Hazard Analysis and Critical Control Point (HACCP) Program
Fully Cooked, Not-Shelf Stable Meat & Poultry Fermented

by
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Model Plan
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Approved:
Signed: _____

Name:
Implementation Date: _____
Revision, Date: _____

Trade Secret/Confidential Commercial Information
This document contains trade secret/confidential commercial information pursuant to 5 U.S.C. 552 (b)(4).

Product Category Description

Product: Fully Cooked, Not-Shelf Stable Meat & Poultry, Fermented - Beef, Pork, Lamb, Turkey and Chicken

The following areas need to be defined when developing the product category description:

1. Common Name/Description:

Several meat and poultry products made from whole muscles or restructured muscles will be in the category. They include

Summer Sausage Summer Sausage Sticks		

2. How is it to be used?

Usually eaten without further cooking, served as an snack or entree for home or food service.

3. Type of Package?
Vacuum packaged
Butcher freezer paper

4. Length of Shelf Life; at what temperature?
_40-80 days, fresh at _35°F

5. Where will it be sold?

Retail to general public

6. Labeling instructions:

Keep Frozen or Keep Refrigerated

7. Is special distribution control needed?
Frozen or refrigerated distribution

Date:_____ Approved by: _____

Product and Ingredients

Product: Fully Cooked, Non-Shelf Stable Ground, Fermented - Beef, Pork, Lamb, Turkey and Chicken

Meat Ingredients:

Beef , Pork, Lamb, Chicken, Turkey Primals / SubPrimals / parts and trim

Non-Meat Ingredients:

Water, Salt, Sugar, Spices or Flavorings, Proteins, Starches, Acidulants, Lactates, Lactic Acid Starter Culture, Encapsulated Organic Acids, Liquid Smoke Products and other food ingredients [GRAS].

Restricted Ingredients:

Sodium Nitrite, Sodium Erythorbate, Sodium Phosphates, Potassium Sorbate and others not listed here but approved and GRAS.

Ascorbate or Erythrobate and their salts

Packaging Materials:

Butcher paper, Vacuum bags, Plastic Bags and liners and Boxes and other Containers approved for food container use, or roll stock film.

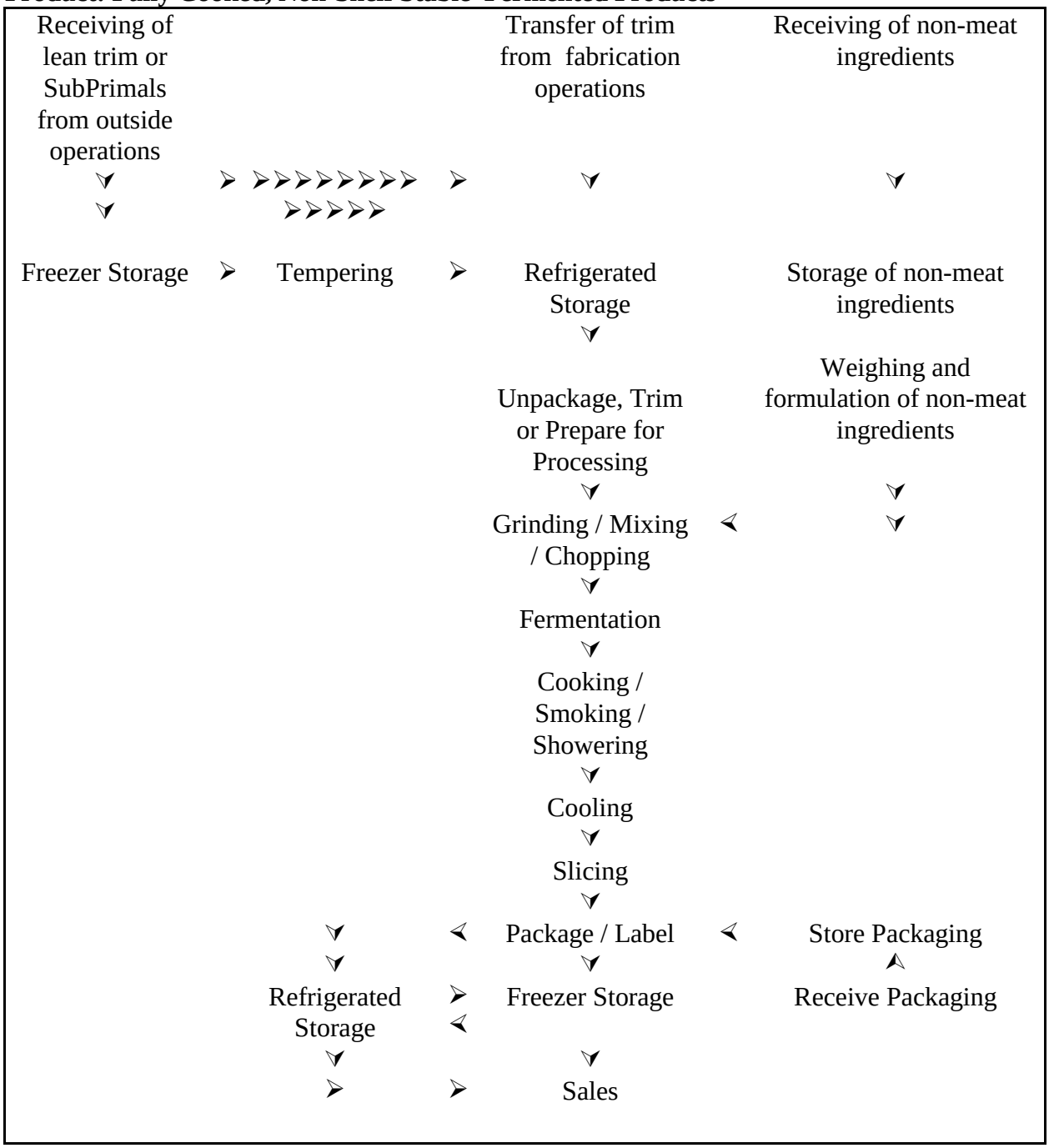
Casing:

