

Hazard Analysis Critical Control Points (HACCP)—Getting Started, Preliminary Steps¹

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To ensure that a HACCP plan has a solid foundation and that safe food is produced, certain initial steps must be carefully followed. Improper preparation or inadequate attention to detail can cause the plan to fail or decrease its effectiveness.

According to the *Codex Alimentarius*, the logical sequence for the application of HACCP involves five HACCP pre-steps (Table 1), which should then be followed by application of the seven HACCP Principles. These pre-steps, and other recommended preliminary activities, are discussed below.

Pre-Steps for Application of HACCP (modified from the *Codex Alimentarius*)

1. Obtain Commitment from Management
2. Assemble the HACCP Team (from *Codex Alimentarius*)
3. Become Aware of Regulatory Requirements
4. Obtain Education and Training
5. Describe the Product (from *Codex Alimentarius*)
6. Identify Intended Use (from *Codex Alimentarius*)
7. Construct Flow Diagram (from *Codex Alimentarius*)
8. On-site Confirmation of Flow Diagram (from *Codex Alimentarius*)

1. Obtain Commitment from Management

Management commitment is required from the very start. Without management support, HACCP cannot be successfully implemented. Management commitment should include commitment to food safety, to the HACCP system and its importance, to empowerment of employees, and to the team concept. Management must support the HACCP team and ensure that adequate resources are available to effectively define, develop, and implement the HACCP system.

2. Assemble the HACCP Team

With management assistance, the HACCP team is identified and assembled. An important aspect of HACCP is its team approach. Each team member should have a commitment to food safety and to the HACCP

system, and have an understanding of each team member's roles and responsibilities.

By definition, a "team" is two or more people. A HACCP plan developed by one person is likely to fail, since it does not engage and empower employees. The size and composition of the team will vary with the size and complexity of the food processing and handling facility, but it is often recommended that the team have a minimum of three members and a maximum of five members. However, in more complex food processing systems, more team members may be desirable.

The HACCP team should not be limited to quality-control or quality-assurance personnel, but be a multi-disciplinary group. It can include representatives from every aspect of the food operation, including management, maintenance, sanitation, operations, and receiving. In very large, complex operations, it may be desirable to have a core team, with additional team members added or included as needed. These team members may serve in an advisory role and may not need to attend every meeting. However, in these situations, it is important to keep these team members involved and engaged.

Once assembled, the HACCP team should elect a team leader, assign responsibilities to all team members, and determine a reasonable meeting schedule. As the team develops the HACCP plan, it should focus on the preliminary steps, the prerequisite programs, and the seven principles of HACCP. In addition, the team should assess additional training needs, determine the scope and format of the HACCP plan, determine the type of records and documentation needed, and prepare and implement the plan.

3. Become Aware of Regulatory Requirements

If the food products produced fall under a HACCP regulation, the HACCP team must be fully aware of these regulations and their requirements. Currently, the U.S. Department of Health and Human Services (DHHS)/Food and Drug Administration (FDA) requires the HACCP system for seafood (21CFR123) and fruit

and vegetable juice (21CFR120). In addition, the FDA administers a voluntary HACCP program for milk and milk products under the National Conference on Interstate Milk Shipments (NCIMS) program. The HACCP system is required for meats and poultry under U.S. Department of Agriculture (USDA)/Food Safety and Inspection Service (FSIS) regulations (9CFR417).

4. Obtain Education and Training

Key individuals involved with implementing HACCP should have an awareness of the HACCP system, should be aware of the importance of the HACCP plan in producing safe food products, and should receive training from an appropriate curriculum. In addition, other employees involved in the HACCP program should receive in-house training. Management should allow sufficient time for employee training.

5. Describe the Food Product and Its Distribution

The second Codex HACCP pre-step requires that the team have a full understanding of the food product(s) being manufactured. Team members must have a good understanding of the product's composition, its raw materials and ingredients, its processing and handling methods, and its distribution system.

6. Describe the Intended Use and Consumers of the Food

The third Codex HACCP pre-step requires that the team have a full understanding of the product's intended use and its likely consumers. Is the target audience the general public, or is the product consumed by a high-risk population (e.g., pregnant women, children, the elderly, or people with weakened immune systems)?

7. Develop a Flow Diagram Which Describes the Process

The fourth Codex HACCP pre-step is for the team to develop a flow diagram. Team members' understanding of the food processing system and its potential food safety risks will be enhanced by a well-conceived and accurate flow diagram. The flow diagram must address all aspects of the process which are under the control of the facility. It should be a simple block diagram (not a complex engineering drawing) that is easily understood by all the employees involved.

8. Verify the Flow Diagram

The fifth Codex HACCP pre-step requires that the flow diagram be verified. An on-site walk-through verification of the flow diagram should be conducted by the HACCP team to confirm the diagram's accuracy and completeness. Changes should then be made as necessary. This is also an excellent opportunity to look for any potential for cross-contamination between raw

and finished products, and to determine whether modifications to the design of the processing system may be needed. The flow diagram should be signed and dated by either the HACCP team leader or a designated team member to confirm that it has been verified and that it accurately reflects the processes being addressed in the HACCP Plan.

Summary

The preliminary or HACCP preparation phase provides an excellent opportunity for self-evaluation of the individual food processing system and how prepared the facility is to prevent food safety problems. Each of the pre-steps and related activities must be done with sufficient commitment and care. It is only after these pre-steps and related activities have been properly implemented that the HACCP team will be ready to move to the next phase of HACCP, which is evaluating, developing, and implementing Prerequisite Programs.

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¹ This document is FSHN07-1, one of a series of the Department of Food Science and Human Nutrition, UF/IFAS Extension. Original publication date June 2007. Visit the EDIS website at <http://edis.ifas.ufl.edu> for the currently supported version of this publication.

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