Sample Food Safety Plan
MEETS BC REGULATORY REQUIREMENTS

BLUEBERRY PIE

BRITISH COLUMBIA | Ministry of Health
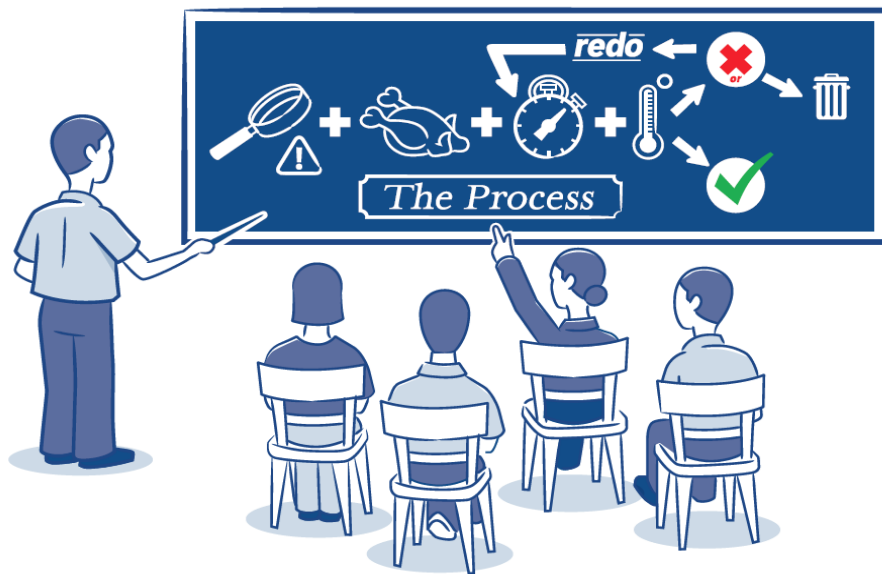
Product Description

Product Description	
1. **What is your product name and weight/volume?**	Blueberry pie (350 g)
2. **What type of product is it (e.g., ready-to-eat, ready-to-cook, or ready for further processing)?**	Baked Ready to eat
3. **What are your product's important food safety characteristics (e.g., A$_w$, salinity, etc.)?**	None
4. **What allergens does your product contain?**	Eggs, milk, sulphites, and wheat.
5. **What restricted ingredients (preservatives, additives, etc.) does your product contain, and in what amounts (e.g., concentration)?**	None
6. **What are your food processing steps (e.g., cooking, cooling, pasteurization, etc.)?**	Receiving, incoming material storage (ambient, refrigerated, frozen), weighing, thawing, mixing, baking, cooling, hopper, sheeting, pressing, filling, sealing, docking, spraying, baking, cooling, depanning, packaging and labeling, metal detector, case packaging and labeling, palletizing, refrigerated or freezer storage, and shipping.
7. **How do you package your product (e.g., vacuum, modified atmosphere, etc.) and what packaging materials do you use?**	Individual pies are packaged using cardboard, plastic trays, and lids. Packaged pie boxes are packed in corrugated boxes.
8. **How do you store your product (e.g., keep refrigerated, keep frozen, keep dry) in your establishment and when shipping?**	Two options: 1. Keep frozen. Frozen pies are shipped in a clean, temperature-controlled truck (less than or equal to -18°C). 2. Keep refrigerated. Fresh pies are shipped in a clean, temperature-controlled truck (less than or equal to 4°C).
9. **What is the shelf-life of your product under proper storage conditions?**	Dependent on the storage option used: 1. Frozen pie shelf-life is 3 months at freezer temperatures (less than or equal to -18°C). After thawing, the shelf-life is 4 days at refrigerated temperatures (less than or equal to 4°C). 2. Fresh pie shelf-life is 5 days at refrigerated temperatures (less than or equal to 4°C).

