HACCP Plan – Fully cooked, not shelf-stable; Pasties

Product Description

COMMON NAME:	Pasties
HOW IS IT TO BE USED?	Cooked by consumer (but considered Ready-to-Eat)
TYPE OF PACKAGE?	Plastic bag inside cardboard box; wax-lined paper bag
LENGTH OF SHELF LIFE, AT WHAT TEMPERATURE?	6 months at 0°F.
WHERE WILL IT BE SOLD?	Wholesale to bars, restaurants, grocery stores, and retail to consumers
LABELING INSTRUCTIONS:	Appropriate product label (may include cooking instructions); lot or date code
IS SPECIAL DISTRIBUTION CONTROL NEEDED?	Shipped in refrigerated trucks. Product should remain in frozen state.

Directions for Use of the Process Flow Diagram

1. Examine the model Process Flow Diagram and determine which steps you actually use in your process. Cross out, white out, or delete all steps that are NOT part of your process. Re-number steps as necessary.
2. Add any processing steps not already shown and make sure that each new step is assigned a number.

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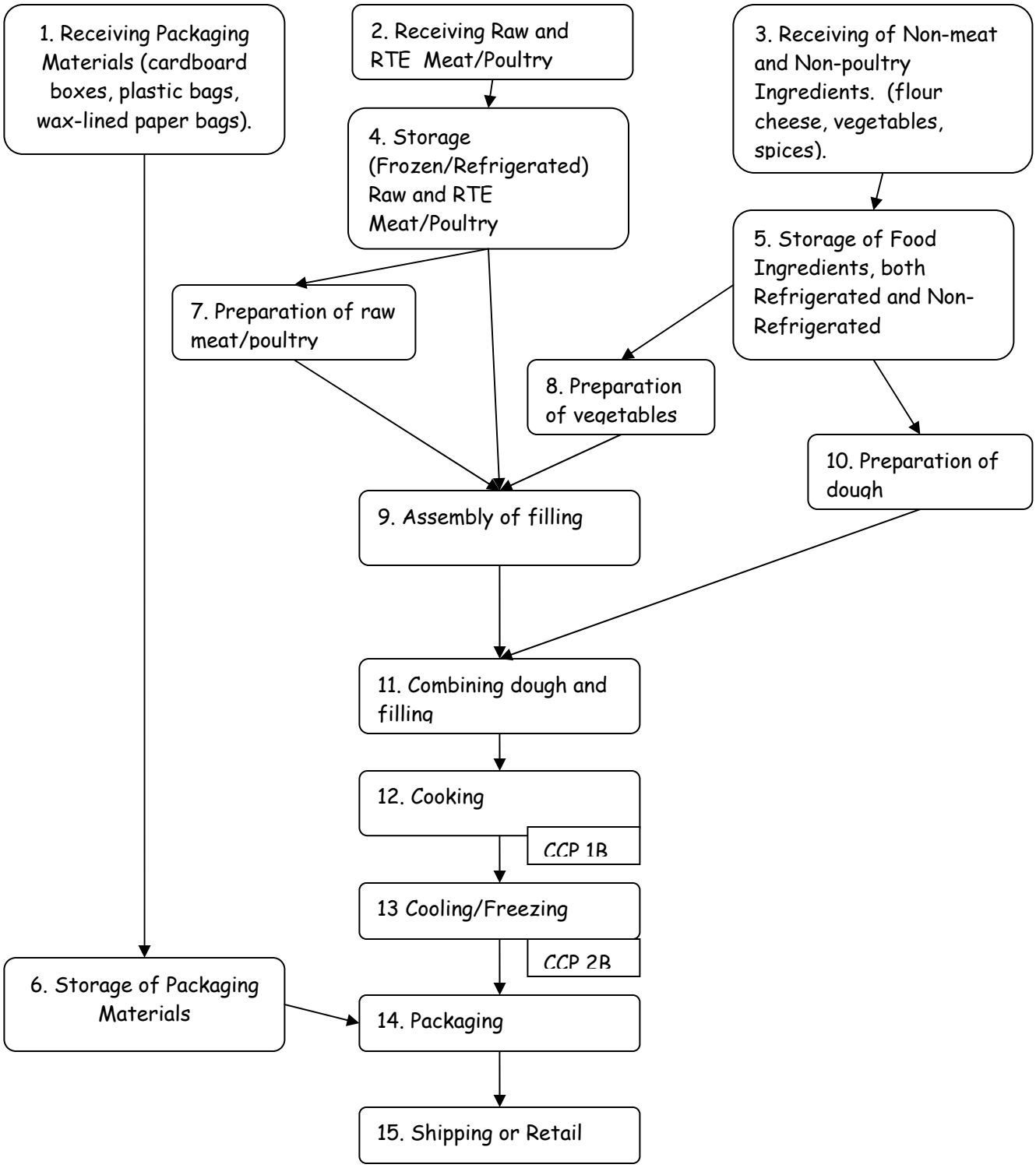
Process Flow Diagram Process Category: Fully cooked, not shelf stable
Products: Pasties



