

Hazard analysis critical control point (HACCP) is a preventive approach to food safety. It identifies food safety hazards in the food production process and designs measurements to reduce those hazards to a safe level. HACCP includes having a written plan that addresses identified critical control points (CCPs) where illness or injury is reasonably likely to occur in the absence of the hazard's control.

Submit the completed HACCP plan and provide all documents relating to your establishment's HACCP plan to the North Dakota Department of Health and Human Services, Food and Lodging Unit by email (foodandlodging@nd.gov), fax (701-328-0340), or mail (1720 Burlington Dr, Ste A, Bismarck, ND 58504-7736). If you have further questions, please contact us at: 701-328-1291.

Establishment Information

Establishment Name	License Number	Date			
123 Sushi	XXXX	MM/DD/YYYY			
Establishment Address	City	State Zip Code			
123 Ave.	Any City	ND XXXXX			
Owner/Corporate Name					
ABC Sushi					
Mailing Address (if different)	City	State Zip Code			
same as establishment					
Primary Contact for HACCP Plan					
General Manager					
Primary Contact Email Address	Primary Contact Telephone Nun	nber			
gmgr@email.com	XXX-XXX-XXXX				

HACCP Team

Name	Job Title or Description
Joe Smith	General Manager
Sue Smith	Assistant Manager
Ted Smith	Food Worker
Frank Smith	Quality Control Officer

Template adapted from the Minnesota Department of Health

Reason for this HACCP plan*
Please check one of the following:
⊠ New HACCP plan submittal
☐ Modification of existing HACCP plan
Activity or food category
Please check one or more of the following:
☐ Curing food
☐ Custom processing animals for personal use
☐ Operating and maintaining molluscan shellfish tanks
☐ Reduced oxygen packaging (ROP) - ROP methods include vacuum packaging, cook-chill, sous vide, modified
atmosphere packaging (MAP), and controlled atmosphere packaging (CAP)
\square Smoking food as a method of food preservation rather than as a method of flavor enhancement
☐ Sprouting seeds or beans
$oxed{\boxtimes}$ Using food additives or adding components, such as vinegar, to preserve food rather than as a method of
flavor enhancement, or to render the food so that it is not time and temperature control for safety food
☐ Other:

^{*}Please consult with the Regulatory Authority to determine if a variance is required.

Product details

Provide product name, ingredients list, recipe/directions, and process description. Additional scientific documentation, as required by the Regulatory Authority, addressing the food safety concerns involved for this HACCP activity shall be provided.

Product Name

Sushi

Ingredients List

Rice, water, vinegar, vegetable oil, sugar, salt

- 2 cups uncooked glutinous white rice (sushi rice)
- 3 cups water
- ½ cup rice vinegar
- 1 tablespoon vegetable oil
- 1/4 cup white sugar
- 1 teaspoon salt

Recipe

Directions

- 1. Rinse the rice in a strainer or colander until the water runs clear.
- 2. Combine with water in a medium saucepan.
- 3. Bring to a boil, then reduce the heat to low, cover and cook for 20 minutes. Rice should be tender, and water should be absorbed.
- Cool until cool enough to handle.
- 5. In a small saucepan, combine the rice vinegar, oil, sugar and salt.
- 6. Cook over medium heat until the sugar dissolves.
- 7. Cool, then stir into the cooked rice. When you pour this into the rice it will seem very wet. Keep stirring and the rice will dry as it cools.