Product Description	
10. How is the best before date noted on your product?	The best before date is printed on the label as YY MM DD, for example, 15 JA 04 (January 4, 2015).
11. Who will consume your product (e.g., the general public, the elderly, the immunocompromised, infants)?	Ready to eat for the general population. **Note:** Blueberry pie is not suitable for people with egg, milk, sulphite, or wheat allergies, or gluten intolerance. Frozen product must be thawed before eating. Preparation instructions, such as for thawing, are provided on the label.
12. How might the consumer mishandle your product and what safety measures will prevent this?	Products that have passed the best before date can have quality defects – the best before date is printed on the cardboard box.
13. Where will the product be sold?	Food service, retail, wholesale, and distributor.
14. What information is on your product label?	Individual pie package label contains information such as product name, weight, ingredients listing, nutritional table, claims, storage and handling instructions, best before date, preparation instructions, manufacturing company name, address, and contact information.

Incoming Materials

Ingredients	
All purpose flour	Fresh or frozen blueberries
Cake flour	Salt
Pastry flour	Sugar
Cinnamon powder	Corn starch
Nutmeg powder	Lemon juice
Liquid pasteurized eggs	Vegetable shortening
Butter	Water
Food contact processing aid materials	
Baking spray	
Food contact packaging materials	
Cardboard boards	Cardboard boxes
Plastic trays and lids	
Non-food contact packaging materials	
Corrugated boxes	Plain labels
Ink	Shrink wrap
Tape	Wooden pallets
Chemicals (hand washing, sanitation and maintenance)	
Hand soap	Sanitizer
Hand sanitizer	Lubricant
Degreaser	

Food Safety Plan Table: Meets BC Regulatory Requirements

1. Identifying Hazards (Regulatory Requirement*)	2. Identifying Critical Control Points (Regulatory Requirement*)	3. Establishing Critical Limits (Regulatory Requirement*)	4. Establishing Monitoring Procedures (Regulatory Requirement*)	5. Establishing Corrective Actions (Regulatory Requirement*)	6. Establishing Verification Procedures (Pending Regulatory Requirement)	7. Keeping Records (Pending Regulatory Requirement)
Biological hazard: Pathogen survival due to improper temperature distribution and time / temperature applications (e.g. *Listeria monocytogenes, Escherichia coli, Shigella* spp.*, Salmonella* spp.*, Clostridium botulinum, Staphylococcus aureus, Clostridium perfringens, Bacillus cereus*)	CCP # 1 Baking	The internal temperature of the product must be at least 85°C for a minimum of 1 minute.	1. Measure the product's internal temperature from different areas of the oven rack (top, middle, and bottom) during each baking session. 2. Insert the thermometer into the centre of the product and wait until the thermometer reading is steady. 3. Record the each result on the "Daily Baking Record" including the date, the time, and initials.	**When critical limits are not being met for one or more product samples** 1. The product must be baked for a longer period of time until the product's internal temperature reaches at least 85°C for a minimum of 1 minute, or the product must be destroyed. 2. Immediately investigate the cause of the non-conformance and take necessary corrective actions to prevent reoccurrence. 3. Record all non-conformances and corrective actions taken on the "Daily Baking Record," including the date, the time, and initials.	1. At the end of each production day, review the "Daily Baking Record" to ensure that it has been properly completed. 2. Once per week, ensure that the temperature check follows the written monitoring procedure. 3. If non-conformance is found during the verification procedure, immediately investigate the cause of the non-conformance and take necessary corrective actions to prevent reoccurrence. 4. Record all observations on the "Daily Baking Record," including the date, the time, and the initials.	Daily Baking Record