Directions for Use of the Hazard Analysis Form

1. Make sure that every step shown on the Process Flow Diagram is entered in the Hazard Analysis Form. Make sure that each step has the same name and number in both the Process Flow Diagram and the Hazard Analysis Form.
2. Check the three categories of hazard (Biological, Chemical, Physical) shown for each step.
   a. If you think a listed hazard is not reasonably likely to occur, leave it in column 2 (Food Safety Hazard) and enter "No" in column 3 (Reasonably likely to occur?). Then provide a reason in column 4.
   b. If you think there are no relevant hazards for a particular category, delete the listed and hazard and write "none" in column 2, write "No" in column 3, and cross out any information in columns 4 – 6.
   c. If you think that a relevant hazard should be added at a step, describe the hazard in column 2 (Food Safety Hazard). Then determine whether the hazard is reasonably likely to occur and put the answer in column 3. Then provide, in column 4, a reason for deciding whether or not the hazard is reasonably likely to occur.
      i. For example, following an SSOP, SOP, or approved formulation may make a hazard unlikely to occur, or a supplier may provide a letter of guarantee stating that the hazard should not be present.
      ii. On the other hand, a history of outbreaks or contamination related to a hazard would mean that the hazard IS reasonably likely to occur.

      Columns 5 and 6 can be left blank if a hazard is NOT reasonably likely to occur.

      If the hazard IS reasonably likely to occur, fill in columns 5 and 6.
      iii. In the 5th column, list measures that could be applied to prevent, eliminate, or reduce the hazard to an acceptable level. NOTE: at least one of these measures must be either a Critical Control Point (CCP) at the present step or a CCP at a later step.
      iv. Finally, if the hazard is controlled by a CCP at the present step, enter the CCP number in the 6th column. The accepted numbering system is to number the CCP's in order, followed by either B, C, or P to indicate what type of hazard is being controlled. For example, if the 2nd CCP in a process controlled a physical hazard, it would be entered as CCP -2P.

   d. I f you agree that a listed hazard is relevant, no changes are necessary.

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HAZARD ANALYSIS

1.Process Step	2. Food Safety Hazard	3. Reasonably likely to occur	4. Basis of Reasonably likely to occur	5. If Yes in Column 3, What Measures Could be Applied to Prevent, Eliminate, or Reduce the Hazard to an Acceptable Level?	6. Critical Control Point
1, Receiving and 6. Storage – Packaging materials	Biological – Contamination with meat, other biological materials	No	Visual inspection for container integrity, contamination, at receiving makes hazard unlikely. SOP for storage makes hazard unlikely.		
	Chemical – Non-food grade materials	No	Letters of guarantee are received from all suppliers of packaging materials.		
	Physical – None	No			
2. Receiving – Raw and RTE Meat/ Poultry	Biological Presence of pathogens: Salmonella, Listeria monocytogenes, Staphylococcus aureus, Clostridium perfringens, Clostridium botulinum;if beef E.coli 0157:H7; if poultry Campylobacter jejuni/coli	Yes	Raw meat/poultry is a known source of pathogens. Spores of C. perfringens and C. botulinum may be present in RTE meat/poultry products.	Hazard will be controlled by later CCP's of cooking (destroys vegetative cells) and cooling/freezing (prevents germination and growth of clostridial spores). Letter of guarantee is on file for each supplier of ground or tenderized beef documenting the application of at least one intervention step against E. coli O157:H7.	
	Chemical – None	No			
	Physical – None	No			