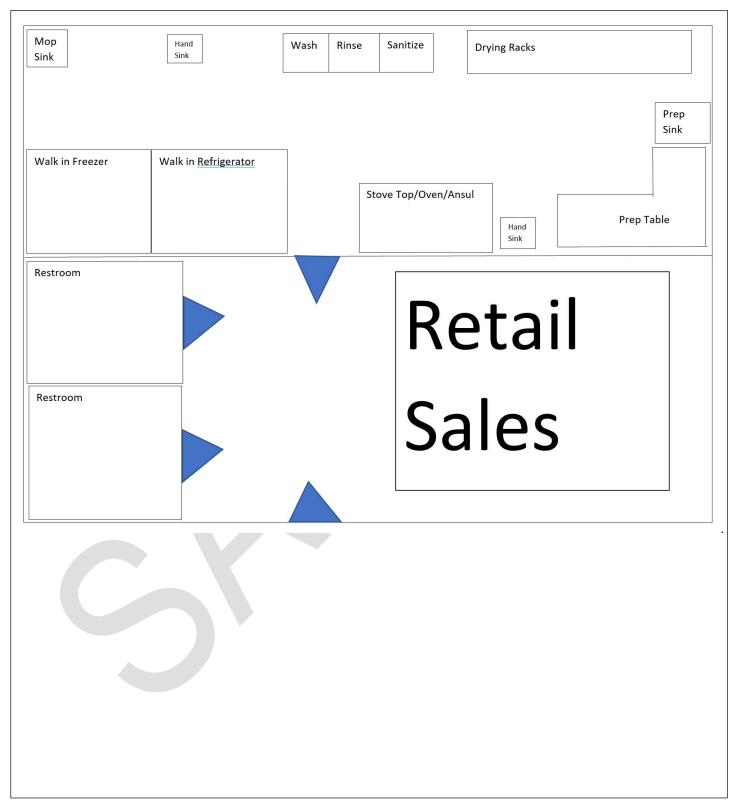
Process Description

Ingredients are combined according to the recipe. Vinegar is included to render the food so that it is not a time and temperature control for safety food. All product ingredients are purchased from approved and licensed suppliers and inspected during receiving for quality. The handling, preparation, and monitoring of products are conducted by employees who have a thorough understanding of this HACCP plan and are trained in the acidification process.

Please check one or more of the following to indicate how the product will be used.								
⊠Ready-to-eat; served in the food establishment to consumers.								
Ready-to-eat; distributed to satellite location; served at satellite location to consumers.								
\square Ready-to-eat; packaged and sold in the food establishment for home use.								
\square Ready-to-eat; packaged and sold wholesale to another food establishment for retail sale.								
☐Raw; served in the food establishment to consumers								
\square Raw; distributed to satellite location; served at satellite location to consumers.								
\square Raw; packaged and sold in the food establishment for home use.								
\square Raw; packaged and sold wholesale to another food establishment for retail sale.								
□ Other:								
Shelf life								
For each storage method included in this HACCP plan, indicate the maximum time products will be stored.								
Shelf Stable								
Shelf Stable								
Shelf Stable								
Shelf Stable								
Shelf Stable								
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Layout of production area

Provide a hand drawing, blueprint, or other diagram of the production area. Include all areas involved with this HACCP activity. Important details may include: sink types and locations, equipment locations, receiving, storage, preparation, and processing areas.



Equipment and materials

List all equipment and materials used for this HACCP activity. Include manufacturer names and model numbers. Attach specification sheets, if available.

Stoves: Make ABC, Model 123

Kitchen Equipment, Pots, Pans, & Lids

Kitchen Utensils, Ladle, Funnel, Knives, & Slicer: Brand ABC

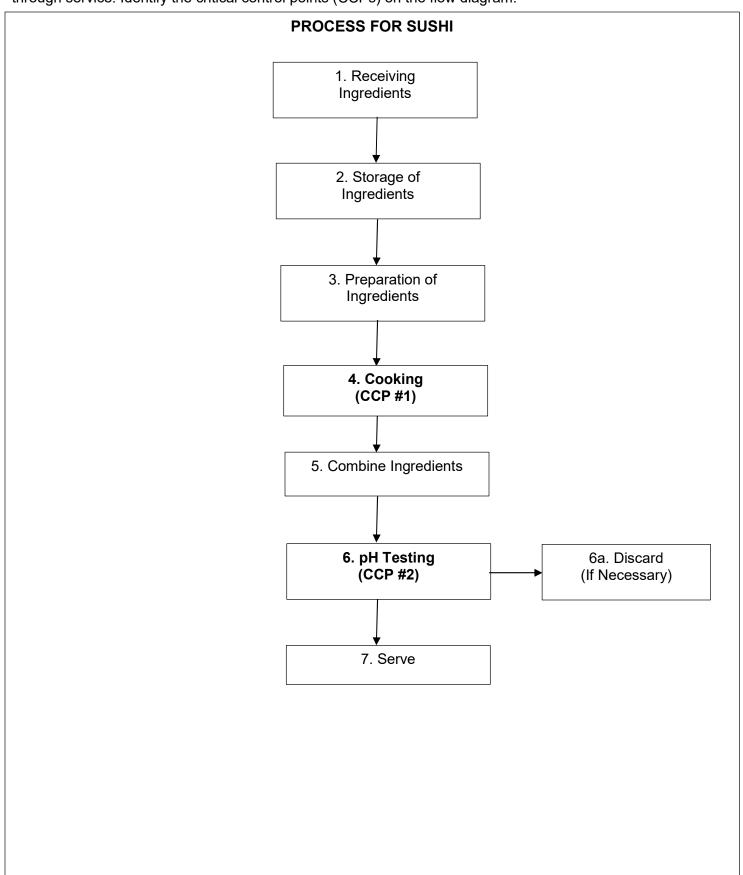
Timer: Make ABC, Model 123 pH Meter: Make ABC, Model 123