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Physical hazard: Presence of hazardous extraneous metallic material in the finished product due to the failure of the metal detector to detect metal and reject the product when metal is detected.	CCP # 2 Metal detecting	Metal detector must detect 3.0 mm ferrous, 3.0 mm non-ferrous, and 3.5 mm stainless steel test samples when the test samples are passed through the detector with the product. The metal detector must reject the product.	1. Test the metal detector at the start, every hour during packaging, and at the end of each packaging run. 2. Test the metal detector by passing a sample piece of metal through the detector to ensure that it is operating effectively and able to detect metal present in the product. 3. Check metal samples of 3.0 mm ferrous, 3.0 mm non-ferrous, and 3.5 mm stainless steel, one at a time. Each check must include all three sample tests. 4. Insert the metal sample into the middle of the product and then pass the product package through the metal detector. A properly operating metal detector must detect the metal sample in the product. 5. Each time a metal contaminant is detected, the metal detector belt must retract and the rejected product must	**A. When the metal detector fails to detect a metal test sample** 1. Immediately stop the line and place all products processed since the last successful check on hold. 2. All products processed while the metal detector was not functional must be held until they can be passed through a functional metal detector. **B. When a product is rejected by the metal detector** 1. Inspect the product for the metal piece. For above listed non-conformances (A & B) investigate the cause of the non-conformance and take necessary corrective actions to prevent reoccurrence. Record all non-conformances and	1. At the end of each production day, review the "Daily Metal Detector Check Record" to ensure that it has been properly completed. 2. Once per week, ensure that the monitoring of the metal detector follows the written monitoring procedure. 3. If non-conformance is found during the verification procedure, investigate the cause of the non-conformance and take necessary corrective actions to prevent reoccurrence. 4. Record all observations (e.g., whether or not the detector is operating effectively, non-conformances, and corrective actions taken) on the "Daily Metal Detector Check Record,"	Daily Metal Detector Check Record

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			drop into the rejection box. 6. Record the metal sample check as acceptable ("✓") (i.e., the metal detector is operating correctly) or not acceptable ("X") (i.e., the metal detector is not operating correctly) on the "Daily Metal Detector Check Record," including the date, the time, and initials.	corrective actions taken on the "Daily Metal Detector Check Record," including the date, the time, and initials.	including the date, the time, and initials.	

Daily Baking Record
Critical Control Point # 1 (Biological)

Critical Limits: The internal temperature of the product must be at least 85°C for a minimum of 1 minute.

Date	Time	Batch Number	Product Name	Product's Internal Temperature (Product selected from top, middle, and bottom racks of oven)			Initials
				Top	**Middle**	**Bottom**	
2015/11/02	12:00	1	Blueberry pie	87°C	87°C	86°C	CC
2015/11/02	13:04	2	Blueberry pie	81°C	88°C	89°C	CC
2015/11/02	16:00	3	Blueberry pie	87°C	89°C	85°C	CC

Record non-conformance and corrective actions here:

2015/11/02: Batch 2:

The internal temperature of pie on top rack did not reach 85°C. Pies were placed on hold and baked again until the internal temperature reached 85°C. CC

Daily verification:		MN	Date: 2015/11/02
Weekly verification:		ML	Date: 2015/11/09

Daily Metal Detector Check Record
Critical Control Point # 2 (Physical)

Critical Limits: Metal detector must detect 3.0 mm ferrous, 3.0 mm non-ferrous, and 3.5 mm stainless steel test samples when the test samples are passed through the detector with the product. The metal detector must reject the product.

Record the metal sample check as acceptable ("✓") (i.e., the metal detector is operating correctly) or not acceptable ("X") (i.e., the metal detector is not operating correctly)

Date	Time	Batch Number	Product Name	3.0 mm Ferrous	3.0 mm Non-ferrous	3.5 mm Stainless Steel	Initials
2015/11/02	12:00 (start)	1	Blueberry pie	✓	✓	✓	SM
	13:05	1	Blueberry pie	✓	✓	✓	SM
	14:07	2	Blueberry pie	✓	✓	✓	SM
	15:37	2	Blueberry pie	✓	✓	✓	SM
	16:04	2	Blueberry pie	✓	✓	✓	SM
	17:05	3	Blueberry pie	✓	✓	✓	SM
	17:44 (finish)	3	Blueberry pie	✓	✓	✓	SM

Record non-conformance and corrective actions here:

At 17:22, one package was rejected. Product was screened for a metal piece. A small piece (4.5 mm in size) of metal was found. Upon investigation, it appears that it came from one of the damaged mixer lids. The mixer lid was immediately removed and replaced. SM

Daily verification:	MN	Date: 2015/11/02
Weekly verification:	ML	Date: 2015/11/09