

HACCP

Introduction

Avoyelles Public Charter School

What is HACCP?

HACCP (pronounced "has-sip") is a difficult name for a simple and effective way to ensure food safety. HACCP stands for the "Hazard Analysis and Critical Control Points" system. It allows you to predict risks to food safety and prevent them before they happen. By using HACCP, you no longer have to rely solely on routine inspections to spot potential food safety hazards.

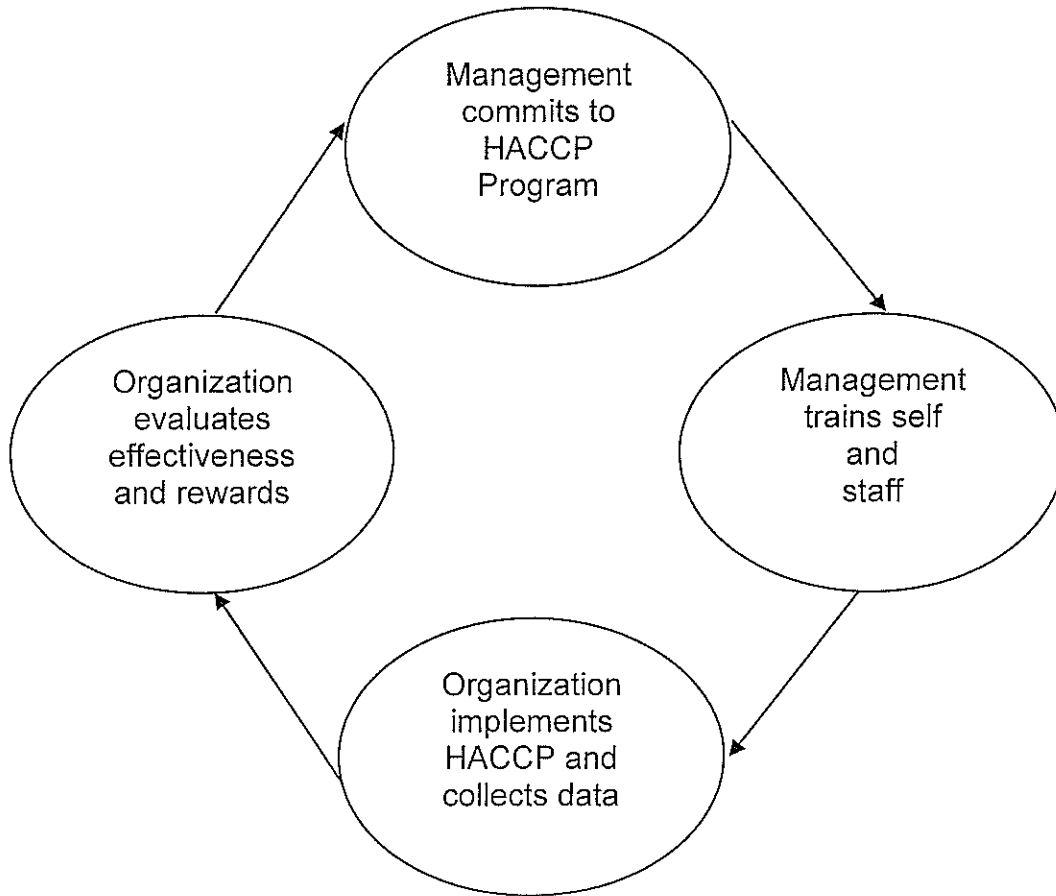
The HACCP process of ensuring food safety was developed in the 1960's by the Pillsbury Company as part of its effort to produce foods for the space program. (Imagine how serious it would be if astronauts got food poisoning in space.) Pillsbury developed a system to predict and prevent safety problems throughout the food preparation process.

This system identified potential problems with food safety in advance and set up methods to control each possible hazard. The company kept records to make sure the controls worked. With the HACCP system, Pillsbury made safe foods. Testing for safety was unnecessary; the HACCP system prevented food safety problems.

Today many food companies use the HACCP system to make sure their products are safe. The U.S. Food and Drug Administration, the U.S. Department of Agriculture, and the U.S. Department of Commerce all encourage HACCP safety plans for food processing in retail food stores, restaurants, and food processing plants.

Food safety is a key to good business. The sale of unsafe foods can cause waste, illness, lost sales, and lost customers. Keeping foods safe means jobs, good business, happy customers, and greater profitability.

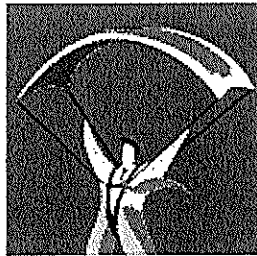
HACCP is, first and foremost, a proactive concept. The technique of it treats the production of food as a total, continuous system, assuring food safety from harvest to consumption. Included in this system are purchasing, receiving, storage, preparation, and service. Each of these components is evaluated by principles of failure analysis. The premise is simple: if each step of the process is carried out correctly, the end product will be safe food.