Distilled Water: Brand ABC

Buffer Solutions 4.0 & 7.0: Brand ABC, Lot 123 Clear Plastic or Metal Blender Cups for pH Testing

Food flow diagram

Provide a written flow diagram for foods covered in this HACCP plan. Identify process steps from receiving through service. Identify the critical control points (CCPs) on the flow diagram.



Hazard analysis

Use the chart below to conduct and document the hazard analysis. The HACCP plan shall include CCPs for each identified hazard.

Step from food flow diagram.	Identify potential biological (B), chemical (C), and physical (P) hazards introduced, controlled, or enhanced at this step.	Does this step involve a hazard of sufficient risk and severity to warrant its control? (Yes/No)	Justification for decision.	What preventive measure(s) can be applied for the significant hazards?	Is this step a CCP? (Yes/No)
1. Receiving Ingredients	B – Pathogens: Salmonella, Shiga toxin-producing E. coli, Listeria, yeast and mold (mycotoxin), Staphylococcus aureus C – Deleterious Chemicals P – Foreign Material		Yeast and mold (mycotoxin) growth and spores and bacterial pathogens may be present on produce and spices but normally should not be at levels hazardous to public health When purchased from approved suppliers, ingredients and materials normally do not contain foreign material or chemicals above food safety threshold		No
2. Storage of Ingredients	B – Pathogens: Salmonella, Shiga toxin-producing E. coli, Listeria, yeast and mold (mycotoxin), Staphylococcus aureus C – Deleterious Chemicals P – None		Yeast and mold (mycotoxin) growth and spores and bacterial pathogens may be present on produce and spices but normally should not be at levels hazardous to public Health	All products will be stored in areas separate from chemicals	No

Step from food flow diagram.	Identify potential biological (B), chemical (C), and physical (P) hazards introduced, controlled, or enhanced at this step.	Does this step involve a hazard of sufficient risk and severity to warrant its control? (Yes/No)	Justification for decision.	What preventive measure(s) can be applied for the significant hazards?	Is this step a CCP? (Yes/No)
3. Preparation of Ingredients	B – Pathogens: Salmonella, Shiga toxin-producing E. coli, Listeria, yeast and mold (mycotoxin), Staphylococcus aureus C – None P – Foreign Material	B – No P – Yes	Yeast and mold (mycotoxin) growth and spores and bacterial pathogens may be present on produce and spices but normally should not be at levels hazardous to public health Potential of broken glass or materials from handling jars	All fresh produce will be rinsed with tap water prior to further preparation Control measures: Thermal processing and testing steps	No
4. Cooking (CCP #1)	B – Pathogens: Salmonella, Shiga toxin-producing E. coli, Listeria, yeast and mold (mycotoxin), Staphylococcus aureus C – None P – None	Yes	bacteria, yeast, and mold	Rice will be cooked to a minimum of 140 degrees by boiling 20 minutes or greater when adjusted for altitude	
5. Combine Ingredients	B – Pathogens: Staphylococcus aureus C – None P – None	Yes	Rice shall not be handled with bare hands.	Ready to eat rice will not be handled with bare hands.	No