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1.Process Step	2. Food Safety Hazard	3. Reasonably likely to occur	4. Basis of Reasonably likely to occur	5. If Yes in Column 3, What Measures Could be Applied to Prevent, Eliminate, or Reduce the Hazard to an Acceptable Level?	6. Critical Control Point
3. Receiving – Non-meat and Non-poultry Ingredients: flour, cheese, vegetables, spices.	Biological- Pathogens: Salmonella, E. coli 0157:H7, Listeria monocytogenes, Staphylococcus aureus, Clostridium perfringens, Clostridium botulinum, Bacillus cereus	No (Cheese, Flour, Spices)	Letters of Guarantee are received from all suppliers of food ingredients that indicate the ingredients are from an approved source. Receiving SOP ensures that ingredients are not accepted if they have been improperly handled.		
		Yes (Vegetables)	Raw vegetables may contain pathogens.	Vegetables are stored separately from other food components and washed prior to further processing. Hazard will be controlled by later CCPs of cooking (destroys vegetative cells) and cooling/freezing (prevents germination and growth of clostridial spores).	
	Chemical – Ingredients not being added or	No	Approved formulations are		

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1.Process Step	2. Food Safety Hazard	3. Reasonably likely to occur	4. Basis of Reasonably likely to occur	5. If Yes in Column 3, What Measures Could be Applied to Prevent, Eliminate, or Reduce the Hazard to an Acceptable Level?	6. Critical Control Point
	used as intended; ingredients containing undesirable substances		followed; letters of guarantee are received from all suppliers of food additives, flour, cheese, spices etc.		
	Physical – None	No			
4. Storage (Frozen/Refrigerated) – Raw and RTE Meat/Poultry	Biological: Presence or growth of pathogens (see list in step 2 above)	Yes (Presence) No (Growth)	Raw meat/poultry is a known source of pathogens. Pathogens are unlikely to grow if raw meat/poultry is stored according to the SOP for storage.	Hazard will be controlled by later CCP's of cooking (destroys vegetative cells) and cooling/freezing (prevents germination and growth of clostridial spores).	
	Chemical - None	No			
	Physical – None	No			
5. Storage – Food Ingredients, both refrigerated and non-refrigerated	Biological – Presence or growth of pathogens on vegetables (see list in step 3 above)	Yes (Presence) No (Growth)	Raw vegetables are a known source of pathogens. Pathogens are unlikely to grow if raw vegetables are stored according to the SOP for storage.	Hazard will be controlled by later CCP's of cooking (destroys vegetative cells) and cooling/freezing (prevents germination and growth of clostridial spores).	
	Chemical – None	No			

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1.Process Step	2. Food Safety Hazard	3. Reasonably likely to occur	4. Basis of Reasonably likely to occur	5. If Yes in Column 3, What Measures Could be Applied to Prevent, Eliminate, or Reduce the Hazard to an Acceptable Level?	6. Critical Control Point
	Physical – None	No			
7. Preparation of Meat/Poultry Ingredients	Biological – Presence or growth of pathogens (see list in step 2 above)	Yes (Presence) No (Growth)	Raw meat/poultry is a known source of pathogens. Preparation is done rapidly enough to prevent pathogen growth. If pre-cooking is done, it will be done rapidly enough and at high enough temperature to prevent pathogen growth.	Hazard will be controlled by later CCP's of cooking (destroys vegetative cells) and cooling/freezing (prevents germination and growth of clostridial spores).	
	Chemical – None	No			
	Physical - None	No			
8. Preparation of vegetables	Biological - Presence or growth of pathogens (see list in step 3 above)	Yes (Presence) No (Growth)	Raw vegetables are a known source of pathogens. Vegetables are washed before preparation and the preparation process is done rapidly enough to prevent pathogen growth. If pre-cooking is	Hazard will be controlled by later CCP's of cooking (destroys vegetative cells) and cooling/freezing (prevents germination and growth of clostridial spores).	

