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Implementing a HACCP Plan in Poultry and Rabbit Processing

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HACCP =

Hazard Analysis Critical Control Points

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What is HACCP?

- It is a systematic preventive approach to food safety during the production processes that contains designed measurements to reduce these risks to a safe level
- Designed to minimize the risk of food safety hazards

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Introduction

- HACCP:
  - "It is the responsibility of the food industry to develop and implement HACCP plans and for regulatory agencies to facilitate the process." (NACMCF, June 1993)
  - Emphasizes process control
  - Concentrates on the points in the process that are critical to the safety of the product

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HACCP – 7 Principles

1. Conduct a hazard analysis
2. Identify critical control points
3. Establish critical limits for each critical control point
4. Establish critical control point monitoring requirements
5. Establish corrective actions
6. Establish procedures for ensuring the HACCP system is working as intended
7. Establish record keeping procedures

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HACCP – Principle 1

- Principle 1: Conduct a hazard analysis
  - Describe product
  - Determine the food safety hazards and identify the preventive measures the plan can apply to control these hazards.
  - A food safety hazard is any biological, chemical, or physical property that may cause a food to be unsafe for human consumption.

  - Example:
    - The chilling process after slaughtering a chicken can offer a physical, biological ……

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Poultry Slaughter Model

PRODUCT DESCRIPTION

Figure 2

PROCESS CATEGORY: SLAUGHTER PRODUCT: YOUNG CHICKEN	
1. COMMON NAME?	CHICKEN
2. HOW IS IT TO BE USED?	READY TO COOK CARCASSES/PARTS
3. TYPE OF PACKAGE?	CARCASSES – VACUUM PACKAGED INDIVIDUALLY; PARTS – VACUUM PACKAGED, TRAY PACKS
4. LENGTH OF SHELF LIFE, AT WHAT TEMPERATURE?	3-6 MONTHS AT 0° F OR BELOW;7 DAYS AT 40° F
5. WHERE WILL IT BE SOLD? CONSUMERS? INTENDED USE?	WHOLESALE TO DISTRIBUTORS; RETAIL TO CONSUMERS
6. LABELING INSTRUCTIONS?	SAFE FOOD HANDLING LABELS; KEEP REFRIGERATED OR KEEP FROZEN; COOKING LABEL
7. IS SPECIAL DISTRIBUTION CONTROL NEEDED?	KEEP REFRIGERATED OR KEEP FROZEN

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https://www.fda.gov/downloads/Food/ResourcesForYou/HealthEducators/UCM109315.pdf

REFRIGERATOR & FREEZER STORAGE CHART

Since product dates aren't a guide for safe use of a product, consult this chart and follow these tips. These short but safe time limits will help keep refrigerated food 40° F (4° C) from spoiling or becoming dangerous.

- Purchase the product before "sell-by" or expiration dates.
- Follow handling recommendations on product.
- Keep meat and poultry in its package until just before using.
- If freezing meat and poultry in its original package longer than 2 months, overwrap these packages with airtight heavy-duty foil, plastic wrap, or freezer paper, or place the package inside a plastic bag.

Because freezing 0° F (-18° C) keeps food safe indefinitely, the following recommended storage times are for quality only.

	Refrigerator	Freezer
Fresh Poultry		
Chicken or turkey, whole	1 to 2 days	1 year
Chicken or turkey, parts	1 to 2 days	9 months
Giblets	1 to 2 days	3 to 4 months
Cooked Poultry, Leftover		
Fried chicken	3 to 4 days	4 months
Cooked poultry dishes	3 to 4 days	4 to 6 months
Pieces, plain	3 to 4 days	4 months
Pieces covered with broth, gravy	3 to 4 days	6 months
Chicken nuggets, patties	3 to 4 days	2 months

