MODEL FOOD SAFETY PLAN FOR A RAW DOG/CAT FOOD WITHOUT HEAT PROCESSING

FSMA Activity - 2021

OTSC FSMA Activity

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Owner or Agent in Charge Signature

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	chicken parts		Packaging Material
			Receiving
			Packaging
	↓		Material Storage
	Cold storage of		
	ingredients.		
		,	
Rework			
	Scale		
	Crinding and mixing		
	Ginnung and mixing.		
	+		
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· · · · · · · · · · · · · · · · · · ·	Packaging	•	<u> </u>
	Irradiation	6602	
		CCP3	
	Frozen Product Storage	CCP1	
	Snipping to Ketail		

List of Product Ingredients and Incoming Materials Form (1)

Product Category: Manufacturer of Dog and Cat Food that has Not Undergone a Heat Process Specific product category: Raw frozen dog and cat food. Complete or for intermittent feeding.

Bulk Ingredients	Bag, and Hand Add Ingredients	Medications/Drugs
Whole chicken with bone	None	None
Liquids	Packaging Materials	Other Additives
Water (if batch is dry)	Plastic chub suitable for irradiation Outer cardboard box for shipping chubs. Lined with plastic.	None

Approved PCQI: DKR

Product Description Form (2)

Product Category: Raw frozen dog and cat food. Complete and or for intermittent feeding (treat)

1. Product name(s)	Ground Chicken with Bone		
2. Product safety properties (Moisture, Temperature, NPN, etc.	Frozen product with high moisture. Animal protein product.		
3. Intended use and customer	Dog and cat food.		
4. Type of packaging	Sealed plastic chub that is suitable for HPP or irradiation. Shipped in plastic lined cardboard boxes.		
5. Shelf life	6 months to 12 months		
6. Where will the product be sold?	Pet food stores, feed stores, general retail establishments.		
7. Labeling instructions	Keep product frozen until ready to use. Thaw in refrigerator before feeding. Discard uneaten portions. This product is meant for intermittent or supplemental feeding only. Not a complete feed. Always wash hands and utensils after handling. Treated with irradiation.		
8. Special distribution control	Must be transported in refrigerator trucks kept at freezing temperatures.		

Approved: DKR

Product Category: Animal Food <u>#3 – Non heat processed dog/cat food</u> Life Stage: <u>All life stages.</u> Intended Species: Dog/Cat

Ingredient or Known or **Explanation/Justification** Is the Do known or Preventive Process Step reasonably reasonably foreseeable Preventive Control foreseeable hazards hazards require a Control Measures introduced, preventive control Applied at Applied increased or based on Severity and this Step? "Yes" or controlled at this Probability "No" "Yes" or "No" step Raw poultry is a known source of 1. Yes Process control: Yes, CCP1 Biological Formulation Salmonella. Controlling Temperature Listeria temperature with help keep Salmonella growth (if present) in check. Chemical None identified at this time. Physical None identified at this time

Product Category: Animal Food <u>Non heat processed dog/cat food</u> Life Stage: <u>All life stages.</u> Intended Species: Dog/Cat

Ingredient or Explanation/Justification Is the Known or Do known or Preventive **Process Step** reasonably reasonably foreseeable Control Preventive foreseeable hazards hazards require a Measures Control preventive control introduced, Applied Applied at increased or based on Severity and this Step? "Yes" or controlled at this Probability "No" "Yes" or "No" step Raw poultry is a known source of 2. Yes Process control: Yes, CCP1 Biological pathogens. Controlling Receiving Temperature Listeria, temperature with help keep whole Salmonella chicken/chicken growth (if present) in check. parts (frozen) Chemical No Low likelihood: approved supplier including letter of Cleaners, guarantee, SSOPs. sanitizers, pesticides Animal drug residue Low likelihood. Metal controlled Physical No at metal detector. Plastic, metal, wood,

Product Category: Animal Food <u>#3 – Non heat processed dog/cat food</u> Life Stage: <u>All life stages.</u>

Ingredient **Explanation/Justification** Known or reasonably Do known or reasonably Preventive Is the or Process foreseeable hazards foreseeable hazards Control Preventive introduced, increased Step require a preventive Measures Control or controlled at this control based on Applied Applied at Severity and Probability this Step? step "Yes" or "No" "Yes" or "No" 3. Packaging Biological 4. GMPs and SOPs will prevent No Material 3.None identified at contamination of packaging Receiving materials. this time 4. Listeria 4. Packaging Salmonella Material Storage No 3. Letters of guarantee from Chemical suppliers. Packaging must be 3.Cleaners/residues designed and approved for from manufacture irradiation/direct contact with 4. Cleaners, sanitizers, food. pesticides. 4. CGMPs. 4. Letters of guarantee from Physical No approved suppliers. 3. None identified at this time 4. Fragments of plastic, metal, wood. Date: 7/19/2021 PCQI Initial: DKR