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1.Process Step	2. Food Safety Hazard	3. Reasonably likely to occur	4. Basis of Reasonably likely to occur	5. If Yes in Column 3, What Measures Could be Applied to Prevent, Eliminate, or Reduce the Hazard to an Acceptable Level?	6. Critical Control Point
			done, it is done rapidly enough and at high enough temperature to prevent pathogen growth.		
	Chemical – None	No			
	Physical - None	No			
9. Assembly of filling	Biological – Pathogen contamination via equipment and workers; presence of pathogens; growth of pathogens including Clostridium perfringens and Clostridium botulinum	No (Contamina-tion) Yes (Presence) No (Growth)	SSOP makes contamination via equipment and workers unlikely to occur. Raw meat/poultry/ vegetables are known sources of pathogens. Assembly is done rapidly enough to prevent pathogen growth. Pre-cooked ingredients (if any) are rapidly cooled by addition of other ingredients that are	Hazard will be controlled by later CCP's of cooking (destroys vegetative cells) and cooling/freezing (prevents germination and growth of clostridial spores).	

1.Process Step	2. Food Safety Hazard	3. Reasonably likely to occur	4. Basis of Reasonably likely to occur	5. If Yes in Column 3, What Measures Could be Applied to Prevent, Eliminate, or Reduce the Hazard to an Acceptable Level?	6. Critical Control Point
			cold. Later cooking will destroy germinated clostridial cells.		
	Chemical – Cheese is a potential allergen; cleaning/sanitizing chemical residues	No	Application of correct label prevents inadvertent consumption of allergen by consumer. Operational SSOP prevents cross-contamination of allergenic agents. Pre-op SSOP makes presence of chemical residues unlikely to occur.		
	Physical – None	No			
10. Preparation of dough	Biological – Pathogen contamination via equipment and workers.	No	SSOP makes contamination via equipment and workers unlikely to occur.		
	Chemical – Wheat flour is a potential allergen;	No	Application of correct label		

1.Process Step	2. Food Safety Hazard	3. Reasonably likely to occur	4. Basis of Reasonably likely to occur	5. If Yes in Column 3, What Measures Could be Applied to Prevent, Eliminate, or Reduce the Hazard to an Acceptable Level?	6. Critical Control Point
	cleaning/sanitizing chemical residues		prevents inadvertent consumption of allergen by consumer. Operational SSOP prevents cross-contamination of allergenic agents. Pre-op SSOP makes presence of chemical residues unlikely to occur.		
	Physical – Foreign material	No	No history of problem (must provide evidence). Visual observation for foreign materials during processing, inspection of equipment during cleaning make hazard unlikely.		
11. Combining dough and filling	Biological – Presence or growth of pathogens (see lists in steps 2 and 3 above); Pathogen contamination via	Yes (Presence)	Raw meat/poultry/ vegetables are known sources of pathogens. Combining step is	Hazard will be controlled by later CCP's of cooking (destroys vegetative cells) and cooling/freezing (prevents germination and growth of	

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1.Process Step	2. Food Safety Hazard	3. Reasonably likely to occur	4. Basis of Reasonably likely to occur	5. If Yes in Column 3, What Measures Could be Applied to Prevent, Eliminate, or Reduce the Hazard to an Acceptable Level?	6. Critical Control Point
	equipment and workers	No (Growth) No (Contamina-tion)	done rapidly enough to prevent pathogen growth. SSOP makes contamination via equipment and workers unlikely to occur.	clostridial spores).	
	Chemical – None	No			
	Physical – None	No			
12. Cooking	Biological – Survival or growth of pathogens (see lists in steps 2 and 3 above);	Yes (Presence) No (Growth)	Raw meat/poultry/vegetables are known sources of pathogens. Cooking is done rapidly enough to prevent pathogen growth.	Hazard will be controlled by exposing pathogens (if present) to sufficiently high temperatures for a long enough time to ensure destruction of vegetative pathogens.	1B
	Chemical – None	No			
	Physical - None	No			
13. Cooling/Freezing	Biological – Presence or growth of Listeria	No (L.m.	Listeria control measures, including	Product is cooled rapidly enough to prevent growth of Clostridium	2B

1.Process Step	2. Food Safety Hazard	3. Reasonably likely to occur	4. Basis of Reasonably likely to occur	5. If Yes in Column 3, What Measures Could be Applied to Prevent, Eliminate, or Reduce the Hazard to an Acceptable Level?	6. Critical Control Point
	monocytogenes and other pathogens listed in steps 2 and 3 above (post-cook contaminants). Growth of Clostridium perfringens or Clostridium botulinum. Pathogen contamination via equipment and workers	Presence) No (L.m. Growth) Yes (clostridial growth) No (Contamina-tion)	testing program, pre-op and operational SSOPs make contamination unlikely Product is frozen (prevents pathogen growth Spores survive cooking and can germinate and grow if cooling is done too slowly. SSOP makes contamination via equipment and workers unlikely to occur.	perfringens (> 1 log) or Clostridium perfringens.	
	Chemical – None	No			
	Physical - None	No			
14. Packaging	Biological – Growth of	No	Product is frozen		