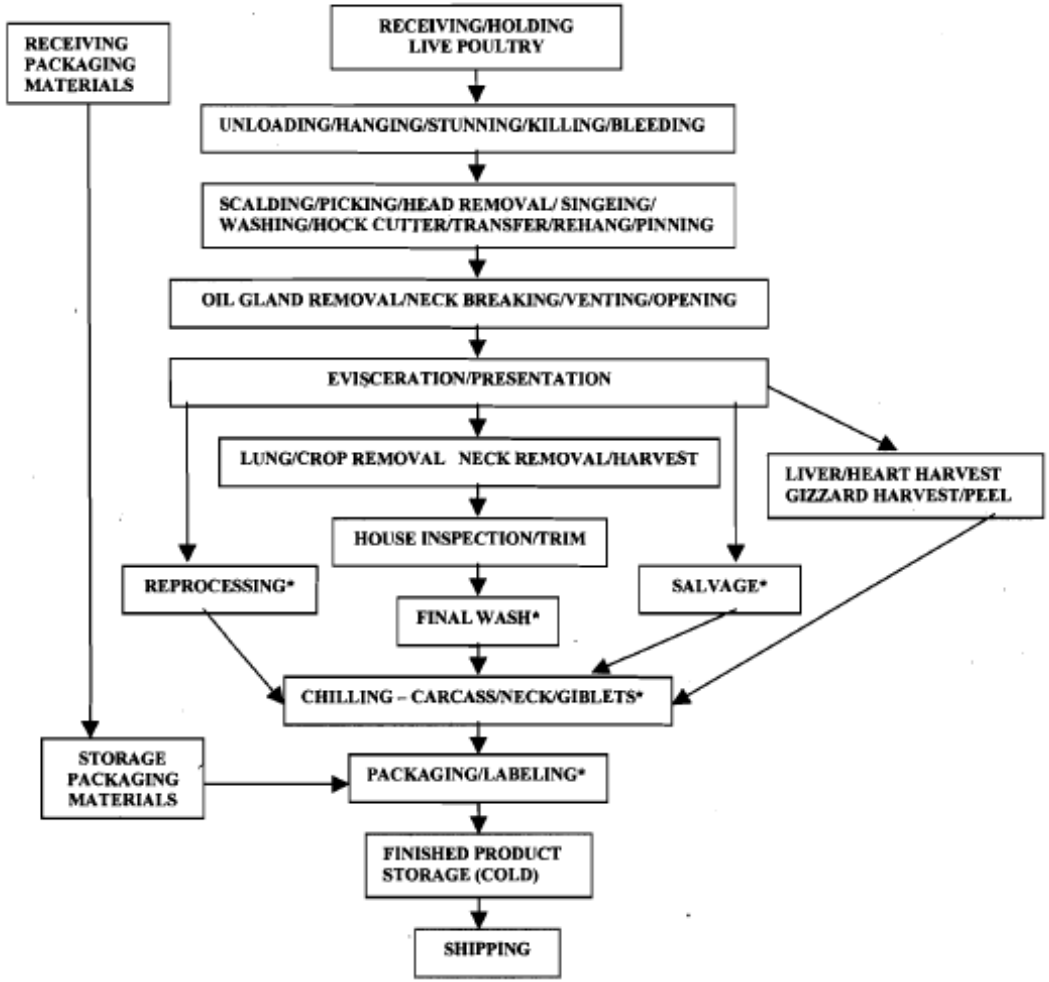
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PROCESS FLOW DIAGRAM

Figure 1

PROCESS CATEGORY: SLAUGHTER
PRODUCT: YOUNG CHICKEN



* Steps in the process where nonmeat ingredients (e.g., antimicrobials) are added to or comes in contact with product.