Natural casings, cellulose and collagen, cloth fabric, plastic and others not listed here but approved for such use.

Fully Cooked, Not-Shelf Stable Fermented.

Process Flow Chart

Product: Fully Cooked, Non-Shelf Stable Fermented Products



Fully Cooked, Not-Shelf Stable Fermented.

Hazard Analysis

Product: Raw, Other

Process Step	Potential hazard introduced, controlled or enhanced at this step B= Biological C= Chemical P= Physical	Does this potential hazard need to be addressed in the HACCP plan? (Yes or No)	Justification for decision made in previous column	What control measures can be applied to prevent, eliminate or reduce the hazards being addressed in the HACCP plan?
Receiving of lean trim or SubPrimals from outside operations	B - Presence and growth of pathogens	Yes	Meat is a known source of pathogens and growth of pathogens could cause sever illness	Thermal processing later in the process at a time and temperature to produce lethality to pathogens.
	C -None			
	P -metal, bone, plastic	No	Low occurrence according to plant experience	
Transfer of trim from fabrication operations	B -Presence and growth of pathogens	No	Low occurrence as temperatures are controlled in fresh meat not ground HACCP plan	
	C - None			
	P -Metal	No	Low occurrence according to plant experience	
Refrigerated Storage	B -Growth of pathogens	No	Low occurrence as refrigeration units are maintained a low temperatures to prevent growth	
	C - None			

Hazard Analysis

Product: Raw, Other

Process Step	Potential hazard introduced, controlled or enhanced at this step B= Biological C= Chemical P= Physical	Does this potential hazard need to be addressed in the HACCP plan? (Yes or No)	Justification for decision made in previous column	What control measures can be applied to prevent, eliminate or reduce the hazards being addressed in the HACCP plan?
	P - None			
Freezer Storage	B -Growth of pathogens	No	Low occurrence as freezer units are maintained a low temperatures to prevent growth	
	C - None			
	P - None			
Tempering	B -Growth of pathogens	No	Low occurrence as tempering units are maintained a low temperatures to prevent growth	
	C - None			
	P - None			
Unpackage, Trim or Prepare for Processing	B -Growth of pathogens	Yes	Bacterial pathogens could grow to levels with potential for moderate severity	Thermal processing later in the process at a time and temperature to produce lethality to pathogens.
	C - Sanitizer residue	No	Low occurrence as plant has SSOP's	
	P - None			

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Hazard Analysis

Product: Raw, Other

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Grinding / Mixing / Chopping	B -Growth of pathogens	Yes	Bacterial pathogens could grow to levels with potential for moderate severity	Thermal processing later in the process at a time and temperature to produce lethality to pathogens.
	C - Sanitizer residue	No	Low occurrence as plant has SSOP's	
	P - None			
Fermentation	B -Growth of Pathogens (*Staphylococcus aureus)*	Yes	Failure of fermentation could allow pathogen growth and production of toxins.	Proper fermentation and reduction of pH with starter culture will inhibit growth.
	C - None			
	P - None			
Cooking / Smoking / Showering	B -Pathogen lethality	Yes	Possible high severity if survival of pathogens occurs.	Thermal processing at time and temperature combinations that produce pathogen lethality.
	C - None			
	P - None			