Intended Species: Dog/Cat

Product Category: Animal Food <u>#3 – Non heat processed dog/cat food</u> Life Stage: <u>All life stages.</u>

Ingredient Known or reasonably Do known or reasonably **Explanation/Justification** Preventive Is the Control or Process foreseeable hazards foreseeable hazards Preventive introduced, increased require a preventive Control Step Measures or controlled at this control based on Applied Applied at Severity and Probability this Step? step "Yes" or "No" "Yes" or "No" 5. Cold No significant growth of No Biological storage of pathogens will occur at low Listeria temperatures of cold storage. ingredients Salmonella (frozen) Chemical No Low likelihood resulting from SSOPs. Cleaners, sanitizers, Pesticides Physical None identified at this time.

Date: <u>7/19/2021</u> PCQI Initial: DKR

Intended Species: Dog/Cat

Product Category: Animal Food <u>#3 – Non heat processed dog/cat food</u> Life Stage: <u>All life stages.</u>

Intended Species: <u>Dog/Cat</u>

Ingredient or Process Step	Known or reasonably foreseeable hazards introduced, increased or controlled at this step	Do known or reasonably foreseeable hazards require a preventive control based on Severity and Probability "Yes" or "No"	Explanation/Justification	Preventive Control Measures Applied	Is the Preventive Control Applied at this Step? "Yes" or "No"
5. Scale	Biological Listeria Salmonella	No	Low likelihood resulting SSOPs.		
	Chemical: None identified at this time				
	None identified at this time				

Product Category: Animal Food <u>#3 – Non heat processed dog/cat food</u> Life Stage: <u>All life stages.</u> Intended Species: Dog/Cat

Ingredient or Process Step	Known or reasonably foreseeable hazards introduced, increased or controlled at this step	Do known or reasonably foreseeable hazards require a preventive control based on Severity and Probability "Yes" or "No"	Explanation/Justification	Preventive Control Measures Applied	Is the Preventive Control Applied at this Step? "Yes" or "No"
6. Tempering (warming meat to just below its freezing	Biological Listeria Salmonella	No	Product will only be allowed warmed to a temperature right below freezing point to allow for easier grinding. If any bacteria present it will be killed in future step.		
point)	Chemical Sanitizers, cleaners	No	Low likelihood resulting from implementing SSOPs.		
	Physical None identified at this time				

Product Category: Animal Food <u>#3 – Non heat processed dog/cat food</u> Life Stage: <u>All life stages.</u>

Intended Species: <u>Dog/Cat</u>

Ingredient or Process Step	Known or reasonably foreseeable hazards introduced, increased or controlled at this step	Do known or reasonably foreseeable hazards require a preventive control based on Severity and Probability "Yes" or "No"	Explanation/Justification	Preventive Control Measures Applied	Is the Preventive Control Applied at this Step? "Yes" or "No"
7. Grinding/Mixing	Biological Listeria Salmonella	No	Low likelihood resulting from SSOPs.		
	Chemical Disinfectants, cleaners,	No	Low likelihood resulting from SSOPs and GMP procedures.		
	Physical Plastic, metal, wood, .	No	Low likelihood. Visual inspection while mixing and metal detector at later step.		

Product Category: Animal Food <u>#3 – Non heat processed dog/cat food</u> Life Stage: <u>All life stages.</u> Intended Species: Dog/Cat

Ingredient Known or reasonably Do known or reasonably **Explanation/Justification** Preventive Is the or Process Preventive foreseeable hazards foreseeable hazards Control introduced, increased require a preventive Step Measures Control or controlled at this control based on Applied Applied at **Severity and Probability** this Step? step "Yes" or "No" "Yes" or "No" 8. Product Low likelihood of bacteria Biological No moved resulting from SSOPs. Listeria through Salmonella metal detector. Chemical No Low likelihood resulting from SSOPs that will prevent cleaner Cleaners/sanitizers residues from entering product and GMPS. Harmful to customer if metal Process control: Yes, CCP 2 Physical Yes contaminates product. metal detector. Plastic, metal, wood. Date: 7/19/2021 PCQI Initial: DKR