Step from food flow diagram.	Identify potential biological (B), chemical (C), and physical (P) hazards introduced, controlled, or enhanced at this step.	Does this step involve a hazard of sufficient risk and severity to warrant its control? (Yes/No)	Justification for decision.	What preventive measure(s) can be applied for the significant hazards?	Is this step a CCP? (Yes/No)
6. pH Testing (CCP #2)	B – Pathogens: Staphylococcus aureus C – None P – None	Yes	Finished product pH below 4.2 controls the pathogen growth and toxin formation	Finished product pH below 4.2	Yes: CCP 2
6a. Discard (If Necessary)	None	N/A	N/A	N/A	N/A
7. Serve None		No	Product does not contain allergens and is ready-to-eat	N/A	No

HACCP Plan CCP Chart

Complete the chart below. Identify each CCP and describe: the critical limit, method and frequency for monitoring and controlling the CCP, method and frequency for person in charge (PIC) to verify that food employees are following standard operating procedures (SOPs) and monitoring CCPs, corrective action when critical limits are not met, and how records are maintained.

		Critical limits	Critical limits Monitoring						
Critical Control point (CCP)	Significant hazard(s)	for each hazard	What	How	Frequency	Who	Corrective action(s)	Records	Verification
CCP #1 Cooking	B – Pathogens: Salmonella, Shiga toxin-producing E. coli, Listeria, yeast and mold (mycotoxin), Staphylococcus aureus C – None P – None	Rice will be cooked to a minimum of 140 degrees by boiling 20 minutes or greater when adjusted for altitude	Processing temperature and time	Visually confirm water is boiling Use a timer	Each batch	Designated food worker		Thermal Processing and pH Testing Log	PIC will review all records within seven days of completion All employees will use and maintain equipment per manufacturer's specifications

0 " 10 11	0: :5 1	Critical limits		Monitorii	ng				
Critical Control point (CCP)	Significant hazard(s)	for each hazard	What	How	Frequency	Who	Corrective action(s)	Records	Verification
CCP #2 pH Testing	B – Staphylococcus aureus, Listeria monocytogens C – None P – None	pH below 4.2	product	Use a pH meter Follow SOPs for preparing product slurry, calibrating pH meter, and testing pH	Each batch	Designated food worker	If product slurry does not meet critical limit, the batch will be discarded Identify and retrain employee(s) on how to ensure that critical limits are met Record corrective actions on the Thermal Processing and pH Testing Log	pH Testing Log	PIC will review all records within seven days of completion All employees will use and maintain equipment per manufacturer's specifications

Standard Operating Procedures (SOPs)

Include SOPs that describe how to conduct procedures specific to this HACCP activity. SOPs necessary for this HACCP activity may include: maintenance of specialized equipment (pH meter calibration, cleaning and sanitizing of equipment), and employee training (monitoring, corrective action, record-keeping procedures, and proper formulation of food additives).

PROCESS FOR SUSHI

- 1. **Receiving Ingredients:** Ingredients will be purchased from approved suppliers and visually inspected for quality and contamination.
- 2. **Storage of Ingredients:** Non-perishable products are stored in a clean location that is separated from any potential sources of contamination.
- 3. **Preparation of Ingredients:** Prepare ingredients according to the recipe directions.
- 4. **Cooking:** Follow recipe directions to process filled jars in a water bath canner. Processing time must be adjusted for altitude. The altitude for the food establishment is 1,686 feet. Process filled jars for 15 minutes per recipe plus five minutes adjusted for altitude for a total of 20 minutes of processing time.
 - Critical Limit: 20-minute total cooking time in boiling water
 - **Monitoring:** Visually confirm water is boiling. Use a timer to ensure rice is cooked for at least 20 minutes.
 - Corrective Action: Ensure that rice is submerged in boiling water and start timer. Restart timer if the water cannot maintain a boil for the required time. Identify and retrain employee(s) on how to ensure that critical limits are met. Record corrective actions on the Thermal Processing and pH Testing Log.
 - **Records:** Record all required information on the Thermal Processing and pH Testing Log. Maintain records for at least one year.
 - **Verification:** PIC will verify that designated employees have met the critical limit and sign off on Thermal Processing and pH Testing Log within seven days of completion. All food workers shall use and maintain equipment per manufacturer's specifications.
- 5. **Cooling:** Follow cooling parameters of 135 degrees F to 70 degrees F in two hours and 70 degrees F to 41 degrees F or below in 4 hours.
 - Critical Limit: Cool from 135 degrees F to 41 degrees F in 6 hours.
 - Monitoring: Use a calibrated thermometer to ensure cooling parameters are met.
 - Corrective Action: If product does not meet the critical limit, the batch will be reheated to meet the cooking and cooling procedures or discarded
 - Records: Record all required information on the Thermal Processing and pH Testing Log.
 Maintain records for at least one year.
 - **Verification:** PIC will verify that designated employees have met the critical limit and sign off on Thermal Processing and pH Testing Log within seven days of completion. All food workers shall use and maintain equipment per manufacturer's specifications.
- 6. **pH Testing:** Follow pH Testing SOP for calibration of pH meter, preparation of product slurry, and calibration of pH meter.
 - Critical Limit: pH below 4.2
 - Monitoring: Use a pH meter to test one jar from each batch.
 - Corrective Action: If product slurry does not meet critical limit, the batch will be discarded.
 - Identify and retrain employee(s) on how to ensure that critical limits are met. Record corrective actions