Hazard Analysis

Product: Raw, Other

Process Step	Potential hazard introduced, controlled or enhanced at this step B= Biological C= Chemical P= Physical	Does this potential hazard need to be addressed in the HACCP plan? (Yes or No)	Justification for decision made in previous column	What control measures can be applied to prevent, eliminate or reduce the hazards being addressed in the HACCP plan?
Cooling	B -Pathogens	No	Low occurrence as products cool rapidly and inhibit growth and plant SSOP's prevent cross contamination.	
	C - None			
	P - None			
Slicing	B - None			
	C - None			
	P - None			
Package / Label	B -None			
	C - None			
	P - None			
Freezer Storage	B -None			
	C - None			
	P - None			

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Refrigerated Storage	B -None			
	C - None			
	P - None			
Sales	B -None			
	C - None			
	P - None			
Receiving of non-meat ingredients	B -Pathogens	No	Low occurrence as indicated by spice supplier.	
	C - None			
	P - None			
Storage of non-meat ingredients	B -None			
	C - None			
	P - None			
Weighing	B - None			

Hazard Analysis

Product: Raw, Other

Process Step	Potential hazard introduced, controlled or enhanced at this step B= Biological C= Chemical P= Physical	Does this potential hazard need to be addressed in the HACCP plan? (Yes or No)	Justification for decision made in previous column	What control measures can be applied to prevent, eliminate or reduce the hazards being addressed in the HACCP plan?
and formulation of non-meat ingredients	C - None			
	P - None			
Receive Packaging	B -None			
	C - None			
	P - None			
Store Packaging	B -None			
	C - None			
	P - None			

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Principle 2 - CCP Determination

Product:

A critical control point is defined as a point, step or procedure at which control can be applied and a food safety hazard can be prevented, eliminated or reduced to acceptable levels.

Process step	Hazard Biological = B Chemical = C Physical = P	Q1. Does this step involve a hazard of sufficient risk and severity to warrant its control?	Q2. Does a preventive measure for the hazard exist at this step?	If Q2. is no: Is control at this step necessary for safety?	Q3. Is control at this step necessary to prevent, eliminate or reduce the risk of the hazard to consumers?	
Receiving of lean trim or SubPrimals from outside operations	B - Presence and growth of pathogens	Yes	Yes		No	
	C -					
	P -					
Unpackage, Trim or Prepare for Processing	B -Growth of pathogens	Yes	Yes		No	
	C -					
	P -					
Grinding / Mixing / Chopping	B -Growth of pathogens	Yes	Yes		No	
	C -					
	P -					
Fermentation	B -Growth of Pathogens (Staphylococcus aureus)	Yes	Yes		Yes	CCP-1B
	C -					
	P -					

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Product:	**Principle 2 - CCP Determination** A critical control point is defined as a point, step or procedure at which control can be applied and a food safety hazard can be prevented, eliminated or reduced to acceptable levels.					
Process step	Hazard Biological = B Chemical = C Physical = P	Q1. Does this step involve a hazard of sufficient risk and severity to warrant its control?	Q2. Does a preventive measure for the hazard exist at this step?	If Q2. is no: Is control at this step necessary for safety?	Q3. Is control at this step necessary to prevent, eliminate or reduce the risk of the hazard to consumers?	
Cooking / Smoking / Showering	B -Pathogen lethality	Yes	Yes		Yes	CCP-2B
	C -					
	P -					

Principles 3, 4 and 5
Critical Limits, Monitoring and Corrective Actions

Product:

Process Step/ CCP	Critical Limits	Monitoring Procedures (Who/What/When/How)	Corrective Actions
Fermentation	pH≤5.3 prior to heat treatment	Who: Smokehouse operator What: pH after fermentation When: After fermentation and prior to cooking. How: The pH will be measured with a pH probe using standard methods for probe calibration and measurement.	1) Place product on hold and evaluate the pH during the deviation. If evaluation by process control authority indicate safety then cook the product. If necessary test for toxins and discard product if necessary. 2) Evaluate fermentation process for possible operator error and retrain operator if necessary. 3) Evaluate thermal processing unit and repair or replace if necessary. 4) Evaluate starter culture usage procedures and adjust if necessary. 5) In all other cases comply with guidelines in CFR Section 417.3.
Cooking / Smoking / Showering	Cooking to one of the time and temperature lethality performance standards 1. ≥150^{o}F for 72 seconds 2. ≥158^{o}F for 0 seconds 3. Other time and temperatures listed in Appendix A	Who: Smokehouse operator What: Internal temperature and time at endpoint temperature When: At the end of the cooking process before cooling How: The internal temperature of the largest meat item will be recorded and time at that temperature recorded.	1. Place product on hold and evaluate the time and temperature during the deviation. If evaluation by process control authority indicate safety then recook the product. Discard product if necessary. 2. Evaluate cooking process for possible operator error and retain operator if necessary. 3. Evaluate thermal processing unit and repair or replace if necessary. 4. In all other cases comply with guidelines in CFR Section 417.3.