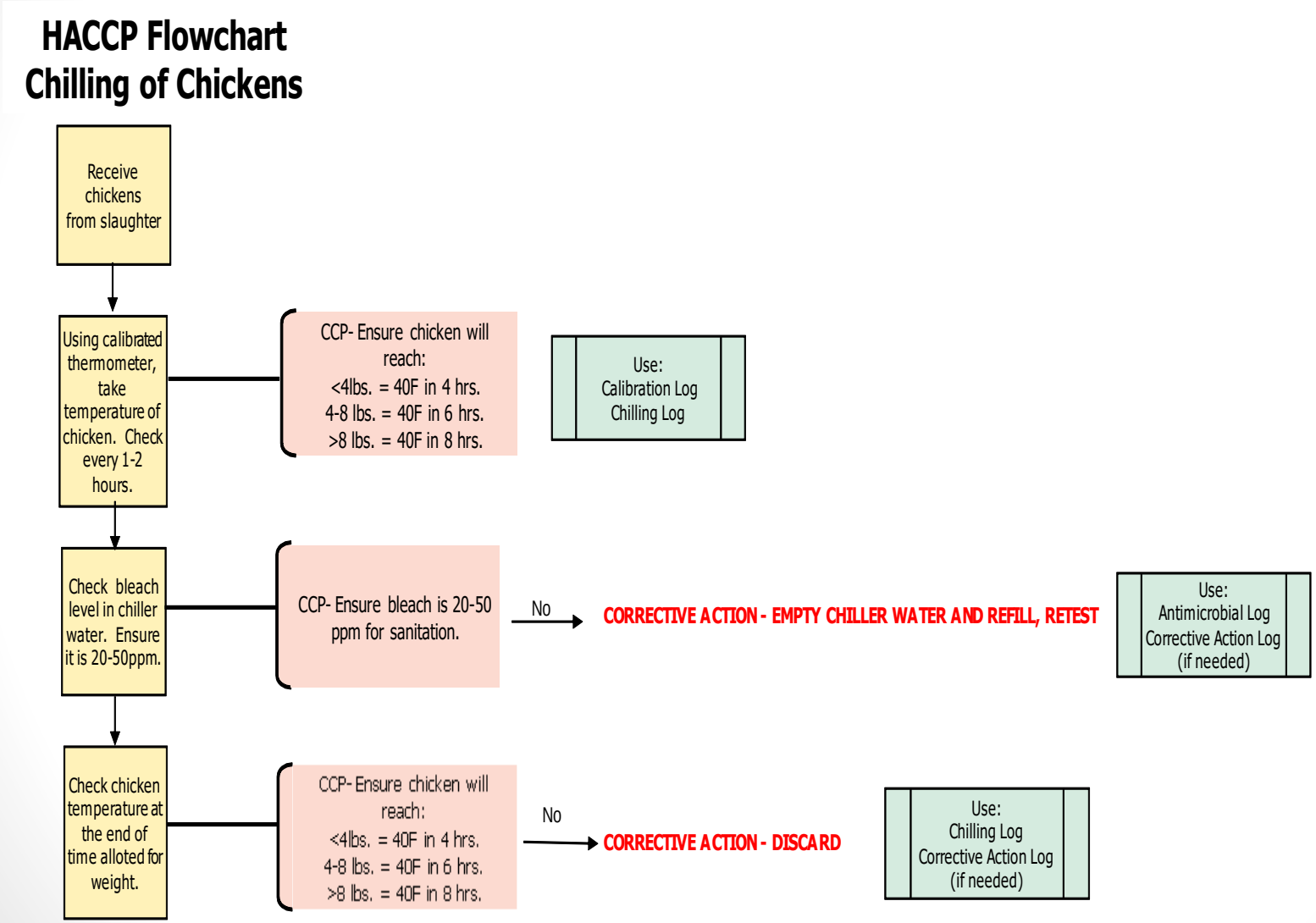
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HACCP – Principle 2

- **Principle 2: Identify critical control points**
  - A critical control point (CCP) is a point, step, or procedure in a food manufacturing process at which control can be applied and, as a result, a food safety hazard can be prevented, eliminated, or reduced to an acceptable level.
    - Examples:
      - When cooling chickens, testing the ice bath for proper sanitation.
      - When cooling chickens, I will use my calibrated stem thermometer to ensure the following:
        - Chicken < 4 lbs. = Must be 40°F (or less) within 4 hours
        - Chicken 4-8 lbs. = Must be 40°F (or less) within 6 hours
        - Chicken > 8 lbs. = Must be 40°F (or less) within 8 hours

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HACCP FLOW CHART



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HACCP – Principle 3

- **Principle 3: <u>Establish critical limits for each critical control point</u>**
  - A critical limit is 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.