7. **Serve:** Sushi rice is non TCS and can be served without a time or temperature control for food safety.

PROCEDURE FOR CLEANING AND SANITIZING OF EQUIPMENT

Food-contact equipment and utensils are cleaned every four hours if in use. Non-food-contact surfaces are cleaned at a frequency necessary to prevent accumulation of soil residues.

- 1. **Pre-cleaning** Equipment and utensils are pre-cleaned by pre-flushing, presoaking, or scraping as necessary to eliminate excessive food debris.
- 2. **Washing** Equipment and utensils are washed in soapy water to remove or completely loosen soils using a manual method.
- 3. **Rinsing** Washed utensils and equipment are rinsed in water to remove soapy residue prior to sanitizing.
- 4. **Testing Sanitizer Solution** Select appropriate test strip (chlorine, quaternary ammonia, or iodine) and test sanitizing solution prior to use daily to ensure appropriate concentration.
- 5. **Sanitizing** After being washed and rinsed, equipment and utensils are sanitized with an approved chemical by immersion. Concentration and exposure times are important to ensure effectiveness of the chemical. Refer to the manufacturer's label for concentrations and exposure times.
- 6. **Air Drying** Allow all cleaned and sanitized equipment and utensils to air dry before stacking or storing. Do not use towels.

*When a mechanical ware washing machine is used, follow manufacturer's instructions for use.

PROCEDURE FOR EMPLOYEE TRAINING

Employees will be trained on each step of the food flow chart. Particular attention will be made to critical control points and proper documentation of logs. Employee training will be documented on the Employee Training Log. Employees will not be allowed to process kippered beef or ROP independently until Employee Training Log has been completed.

PROCEDURE FOR PH METER TESTING AND CALIBRATION

To calibrate the pH meter:

- 1. Prior to testing, the electrodes, buffer solutions, product and distilled water need to be at a temperature between 68°F and 86°F.
- 2. Calibrate pH meter on each day product will be tested, or when readings are in doubt.
- 3. Calibrate pH meter according to manufacturer's instructions.
- 4. Only use buffer solutions that have not exceeded the labeled expiration dates.
- 5. Use pH 4.0 and 7.0 buffer solutions.
- 6. If the pH meter does not read the buffers correctly, recalibrate the pH meter according to the manufacturer's instructions or replace the meter.

Prepare product slurry:

- 1. Select one jar from each batch.
- 2. Place 1/2 cup of the solid product with 1/8 cup of distilled water in a clear plastic or metal blender cup.
- 3. Blend the product for approximately 20 seconds to create uniform slurry.

Test product pH:

- 1. Use the pH meter to test the pH of the slurry. Do not use pH papers or strips.
- 2. Record product pH on the Thermal Processing and pH Testing Log.

Prerequisite programs

Describe facility-wide considerations implemented in all phases of the food operation that allow active managerial control over personal hygiene and cross-contamination. Include standard sanitation operating procedures (SSOPs) that address the following: how employees comply with ND Food Code by preventing contamination from hands, minimizing cross contamination, cleaning and sanitizing procedures, and restriction or exclusion of ill employees. Include a description of the training programs that ensure food safety in the operation.

