

HACCP PLANS

What is HACCP and why is it important?

The term HACCP is an acronym for Hazard Analysis Critical Control Point. HACCP is a management system in which food safety is addressed through the analysis and control of biological, chemical, and physical hazards from raw material receipt, product handling, manufacturing, storage, distribution and consumption of the finished product by the public. If properly designed and implemented, a HACCP plan can prevent the occurrence of potential food safety problems.

HACCP PLAN REQUIREMENTS

To be considered a written HACCP plan with all of the following components must be submitted:

a. Each **critical control point** (CCP)

This will be each step in your process that, without control, will produce an unsafe product. Not every step in a process will be a CCP. Use document 2A. Decision Tree when deciding what steps in your process are CCPs.

b. The **significant hazards** that are to be controlled

Conducting a hazard analysis will help in identifying the hazards in your process. Hazards can be biological, chemical or physical. Biological hazards can be pathogen growth and/or toxin formation, yeast, parasites and/or viruses and may include Clostridium botulinum, Bacillus cereus, Staphylococcus aureus, Listeria monocytogenes, Hepatitis A, Norovirus, etc. Chemical hazards can include food additives used in excess like nitrates or sulfites or cleaning compounds that are unintentionally introduced. Physical hazards can be anything from glass to metal shards from the working environment.

c. The **critical limits** (CL) for each CCP

This is the limit that, if not met, could produce an unsafe product. An example of this is refrigerated control. The CL for all foods held cold is 41°F. If this CL is exceeded (temperature rises above 41°F), then the food products are maintained in an unsafe temperature zone and could therefore support the rapid growth of bacteria. Other examples could be minimum water activity reached, final internal cooking temperature, equilibrium pH, water phase salt value, etc.

d. The **monitoring** actions for each CCP

Monitoring addresses four parts: What, How, Frequency and Who. Ask yourself the following questions when filling each section: "What is being monitored to control the CL"; "How is the CL being monitored"; "At what frequency is the CL being monitored"; and "Who is monitoring the CL"?

e. **Corrective actions** (CA) to be taken if the critical limit is not met. This includes two parts:

- Taking control of the product—ensuring the negatively affected product does not reach the customer, e.g., discarding, re-processing or evaluating for safety
- Taking control of the process – correct the problem that caused the CL deviation, e.g., making adjustments to the process, like repairs to a malfunctioning refrigerator, replacing broken pH meter

f. **Record system** that documents monitoring and control of each CCP

Logs or records reflect the effectiveness of the HACCP plan by documentation of the CL. Examples would be a log showing the minimum cooking temperature was met; the refrigeration unit is holding 41°F or less; the pH of the product is appropriate, etc.

g. The method and frequency for **verification** of each CCP being controlled

Describe the verification procedures that will ensure that the HACCP plan is adequate to address the hazard and that it is consistently being followed. Items like thermometer calibration, in-process or end-product testing, and review of monitoring records each week are some examples of verification.

A HACCP Plan template is included at the end of this document (2B. HACCP Plan Form)

The following are additional required components of HACCP:

1. A description of the food product in consideration for variance
2. A flow diagram for the process used that identifies each step in the process and which are CCPs
3. Ingredients, materials, and equipment used in the preparation of that food
4. Formulations or recipes that address the food safety concerns involved
5. Employee training plan of standard operating procedures
6. Copies of blank record forms that are necessary to implement the plan
7. Additional scientific data or other information, as required by the department, supporting the determination that food safety is not compromised by the proposal.

