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Popular Article

Implementation HACCP procedures for food safety in poultry products

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INTRODUCTION

Pillsbury created HACCP for NASA in 1959. Food companies willingly employed - Hazard Analysis Critical Control Point (HACCP) for years. USDA-FSIS implemented HACCP in meat and poultry slaughter and processing plants in 1996 to beef up food safety. HACCP is the systematic use of good practice to prevent food safety issues and provide safe food. Preventing issues requires anticipating them and designing effective remedies. Prevention is proactive.

HACCP is used by numerous food manufacturers globally. HACCP assures food safety and harmlessness, protects products, and corrects faults, reducing quality defect costs and eliminating the need for final superior control. Meat slaughtering plants must follow food safety protocols to produce healthy meat. Both industrialized and developing nations face foodborne microorganisms as public health threats, regardless of economic level or geography. *Campylobacter*, *Salmonella*, *Escherichia coli* O157:H7, *Staphylococcus aureus*, and *Listeria monocytogenes* are frequent meat and poultry infections.

Numerous food safety concerns are addressed by HACCP, including parasitic pathogens (*Cryptosporidium*, *Entamoeba histolytica*, *Giardia*, *Trichinella*), bacterial pathogens (*Clostridium botulinum*, *Escherichia coli*, *Listeria*, *Salmonella*, *Vibrio cholerae*, *Cronobacter* spp.), viral pathogens (*Enterovirus*, *Hepatitis A*, *Norovirus*, *Rotavirus*), parasitic pathogens (*Cryptosporidium*), toxic microbial metabolites (mycotoxins), etc. The majority of *Salmonella* infections are caused by eggs, egg products, and chicken meat.

HACCP Plan work

1. Hazards are deemed bearable if they do not pose an intolerable danger to health. Any point in a food system or process where a loss of control does not present a health risk is known as a control point (CP).

1. A system or procedure where a loss of control might be harmful to one's health is known as a critical control point (CCP).
2. Critical Limit (CL): To lessen the risk to food safety, a biological, chemical, or physical property must be controlled at its maximum or lowest value. A critical control point limitation is not being met by the deviation.
3. The official procedures for adhering to the principles are described in the HACCP plan.
4. Physical, chemical, or biological characteristics that endanger the health of consumers are known as hazards.
5. Monitoring is a systematic series of measurements or observations of significant limitations in order to create and preserve an accurate record.
6. Preventive actions reduce, remove, annihilate, or exclude risks.
7. Risk is an evaluation of the probability and seriousness of hazard.
8. A material is sensitive if it has a history of biological dangers.
9. Verification is a set of procedures, tests, and methods used to determine whether the HACCP system is operating as intended.

The HACCP principles

The following seven principles guide HACCP's identification, appraisal, and control of food safety hazards:

Principle 1: analyze hazards.

Principle 2: Identify essential control points.

Principle 3: Set important limitations.

Principle 4: Establish monitoring.

Principle 5: Take remedial action.

Principle 6: Verification.

Principle 7: Maintain records and documentation.

HACCP Verification

- ✓ Check of all HACCP plans and records routine wise
- ✓ Checking of monitoring procedures and equipment routine wise
- ✓ Random sampling of all products such as microbiological.
- ✓ Review of all critical limit and handling of products.

Advantage of HACCP

- ✓ Identifies Hazards
- ✓ Remove Hazards
- ✓ Produce safe food
- ✓ Reduce Health Issues
- ✓ High Profit