Product Category: Animal Food <u>#3 – Non heat processed dog/cat food</u> Life Stage: <u>All life stages.</u>

Intended Species: Dog/Cat

Ingredient or Process Step	Known or reasonably foreseeable hazards introduced, increased or controlled at this step	Do known or reasonably foreseeable hazards require a preventive control based on Severity and Probability "Yes" or "No"	Explanation/Justification	Preventive Control Measures Applied	Is the Preventive Control Applied at this Step? "Yes" or "No"
9. Packaging	Biological Listeria Salmonella	No	Sanitation SOPs will address the potential contamination of product during packaging.		
	Chemical cleaners, pesticides.	No	Low likelihood resulting from SSOPs that will prevent cleaner residues from entering product and GMPS.		
	Physical Plastic,	No	Low likelihood resulting from visual inspection of product while packaging (SOP).		

Date: ______ PCQI Initial: DKR

Product Category: Animal Food <u>#3 – Non heat processed dog/cat food</u>

Intended Species: <u>Dog/Cat</u>

Ingredient or Process Step	Known or reasonably foreseeable hazards introduced, increased or controlled at this step	Do known or reasonably foreseeable hazards require a preventive control based on Severity and Probability "Yes" or "No"	Explanation/Justification	Preventive Control Measures Applied	Is the Preventive Control Applied at this Step? "Yes" or "No"
10. Individually quick freezing packaged product. (to get product	Biological Listeria Salmonella	No	Low likelihood resulting temperature control		
to final storage temperature)	Chemical Cleaners sanitizers	No	Low likelihood resulting from SSOPs and GMP procedures.		
	Physical None identified at this time				

Life Stage: <u>All life stages.</u>

Product Category: Animal Food <u>#3 – Non heat processed dog/cat food</u>

Intended Species: <u>Dog/Cat</u>

Ingredient or Process Step	Known or reasonably foreseeable hazards introduced, increased or controlled at this step	Do known or reasonably foreseeable hazards require a preventive control based on Severity and Probability "Yes" or "No"	Explanation/Justification	Preventive Control Measures Applied	Is the Preventive Control Applied at this Step? "Yes" or "No"
11. Irradiation	Biological Pathogenic bacteria	Yes	Control step to eliminate pathogenic bacteria like Salmonella, Listeria, and E. coli O157:H7.	Process control using Irradiation of product at allowed dose range per CFR for poultry products.	Yes. CCP 3
	Chemical Disinfectants, cleaners, pesticides.	No	Low likelihood resulting from SSOPs and GMP procedures		
	Physical None identified at this time				

Life Stage: <u>All life stages.</u>

Intended Species: Dog/Cat

Product Category: Animal Food <u>#3 – Non heat processed dog/cat food</u> Life Stage: <u>All life stages.</u>

Ingre or Pro Step	dient ocess	Known or reasonably foreseeable hazards introduced, increased or controlled at this step	Do known or reasonably foreseeable hazards require a preventive control based on Severity and Probability "Yes" or "No"	Explanation/Justification	Preventive Control Measures Applied	Is the Preventive Control Applied at this Step? "Yes" or "No"
12. Fr Produ Storag	ozen Ict ge	Biological Pathogenic bacteria	Yes	Correct temperature storage after irradiation will prevent growth of bacteria and maintain product freshness.	Process control using Temperature	Yes. CCP1
		Chemical Disinfectants, cleaners, insecticides	No	Low likelihood resulting from SSOPs and GMP procedures		
		Physical None identified at this time				

Product Category: Animal Food <u>#3 –Non heat processed dog/cat food</u> Life Stage: <u>All life stages.</u> Intended Species: <u>Dog/Cat</u>

Ingredient or Process Step	Known or reasonably foreseeable hazards introduced, increased or controlled at this step	Do known or reasonably foreseeable hazards require a preventive control based on Severity and Probability "Yes" or "No"	Explanation/Justification	Preventive Control Measures Applied	Is the Preventive Control Applied at this Step? "Yes" or "No"
13. Shipping to retail	Biological		Correct temperature storage after irradiation will prevent growth of bacteria and maintain product freshness.	Process control using Temperature	Yes. CCP1
	Chemical Disinfectants, cleaners, pesticides	No	Low likelihood resulting from SSOPs and GMP procedures		
	Physical Wood Metal Plastic	No	Low likelihood resulting from visual inspection of carrier SOP.		