    - Example:

      Chicken < 4 lbs. = Must be 40°F (or less) within 4 hours

      Chicken 4-8 lbs. = Must be 40°F (or less) within 6 hours

      Chicken > 8lbs. = Must be 40°F (or less) within 8 hours

      Sanitizer levels must be in limits:

      Chlorine: MAX 50 PPM

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HACCP Chart
Chilling Chicken after slaughter

To reduce biological contamination (i.e. Salmonella)

HACCP CHART

CCP	Critical Limits	Monitoring	Record	Verification Procedures	Corrective Actions
Chilling	Temperature will be: < 4lb. = 40F in 4 hrs 4-8 lbs. = 40F in 6 hrs >8 lbs. = 40F in 8 hrs	Product temp will be monitored by the Employee at the end of chilling procedure or every hour.	Chilling Log Thermomter Calibration Log	Once per shift Employee will review all logs.	Employee will reject product dependent on time and temp. Employee will identify any deviation form plan and prevent reoccurence.
	Chlorine in chiller will be maintained at 20-50ppm.	Chill water will be tested for Chlorine level every 2 hrs.		Employee will verify chiller Chlorine level at beginning of each shift.	Employee monitor Chlorine level in chiller every 2 hrs to ensure proper sanitation and correct when necessary. Any necessary repairs that is required to the chiller will be made as required.

Signature:_____ Date:_____

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HACCP – Principle 4

- **Principle 4: <u>Establish critical control point monitoring requirements</u>**
  - Monitoring activities are necessary to ensure that the process is under control at each critical control point.
    - Examples:
      - Checking the temperature of the chicken every hour after slaughter.
      - Checking the sanitizer frequently.

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REPROCESSING INSPECTION LOG

Date: _____ **Critical Limit: No visible fecal contamination entering chiller**

Time	Product ID	Results of Inspection	Monitor Initials	Verification Initials	Corrective Actions and/or Comments

Reviewed by: _____ **Date:** _____

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HACCP – Principle 5

- **Principle 5: <u>Establish corrective actions</u>**
  - These are actions to be taken when monitoring indicates a deviation from an established critical limit.
  - Corrective actions are intended to ensure that no product injurious to health or otherwise adulterated as a result of the deviation enters commerce.
    - Example:
      - After slaughtering a 6 lb chicken, the temperature after 6 hours is 51°F. This is a critical control point. The chicken will need to be discarded and is not safe for human consumption.
      - If the chill water is not meeting sanitizer limits, the water must be disposed of properly and new water, ice and sanitizer must be added. Re-test the water.

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CORRECTIVE ACTIONS LOG

Product: _____ **Lot #** _____

CCP	Deviation/ Problem	Corrective Action Procedures/Explain	Disposition of Product	Responsible Person	Date/Time

SIGNATURE: _____ **DATE:** _____

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HACCP – Principle 6

- **Principle 6: <u>Establish procedures for ensuring the HACCP system is working as intended</u>**
  - Validation ensures that the plants do what they were designed to do; that is, they are successful in ensuring the production of a safe product.
    - Example:
      - The validation that chilling temperatures are being taken and followed will require the employees signature or initial by each temperature taken.

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CHILLING LOG

Date: _____ Critical Limit: Internal temperature of ≤40^0 F when product exits chiller

Time	Product ID	Internal Temperature	Monitor Initials	Verification Initials	Corrective Actions and/or Comments

Reviewed by: _____ Date: _____

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HACCP – Principle 7

- **Principle 7: Establish record keeping procedures**
  - The HACCP regulation requires that all plants maintain certain documents, including its hazard analysis and written HACCP plan, and records documenting the monitoring of critical control points, critical limits, verification activities, and the handling of processing deviations.
    - Example:
      - Records on a "Chilling Log" will be kept daily and maintained through out every slaughter. HACCP records must be kept for the inspector to view at anytime. Also, there will be employee training on HACCP and the employee will sign off on that training.

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Other Records

- Slaughter dates and number of poultry/rabbits slaughtered each date
- Number of sick animal segregated from healthy animals
- If selling products to a restaurant or retailer you must keep a copy of the invoice with date of delivery, your name and address, buyer's name and address, identity and quantity of product

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Finally

- Keep it simple!!
- Don’t use the word “Daily” unless you are going to do it daily. Better to say “on slaughter days” and “when product is present”



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