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	Clostridium perfringens or Clostridium botulinum; presence or growth of Listeria monocytogenes (post-cook contaminant).	(clostridial growth) No (L.m. Presence) No (L.m. Growth)	during packaging step. Listeria control measures, including testing program, make hazard unlikely. Product is frozen (prevents pathogen growth)		
	Chemical – None	No			
	Physical - None	No			
15. Shipping or Retail	Biological – None	No	Product is handled according to SOP for Finished Product Storage		
	Chemical – None	No	Product is handled according to SOP for Finished Product Storage		
	Physical - None	No	Product is handled according to SOP for Finished Product Storage		

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12/15/05 version. Supersedes all previous versions.

Directions for Using the HACCP Plan Form

1. Examine your Hazard Analysis form to determine which steps are CCP's and what type of hazard (Biological, Chemical, or Physical) each CCP controls.
2. Check to see whether each CCP is already listed on the HACCP Plan Form. If a CCP is not already listed, enter the CCP number and step in the column labeled "CCP # and Location".
3. For CCP's already listed on the model form, examine the Critical Limits listed. In the HACCP Plan Form for some HACCP categories there will be several options for Critical Limits. If this is the case, choose the Critical Limits that will work best in your plant and cross out, white out, or delete the other Critical Limits and the Monitoring Procedures that go with them. It may be helpful to check the "Monitoring Procedures and Frequency" column during your decision-making. For CCP's already on the model form, supporting scientific documentation is already included in your manual.
4. If you are adding a new CCP, you will need to determine the scientifically valid Critical Limits to be used with the CCP. You must also obtain scientific information supporting your choice of Critical Limits. Consult your inspector or university extension specialists for help.
5. Examine the "Monitoring Procedures and Frequency" column for each CCP. If you wish to change the procedure and/or the frequency, check with your inspector or a university extension specialist for help. If a change is OK, you will need to write down your reasoning for making the change and include this reasoning in your HACCP manual.
6. Examine the "HACCP Records" column. If you are using different forms for record-keeping in this HACCP Plan, please put the correct form title(s) in the "HACCP Records" column.
7. The verification activities listed in the "Verification Procedures and Frequency" column are required by the regulation. However, you may choose to do additional activities; for example, for verification, beef jerky samples may be sent to the lab each quarter for water activity and Moisture : Protein Ratio testing. If you do any additional verification activities, enter them in the "Verification Procedures and Frequency" column. If you choose to use a frequency for the required verification activities that is different than the frequency shown, you must provide written justification for the different frequency. Consult your inspector or university extension specialists for help.
8. We suggest that you make no changes in the "Corrective Actions" column. Be sure to have a form for documenting corrective actions that you take. A corrective action form is included in this model.

HACCP PLAN PROCESS CATEGORY: Fully cooked, not shelf stable Product example: Pasties					
CCP# and Location	Critical Limits	Monitoring Procedures and Frequency	HACCP Records	Verification Procedures and Frequency	Corrective Actions
1B Cooking	Pasty internal temperature is held at a pre-determined temperature and time listed in Appendix A as resulting in a 6.5 log lethality for Salmonella. Note that no time measurement is necessary if the pasty internal temperature reaches 158°F or higher. If pre-cooked poultry ingredients are used, the assembled past must be cooked to an internal temperature of at least 160°F. If raw poultry ingredients are used, the Appendix A treatment (160°F internal temperature for uncured products or 155°F internal temperature for cured products) or one of the new poultry "safe harbors" treatments (based on % fat in product) will be	The plant manager or designee will use a calibrated thermometer and a clock (if necessary) to determine the internal temperature over time of a pasty located in the coldest part of the oven. This procedure will be followed for every lot.	CCP Monitoring Form Corrective Action Log Thermometer Calibration Log	Establishment owner or designee will review the CCP Monitoring Form, Corrective Action Log, and Thermometer Calibration Log once per week. Establishment owner or designee will calibrate all thermometers to a known standard monthly. Thermometers will be calibrated to ± 2° F or taken out of operation as stated in the SOP. Calibration actions are recorded in the Thermometer Calibration Log. Establishment owner or designee will observe monitoring of temperature at least once per month.	If a deviation from a critical limit occurs, the establishment owner or designee is responsible for corrective action protocol as stated in 9 CFR 417.3 1. The cause of the deviation will be identified and eliminated. 2. The CCP will be under control after the corrective action is taken. 3. Measures to prevent recurrence are established. 4. No product that is injurious to health or otherwise adulterated as a result of the deviation will be permitted to enter commerce.

