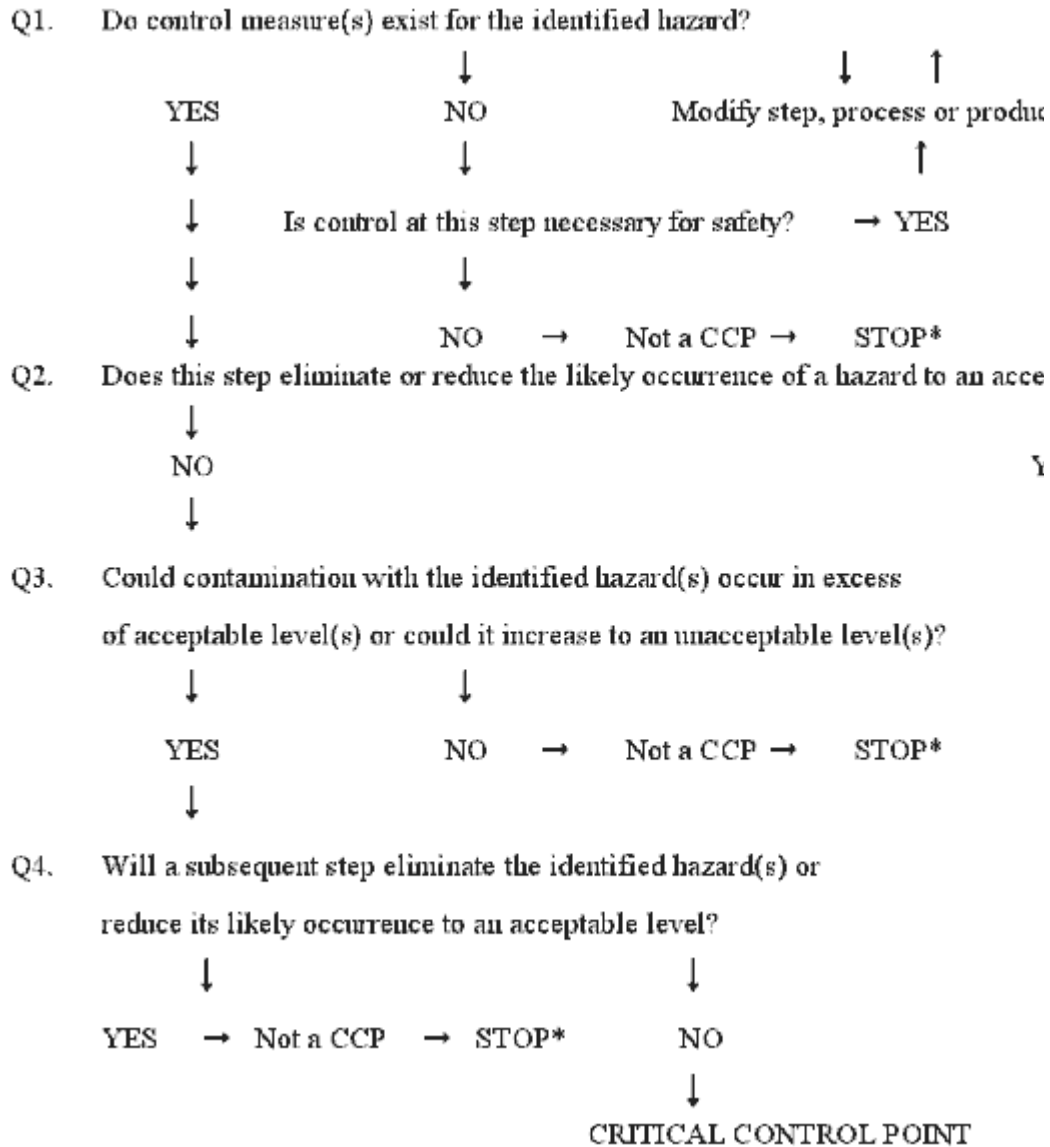
Important considerations when using the decision tree:

- The decision tree is used after the hazard analysis.
- The decision tree then is used at the steps where a hazard that must be addressed in the HACCP plan has been identified.
- A subsequent step in the process may be more effective for controlling a hazard and may be the preferred CCP.
- More than one step in a process may be involved in controlling a hazard.
- More than one hazard may be controlled by a specific control measure.



**APPENDIX F**

**Example II of a CCP Decision Tree**



\*Proceed to next step in the described process

Critical control points are located at any step where hazards can be either prevented, eliminated, or reduced to acceptable levels. Examples of CCPs may include: thermal processing, chilling, testing ingredients for chemical residues, product formulation control, and testing product for metal contaminants. CCPs must be carefully developed and documented. In addition, they must be used only for purposes of product safety. For example, a specified heat process, at a given time and temperature designed to destroy a specific microbiological pathogen, could be a CCP. Likewise, refrigeration of a precooked food to prevent hazardous microorganisms from multiplying, or the adjustment of a food to a pH necessary to prevent toxin formation could also be CCPs. Different facilities preparing similar food items can differ in the hazards identified and the steps which are CCPs. This can be due to differences in each facility's layout, equipment, selection of ingredients, processes employed, etc.

### Further Reading:

- ✓ *The Affirming Way of Life: See the Good, Speak the Good, Spread the Good Kindle Edition by Gail Siggelakis ,2019*
- ✓ *The Gift of Global Talent: How Migration Shapes Business, Economy & Society 1st Edition by William R. Kerr,2018*