PROCEDURE FOR EMPLOYEE HEALTH & HYGIENE

- 1. Hands are to be thoroughly washed for 20 seconds in a designated hand sink with soap and water, paying particular attention to the areas underneath the fingernails and between the fingers by scrubbing thoroughly. Dry with single use towels. Hand washing is to be done at the following times:
 - After using the toilet, in the toilet room
 - After coughing, sneezing, using a tissue, using tobacco, eating or drinking
 - After handling soiled equipment or utensils
 - Immediately before engaging in food preparation activities
 - During food preparation activities necessary to remove soil and prevent cross contamination
 - When switching between raw and ready-to-eat foods
 - Other times as needed to maintain good sanitation
- 2. Fingernails must be kept trimmed, filed, free of nail polish, and maintained so the edges are cleanable and not rough. Artificial nails are prohibited.
- 3. Eating and drinking is prohibited in areas where contamination of exposed food, clean equipment, utensils, unwrapped single service and single use articles could occur. A food employee may drink from a closed beverage container as long as it is handled to prevent contamination. Smoking and other uses of tobacco are prohibited.
- 4. Effective hair restraints must be worn in processing areas.
- 5. Clean outer clothing must be worn each day and changed as often as necessary throughout the day (when moving from a raw food operation to a ready-to-eat food operation). Footwear is to be kept clean. Aprons used by employees are to be hung in a designated area when not in use. They are not to be worn in the toilet area, eating areas, and locker rooms.
- 6. No jewelry (except a wedding band or other plain ring) is allowed during handling of food.
- 7. Food employees shall report to the person in charge when they have a symptom caused by illness, infection, or other source that is:
 - Associated with diarrhea, vomiting, or other acute gastrointestinal illness
 - Jaundice
 - A boil, infected wound, or other lesion containing pus that is open or draining unless: if on the hands and wrist, unless a finger cot or other impermeable cover protects the lesion and a single use glove is worn if on exposed portions of the arms, the lesion is protected by an impermeable cover.

The person in charge shall impose the proper restrictions and exclusions and record on the Employee Illness Log.

Record-keeping

Attach all blank record-keeping forms employees will use for the processes covered in this HACCP plan. Procedures to monitor all SOPs (daily thermometer accuracy log, pH meter calibration log) shall be included. Procedures to monitor all CCPs (temperature logs for cooking, cooling, and storage; product pH testing log; corrective action logs; etc.) shall be included. The PIC shall verify all record-keeping documents by reviewing, dating, and initialing the logs.



Employee Training Log

Name of Employee		Date of Hire
Documentation of Em	ployee Training	
Topic	Trainee Date & Initials	Trainer Initials
Introduction to Canning – Safety & Hazards		
Storage		
pH Testing		
pH Calibration		
Discarding Product		
Serving		
Cleaning & Sanitizing Equipment		
Employee Health & Hygiene		
Record Keeping		
I verify that I am competent to perform all duties listed above.		
Employee Signature Date	,	
I have reviewed this training document and verify that this employe	ee is competent to perform all du	uties listed above.
Employee Signature Date	;	

pH Testing Log

Date & Initials		Product Info	ormation		p	H Testing		Corrective Actions	Verified
	Recipe	Batch Number	Jar Size	# of Jars Made	pH Meter Calibrated (Yes or No)	pH of Product	CCP #1 Met?	Confective Actions	by PIC (Initials)

Employee Illness Log

Instructions: This log should be used to track employee absences due to illness.

- Employees are required to notify the Person in Charge (PIC) of any of the following:
 - o Symptoms of vomiting, diarrhea, jaundice, sore throat with fever, and/or infected wounds
 - o Diagnosis from a health practitioner of norovirus, hepatitis A, *Shigella, Salmonella* Typhi, nontyphoidal *Salmonella*, or Shiga toxin-producing *E. coli.* The PIC is required to record all reports of symptoms and diagnoses and to notify the Regulatory Authority of any of the diagnoses.

Report date	Employee name	Vomiting*	Diarrhea*	Jaundice	Fever	Respiratory (cough, sore throat, runny nose)	Comments or additional symptoms	Date returned to work	Diagnosed with a pathogen? (see list above)	If diagnosed, 1-800-472- 2927 or local health agency contacted?
02/20/2020	John Doe	X	X				Sent home	6/15/2019	Yes – norovirus	02/20/2020

^{*}Employees with diarrhea or vomiting CANNOT RETURN TO WORK for at LEAST 24 HOURS after symptoms resolve.