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HACCP PLAN PROCESS CATEGORY: Fully cooked, not shelf stable Product example: Pasties					
CCP# and Location	Critical Limits	Monitoring Procedures and Frequency	HACCP Records	Verification Procedures and Frequency	Corrective Actions
	followed.				
2B Cooling/Freezing	Appendix B limits for uncured products: internal temperature falls from 130°F to 80°F in no more than 1.5 hours, and from 80°F to 40°F in no more than an additional 5 hours.	The plant manager or designee will use a calibrated thermometer and a clock to determine the internal temperature and time for the first pasty in the lot removed from the oven. About one hour later, this procedure will be repeated with the final pasty removed from the oven for the lot. The procedure will be repeated about 4.5 hours after the 2nd temperature measurement for the same pasty. This procedure will be performed for every lot.	CCP Monitoring Form Corrective Action Log Thermometer Calibration Log	Establishment owner or designee will review the CCP Monitoring Form, Corrective Action Log, and Thermometer Calibration Log once per week. Establishment owner or designee will calibrate all thermometers to a known standard monthly. Thermometers will be calibrated to ± 2° F or taken out of operation as stated in the SOP. Calibration actions are recorded in the Thermometer Calibration Log. Establishment owner or designee will observe monitoring of temperature at least once per month.	If a deviation from a critical limit occurs, the establishment owner or designee is responsible for corrective action protocol as stated in 9 CFR 417.3 1. The cause of the deviation will be identified and eliminated. 2.The CCP will be under control after the corrective action is taken. 3.Measures to prevent recurrence are established. 4.No product that is injurious to health or otherwise adulterated as a result of the deviation will be permitted to enter commerce.

Sign and date at initial acceptance, modification, and annual reassessment.

Signed _____ Date _____

Signed _____ Date _____

Signed _____ Date _____

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CCP Monitoring Form: Critical Limits are internal product temperatures and times

Date	Lot ID	Cooking Temperature/ Time		Initials	Cooling Temperature/Time Critical Limits: 130 to 80ºF in 1.5 h or less, 80 to 40ºF in 5 h or less			Initials	Devn. from Critical Limit? (Y = yes, N = no)	Pre-shipment / pre-use review Signature/Date
		1st	2nd		1st elapsed time since 1st pasty out of oven 0 h	2nd 1 h	3rd 5.5 h			

Verification Activities (for up to three weeks) associated with these batches. Indicate Type of activity: DOT = Direct Observation of Temperature monitoring (monthly), DOL = Direct Observation of Labeling monitoring (monthly), CAL = thermometer calibration, or RR = Records Review (weekly).

Type of activity: _____	Type of activity: _____	Type of activity: _____
Result (✓ = Acceptable): _____	Result (✓ = Acceptable): _____	Result (✓ = Acceptable): _____
Date/Time: _____	Date/Time: _____	Date/Time: _____
Initials: _____	Initials: _____	Initials: _____

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Raw, Pasties Model

Corrective Action Log

Product:	Lot ID:
Date / Time:	Responsible Person:
Deviation:	
Cause of Deviation:	
Cause of Deviation Eliminated By:	
CCP Under Control After Corrective Actions Taken:	
Preventative Measures:	
Product Disposition:	

Verification (Records Review) by and Date: _____

Thermometer Calibration Log

Date	Time	Test Therm. ID#	Reference Therm. Reading	Test Therm. Reading	Adjustments Required (yes/no)	Comments	Initials

Thermometers intended for measuring higher temperature items, such as cooked product, will be calibrated in hot water, while those used for taking lower temperatures will be calibrated in ice water. All thermometers will be calibrated within + or – 2 degrees F. Thermometers taken out of service , document in the "comments" column.

SOP for Calibration of Thermometer

Processor or designee will calibrate the thermometers prior to use by following the specifications of the manufacturer of the equipment (this will vary) or the following procedures.