Process Step/CCP	Critical Limit	Monitoring Procedures	Corrective Action
CCP1 Controlling temperature at receiving. Controlling temperature in ingredient freezer and finished product freezer.	Receiving: Product should be at or below 10° F (- 12°C) Storage: Ingredients and finished product should be stored at 0°F or -17°C.	 What will be measured? Temperature of incoming ingredients and the temperature of storage freezers. Where will the CL be measured? At receiving and during storage. How will the CL be measured? Surface temperature of incoming ingredients will be taken with an infrared thermometer. In storage freezers the temperature will be monitored with a commercial grade system with alarm. Who will monitor the CL? By a trained and responsible plant employee. How often will the CL be measured? Freezer will be monitored 24 hours a day. Each batch of incoming ingredients will be checked. 	 Cause of the deviation? Hold product, evaluate why deviation is occurring. If incoming ingredient temperature is too high reject load. How will the process be corrected? Make sure supplier follows correct temperature for shipping. Also, depends on issue. Review process and determine causes. Product disposition? Reject product if above Reject product if product not frozen when received. Dispose of product if freezers fail (unlikely with monitoring system) Measure to prevent recurrence? Instructions to supplier what temperature the product should be shipped at. Proper inspection and maintenance of freezers. Who is responsible for implementing the CA? A trained and responsible plant employee. PC can review decisions made.

Identifying Critical Limits, Monitoring and Corrective Actions Form (5)

Approved: DKR

Process Step/CCP	Critical Limit	Monitoring Procedures	Corrective Action
CCP2: Metal detector	Any detection of metal in product. All product will pass through metal detector.	 What will be measured? Metal fragments (if any) found in ground product. Where will the CL be measured? On the production line right after grinding and mixing. How will the CL be measured? With a commercial grade metal detector designed for meat processing facility. Who will monitor the CL? A trained and responsible employee will monitor the metal detector. How often will the CL be measured? During production. Continuous. 	 Cause of the deviation? A cause of deviation would be metal fragments found in ground product. How will the process be corrected? Hold. Stop production and check equipment for broken or loose parts. Review maintenance records and process procedures. Check metal detector and repair if needed. Product disposition? Dispose of any product if metal detected in that batch. Measure to prevent recurrence? Check metal detector at start of day, middle of shift, and end of day with controls. Who is responsible for implementing the CA? A trained and responsible employee.

Identifying Critical Limits, Monitoring and Corrective Actions Form (5)

Approved: DKR

Identifying Critical Limits, Monitoring and Corrective Actions Form (5)

Process Step/CCP	Critical Limit	Monitoring Procedures	Corrective Action
CCP3: Irradiation of packaged product	D _{min} and D _{max} according to FDA, USDA/FSIS approved protocols. Which includes the time of process and dose mapping for ground poultry products. (1.5 to 3.0 kGy)	 What will be measured? Dosimetry to measure actual absorbed dose and dose mapping. Microbial testing. Where will the CL be measured? In production facility after irradiation. How will the CL be measured? Dosimetry shows correct amount of ionizing radiation absorbed. Lack of pathogenic bacteria found in sampled products. Who will monitor the CL? A trained and responsible employee. How often will the CL be measured? Monthly or more frequent by volume and other factors. Microbial testing can be done by outside lab as well to verify process. 	 Cause of the deviation? If exceeding D_{max} dispose of product. If not reaching D_{min} then evaluate process and adjust to reach correct levels. Dispose of product as well. How will the process be corrected? By reviewing the process and determining what caused the issue. Product disposition? See above comments. If microbial contamination found dispose of that batch produced. Measure to prevent recurrence? Daily follow SSOPs and review relevant HACCP records. Proper training of employees as well. Who is responsible for implementing the CA? A trained and responsible employee.

Approved: DKR

Record Keeping and Verification Form (6)

Process step/CCP	Hazard	Records	Responsibility	CCP Verification
CCP1: Incoming ingredient temperature and storage freezer temperature	Growth of pathogenic bacteria <i>Listeria</i> monocytogenes, Salmonella,	Receiving log recorded at CCP site on a real time basis. Thermometer calibration log. Hold log. Deviation and corrective action log. All logs will be completed by a designated employee.	Designated employees who report to PC.	 Short term Calibrate thermometers and monitoring system for storage freezers. Review records daily or weekly depending on production amounts. Long term Perform ongoing review of HACCP plan in response to deviations and or system and product modification.