Principles 6 and 7
Verification and Record Keeping

Product:

Process Step/CCP	Records	Verification Procedures
Fermentation	1. Fermentation pH monitoring log w/daily review initials if in production. 2. CCP deviations/corrective actions log. 3. Audit report of CCP monitoring activities.	1. Daily review and initialing of the fermentation pH monitoring log CCP-1B (including any corrective actions taken) and thermometer calibration log by the HACCP manager if product is in production that day. 2. Audit of CCP monitoring activities and procedures by the HACCP manager approximately every 4 months.
Cooking / Smoking / Showering	1. Thermal processing time and temperature monitoring log w/daily review initials: 2. CCP deviations/corrective actions log. 3. Audit report of CCP monitoring activities.	3. Daily review and initialing of the thermal processing time and temperature monitoring log CCP-2B (including any corrective actions taken) and thermometer calibration log by the HACCP manager if product is in production that day. 4. Audit of CCP monitoring activities and procedures by the HACCP manager approximately every 4 months.
Overall plan	5. Thermometer Calibration log	6. Daily calibration of thermometers used to monitor CCP's by a designated employee.

Principles 6 and 7 **Verification and Record Keeping** **Product:**		
Process Step/CCP	**Records**	**Verification Procedures**
		7. Annual review of HACCP plan.

HACCP Plan

Product: Fully Cooked, Not-Shelf Stable Meat & Poultry - Fermented.

Process Step	Hazard Description	CCP Description	Critical Limit	Monitoring Procedures/ Frequency/ Person Responsible	Corrective Action/ Person Responsible	HACCP Records	Verification Procedures/ Person Responsible
Fermentation	Growth of Pathogens	CCP-1B	pH ≤5.3 prior to heat treatment	Who: Smokehouse operator What: pH after fermentation and prior to cooking. How: the pH will be measured with a probe using standard methods for calibration and measurement.	1. Place product on hold and evaluate the pH deviation. If evaluation by process control authority indicates safety, then cook the product. Discard the product if necessary. 2. Evaluate fermentation process for possible operator error and retrain if necessary. 3. Evaluate thermal processing unit and repair or replace if necessary. or replace if necessary. 4. Evaluate starter culture usage procedures and adjust if necessary. 5. In all cases comply with guidelines in CFR 417.3.	1. Fermentation pH monitoring log w/daily review initials if in production 2. CCP deviations/corrective actions log. 3. Audit report of CCP monitoring activities.	1. Daily review and initialing of the fermentation pH monitoring log CCP-1B (including any corrective actions taken) and thermometer calibration log by the HACCP manager if product is in production that day. 2. Audit of CCP monitoring activities and procedures by the HACCP manager approximately every 4 months.
Cooking/ Smoking/ Showering	Pathogen Lethality	CCP-2B	Cooking to one of the time and temperature lethality performance standards 1. ≥150°F for 72 seconds. 2. ≥158°F for 0 seconds. 3. Other time and temperatures listed in Appendix A.	Who: Smokehouse operator. What: Temperature at the end of cooking. When: At the end of Cooking and before Cooling. How: The internal temperature of the largest meat item will be recorded and time	1. Place product on hold and evaluate the time and temperature during the deviation. If evaluation by process control authority indicate safety then recook the product. Discard product if necessary. 2. Evaluate cooking	1. Fermentation pH monitoring lag w/daily review, initials if in production 2. CCP deviations/corrective actions log. 3. Audit report of CCP monitoring activities.	1. Daily review and initialing of the fermentation pH monitoring log CCP-2B (including any corrective actions taken) and thermometer calibration log by the HACCP manager approximately every

HACCP Plan

Product: Fully Cooked, Not-Shelf Stable Meat & Poultry - Fermented.

Process Step	Hazard Description	CCP Description	Critical Limit	Monitoring Procedures/ Frequency/ Person Responsible	Corrective Action/ Person Responsible	HACCP Records	Verification Procedures/ Person Responsible
			Appendix A.	at that temperature recorded.	process for possible operator error and retain operator if necessary. 3. Evaluate thermal processing unit and repair or replace if necessary. 4. In all other cases comply with guidelines in CFR Section 417.3.	activities.	4 months.