Each thermometer will be assigned an ID number.

Thermometers intended for measuring higher temperature items, such as cooked product, will be calibrated in hot water, while those used for taking lower temperatures will be calibrated in ice water. All thermometers will be calibrated within + or – 2 degrees F.

Thermometers in use will be checked against a certified thermometer during calibration, if available. Otherwise, all thermometers will be calibrated either against each other, or against a thermometer that is used only during calibration. The latter methods would require at least three thermometers for accuracy. Dial thermometers will only be calibrated (and used!) on one end of the range of use, e.g. either the hot end or the cold end. This practice is followed to assure accuracy.

Calibration with ice water:

1. Add crushed ice and water to a clean container to form a watery slush.
2. Place thermometer probe into slush for at least one minute, taking care to not let the probe contact the container.
3. If the thermometer does not read between 30 degrees and 34 degrees F., adjust to 32 degrees. Nonadjustable thermometers will be removed from use until they have been professionally serviced. Thermometers that have been adjusted for 3 consecutive months will be replaced.
4. Record the results, using actual values, on the thermometer calibration log, along with the date and initials of the person performing the calibration procedure.

Calibration with hot water:

1. Heat a clean container of water to a temperature in the range of cooked products. Running clean water through the coffee maker gives a water temperature of approximately 145 degrees F. Another option is to bring a clean container of water to a rolling boil.
2. Place the thermometer probe into the hot water, along with the certified thermometer and/or reference thermometer, or at least two other

thermometers, for at least one minute, taking care not to let the probe contact the container.

3. If the test thermometer does not read within + or – 2 degrees of the reference thermometer, adjust accordingly. If three thermometers are used and one thermometer differs from the other two by more than 2°F, that thermometer shall be adjusted or removed from use. If all three thermometers differ from each other by more than 2°F, a reference thermometer must be used or each thermometer must be calibrated against vigorously boiling water (212°F). Nonadjustable thermometers will be removed from use until they have been professionally serviced. Thermometers that have been adjusted for 3 consecutive months will be replaced.
4. Record the results, using actual values, on the thermometer calibration log, along with the date and initials of the person performing the calibration procedure.

Thermometers that cannot be easily calibrated through direct immersion in either ice water or hot water can be calibrated by comparing readings with another calibrated thermometer. Thermometers that may be calibrated in this way include smokehouse probes and room temperature thermometers. When doing this, a recently calibrated thermometer will be used as the reference. Room temperature thermometers that are outside the + or – 2 degree F range will be replaced. Smokehouse probes that are outside the + or – 2 degree F. range will be professionally serviced. Results will be recorded, using actual values, on the thermometer calibration log, along with the date and initials of the person performing the calibration procedure.

Thermometers will be calibrated at a frequency dependent on production volumes, and use of monitoring CCP values or SOP values. Any thermometer that has been dropped or abused will be taken out of service until it has been recalibrated. Any "loose" thermometers, or thermometers that have been out of calibration for 3 consecutive months, shall be discarded.
Thermometers in use will be checked against a certified thermometer during calibration, if available. Otherwise, all thermometers will be calibrated either against each other, or against a thermometer that is used only during calibration. These methods would require a minimum of three thermometers for accuracy. Dial thermometers will not be calibrated on both the high and low ends on the range it is intended to read to assure accuracy.

Thermometers that cannot be easily calibrated through direct immersion in either ice water or hot water can be calibrated by comparing readings with another calibrated

thermometer. Thermometers that may be calibrated in this way include room temperature thermometers. When doing this, a recently calibrated thermometer will be used as the reference. Room temperature thermometers that are outside the + or – 2 degree F. range will be replaced. Results will be recorded, using actual values, on the thermometer calibration log, along with the date and initials of the person performing the calibration procedure.

Thermometers will be calibrated at a frequency dependent on production volumes, and use of monitoring CCP values or SOP values. Any thermometer that has been dropped or abused will be taken out of service until it has been recalibrated. Any "loose" thermometers, or thermometers that have been out of calibration for 3 consecutive months, shall be disposed of.