Approved: DKR

Record Keeping and Verification Form (6)

Process step/CCP	Hazard	Records	Responsibility	CCP Verification
CCP2: Metal detector after grinding and mixing.	Metal fragments found in ground product.	Calibration log of metal detector. Sensitivity check log of metal detector. Hold log. Deviation and correct action log. All logs will be completed by a designated employee.	A trained and designated person who reports to PC.	Short term Daily testing of metal detector as needed and calibration once a month. Long term Perform ongoing review of HACCP plan in response to deviations and or system and product modifications.

Approved: DKR

Record Keeping and Verification Form (6)

Process step/CCP	Hazard	Records	Responsibility	CCP Verification
CCP3: Irradiation of packaged product.	Control of pathogenic bacteria like <i>Listeria</i> monocytogenes, Salmonella,	Records of poultry processing required by 9 CFR 381.145. Preventative maintenance records. Inoculated pack study records. Deviation and corrective action log completed by designated employee.	A trained and designated person who reports to PC.	Short term Dosimetry calibration, Inoculated Pack studies and microbial testing as deemed necessary based on volume produced. Long term Perform ongoing review of Food Safety plan in response to deviations and or system and product modifications.

Approved: DKR

Animal Food Safety Plan Summary Form (8)

Process step	Hazard	Critical Limits for		Monit	oring		Corrective	Verification	Record- keening
and CCP		each CCP	What	How	Frequency	Who	Action	Activities	Procedure
CCP1: Controlling temperature at receiving. Controlling temperature in both the ingredient freezer and finished product freezer.	Pathogenic bacteria growth. Examples: like <i>Listeria</i> monocytog enes, Salmonella,	Receiving: Product should be at or below 10° F (- 12°C) Storage: Ingredients and finished product should be stored at 0°F or - 17°C.	Temperature of incoming ingredients. Temperature of freezers.	Incoming ingredient temperature with infrared thermometer Freezer temperature with commercial grade thermometer system with alarm/recordi ng system.	Each incoming batch. Freezer temperature 24 hours a day.	Both measured by trained and responsible plant employee.	Hold product, evaluate why deviation is occurring. Reject product if need be. Review process and update if problems keep occurring.	Calibrate thermometers and monitoring system for freezers. Review records daily or weekly depending on production amounts.	Receiving log at CCP site on a real time basis. Thermometer calibration log. Hold log. Deviation and corrective action log. All logs will be completed by a designated employee.
CCP 2: Metal detector	Fragments of ground metal in product.	Any detection of metal in product.	Metal fragments if any found in ground product.	With commercial grade metal detector designed for a meat processing facility.	Continuous. During production.	A trained and responsible plant employee.	Hold product, stop production and check equipment for broken or loose parts. Review maintenance records and process procedures. Check metal detector and repair if needed. Dispose of product batch if need be.	Daily testing of metal detector (sensitivity controls). And calibration once a month.	Calibration log of metal detector. Sensitivity check log of metal detector. Hold log. Deviation and corrective action log. All logs will be completed by a designated employee.

CCP3:	Control of	D _{min} and	Dosimetry to	Dosimetry	Monthly or	A trained	It exceeding D _{max}	Dosimetry	Records of
Irradiation	pathogenic	D _{max}	measure	shows	more	and	dispose of	calibration,	poultry
of packaged	bacteria	according	actual	correct	frequent by	responsible	product. If not	Inoculated Pack	processing
product	like <i>Listeria</i>	to FDA,	absorbed	amount of	volume and	employee.	reaching D _{min}	studies and	required by 9
	monocytog	USDA/FSIS	dose and	ionizing	other factors.		then evaluate	microbial	CFR 381.145.
	enes,	approved	dose	radiation	Microbial		process and	testing as	Preventative
	Salmonella,	protocols.	mapping.	absorbed.	testing can		adjust to reach	deemed	maintenance
		Which	Microbial	Lack of	be done by		correct levels.	necessary based	records.
		includes the	testing.	pathogenic	outside lab as		Dispose of	on volume	Inoculated
		time of		bacteria	well to verify		product as well.	produced.	pack study
		process and		found in	process.				records.
		dose		sampled				Perform	Deviation and
		mapping		products.				ongoing review	corrective
		for ground						of HACCP plan	action log
		poultry						in response to	completed by
		products.						deviations and	designated
		(1.5 to 3.0						or	employee.
		kGy)						system/product	
								modifications.	

Approved <u>DKR</u>