

HACCP Principle 3: Establishing Critical Limits

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Definition:

- **The maximum or minimum value to which a physical, biological, or chemical food hazard must be controlled at a critical control point to prevent, eliminate, or reduce to an acceptable level the occurrence of the identified food safety hazard.**

Critical Limits and CCPS

- For each CCP, a Critical Limit is established to signify whether a CCP is “in” or “out” of control.

Exceeding Critical Limit Indicates

- **Existence of direct health hazard.**
- **Direct health hazard could develop.**
- **Product not produced under conditions assuring safety.**

Setting Critical Limits

- **May require consultation with experts.**
- **Should be based on research.**
 - **published and reviewed research papers**
 - **in plant studies**

Parameters for Critical Limits

- Time
- Temperature
- Water activity (A_w)
- pH
- Salt concentration
- Weight
- Visual evaluation

Critical Limits

- **Are already established for many Critical Control Points in the USDA regulations.**
 - **Time and temperature for ground beef.**
 - **Zero tolerance for fecal contamination.**

Critical Limits

- **If the agency has a regulation on a critical control point, must use the regulation, even if strict compliance with regulation is not necessary for safety.**

Steps is Establishing Critical Limits

- **For each Critical Control Point**
 - **Determine if there is a regulatory critical limit (or find one based on scientific evidence.)**
 - **If there's no regulatory critical limits, you may have to obtain assistance from outside HACCP experts.**
 - **File letters or other documentation for critical limits you had to determine (for validation).**

417.1 Definitions

- **Critical Limit:** The maximum or minimum value to which a physical, biological, or chemical hazard must be controlled at a critical control point to prevent, eliminate, or reduce to an acceptable level the occurrence of the identified food safety hazard.

HACCP Compliance Checklist Form 5000.1

- **The HACCP plan does not list the critical limit to be met at each CCP (417.2 (c) (3)).**

417.2 Hazard Analysis and HACCP Plan

- **(c) The contents of the HACCP plan.**
 - **(3) List the critical limits that must be met at each of the critical control points. Critical limits shall, at a minimum, be designed to ensure that applicable targets or performance standards established by FSIS, and any other requirement set forth in this chapter pertaining to the specific process or product, are met.**