SOP for Receiving and Storage

Raw Meat/Poultry and Natural Casings

- We will only accept product from an approved source.
- All containers will be inspected for visible evidence of contamination or damage that may allow contamination. All contaminated or damaged product will be rejected.
- The product temperature will be checked for 2 boxes per load by placing a calibrated thermometer between two wrapped or bagged products or by inserting a cleaned and sanitized (and calibrated) thermometer into the product or between product pieces. Products that are not warmer than 50°F will be accepted. Products that are not warmer than 50°F will be accepted. Products that are between 50 and 75°F will either be rejected outright or evaluated. Evaluation may include organoleptic evaluation, review of time/temperature information obtained from the shipper, consulting a process authority, or accepting the product and performing a microbiological analysis. Product should be properly refrigerated/frozen if it is accepted pending the end of the evaluation. If the evaluation indicates that the product could be used to safely make cooked items, it can be accepted and used only in this way. No product with temperature over 75°F will be accepted. All temperatures and evaluations will be recorded on incoming invoices.
- All inovoices will be checked, initialed, and kept on file for review.
- Accepted products will be immediately placed on designated racks/shelves in the cooler or freezer.
- All coolers will be maintained to hold a temperature of 41°F or lower, with daily monitoring and documentation.
- All freezers will be maintained to hold a temperature of 0°F or lower, with daily monitoring and documentation.

Perishable Non-Meat Ingredients

- We will only accept product from an approved source.
- All containers will be inspected for visible evidence of contamination or damage that may allow contamination. All contaminated or damaged product will be rejected.
- The product temperature will be checked for 2 boxes per load by placing a calibrated thermometer between two wrapped or bagged products or by inserting a cleaned and sanitized (and calibrated) thermometer into the product or between product pieces. Products that are not warmer than 50°F will be accepted. Products that are between 50 and 75°F will either be rejected outright or evaluated. Evaluation may include organoleptic evaluation, review of time/temperature information obtained from the shipper, consulting a process authority, or accepting the product and performing a microbiological analysis. Product should be properly

refrigerated/frozen if it is accepted pending the end of the evaluation. If the evaluation indicates that the product could be used to safely make cooked items, it can be accepted and used only in this way. No product with temperature over 75°F will be accepted. All temperatures and evaluations will be recorded on incoming invoices.

- All inovoices will be checked, initialed, and kept on file for review.
- Accepted products will be immediately placed on designated racks/shelves in the cooler or freezer.
- Perishable non-meat items will be stored separately (different cooler, rack, or shelf) from raw meat/poultry and natural casings.
- All coolers will be maintained to hold a temperature of 41°F or lower, with daily monitoring and documentation.
- All freezers will be maintained to hold a temperature of 0°F or lower, with daily monitoring and documentation.

<u>Non-Perishable Non-Meat Ingredients</u>

- We will only accept product from an approved source.
- All containers will be inspected for visible evidence of contamination or damage that may allow contamination. All contaminated or damaged product will be rejected.
- Product containers will be marked with the date of receipt and stored on designated shelves/racks in the dry storage area. The "First In, First Out" principle will be followed in using ingredients.
- The acceptance of the product will be recorded on the incoming product invoice. All invoices will be checked, initialed, and kept on file for review.

<u>Packaging Materials, Cleaning Supplies, other non-ingredient items</u>

- We will only accept product from an approved source.
- All containers will be inspected for visible evidence of contamination or damage that may allow contamination. All contaminated or damaged product will be rejected.
- Product containers will be marked with the date of receipt and stored on designated shelves/racks in the packaging storage area or chemical storage area, as appropriate. The "First In, First Out" principle will be followed in using packaging materials, cleaning supplies, and other non-ingredient items..
- The acceptance of the product will be recorded on the incoming product invoice. All invoices will be checked, initialed, and kept on file for review.

SOP for Finished Product Storage

- Once meat/poultry items are packaged and labeled, they will be master-packed (if appropriate), and immediately moved into either dry storage (jerky and other shelf-stable products), refrigerated storage, or frozen storage.
- All coolers will be maintained to hold a temperature of 41°F or lower, with daily monitoring and documentation.
- All freezers will be maintained to hold a temperature of 0°F or lower, with daily monitoring and documentation.
- Finished raw products will be stored separately from finished Ready-To-Eat (RTE) products, either in separate coolers/freezers/rooms, or on physically separate racks/shelves.
- Finished RTE products will NEVER be stored below finished or unfinished raw products.
- No products (finished or unfinished) will be stored on the floor.