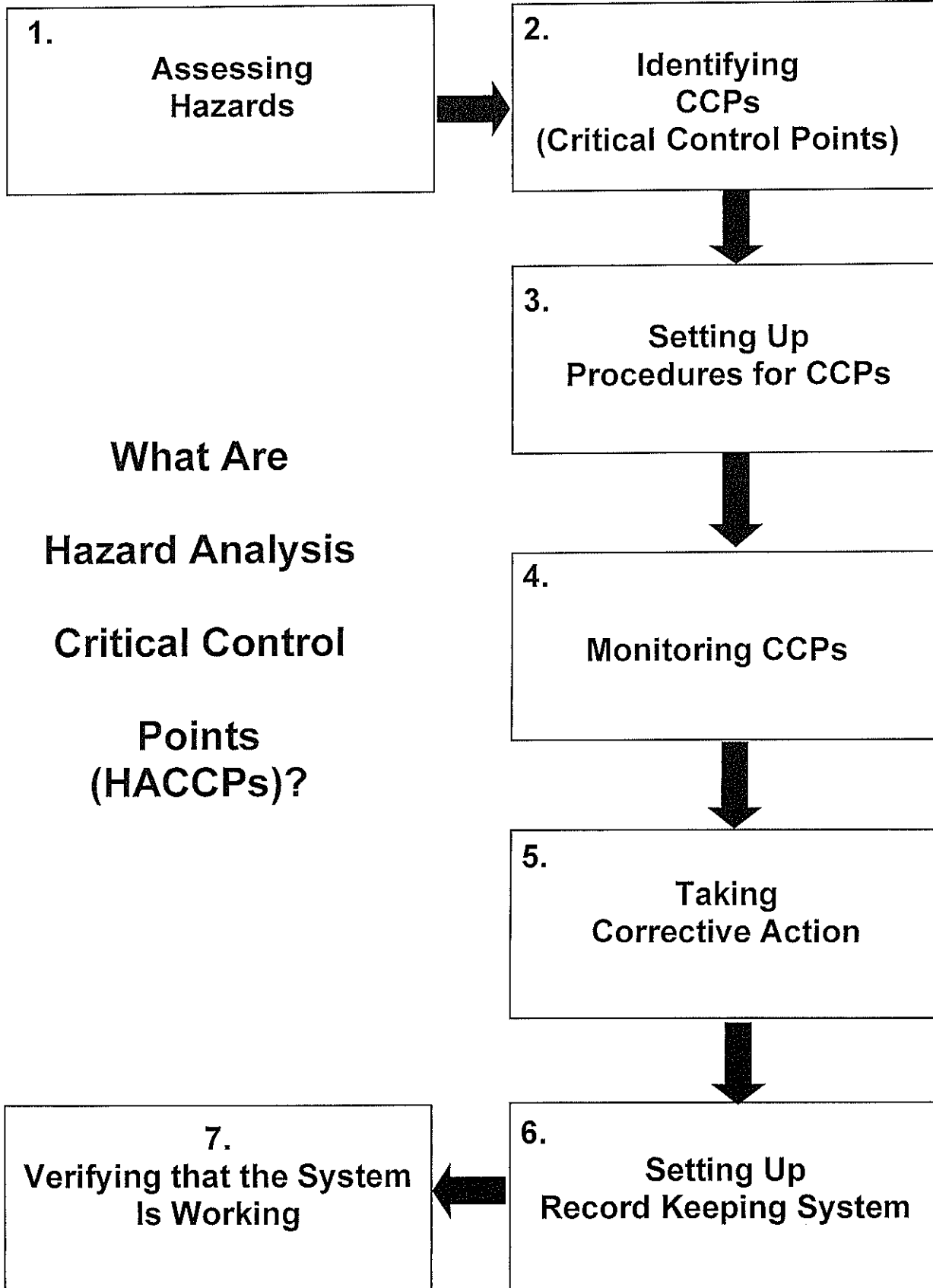


Our Mission:

To minimize consumer risk of illness and injury from foods consumed in our food service departments.

HACCP IS
AN EVALUATION SYSTEM:
TO IDENTIFY;
TO MONITOR;
TO CONTROL
CONTAMINATION RISKS
IN OUR
FOOD SERVICE ESTABLISHMENTS





**What Are
Hazard Analysis
Critical Control
Points
(HACCPs)?**

BASIC HACCP PROCEDURE

1. Identify potentially hazardous foods and sensitive ingredients.
2. Find sources and specific points of contamination.
3. Determine the potential for microorganisms to:
 - Survive a heat process, and
 - Multiply at room temperature, and during hot and cold storage.



SEVEN (7) STEPS OF THE HACCP SYSTEM

1	First identify potentially hazardous foods.
2	Then observe those foods throughout your preparation, holding, and serving process to identify critical control points .
3	Establish control procedures and monitor those critical points to guarantee safe handling of the food.
4	Establish monitoring procedures to adjust the process and maintain control.
5	Establish corrective actions to be taken when monitoring indicates that there is a deviation from an established critical limit.
6	Establish effective record-keeping procedures that document the HACCP system.
7	Establish procedures to verify that the HACCP plan or system is working.

STEPS OF THE HACCP SYSTEM:

Explanation and Application of HACCP Principles

STEP 1: IDENTIFY POTENTIALLY HAZARDOUS FOODS

Hazard: Any biological, chemical or physical property that may cause an unacceptable consumer health risk.

Risk: A likelihood of a hazard.

- Review description and charts of potentially hazardous foods (PHF).
- Review menu for potentially hazardous foods.

STEP 2: IDENTIFY CRITICAL CONTROL POINTS

A *critical control point* is defined as a point, step, procedure in which a food safety hazard can be prevented, eliminated, or reduced. Examples of critical control points (CCPs) may include, but are not limited to, cooking, chilling, specific sanitation procedures, prevention of cross-contamination, and certain aspects of employee and environmental hygiene.

- Review critical items list.
- Observe foods throughout preparation, holding, and serving process.
- Review recipe procedures.
- Observe employee food handling and hand-washing practices.
- Observe use of sanitizer solutions and document proper concentrations.
- Conduct a pocket thermometer calibration demonstration.
- Chart the time/temperature of the cool down and/or reheating of a PHF.

STEP 3: ESTABLISH CONTROL PROCEDURES

"Critical limits" is defined as the criteria that must be met for each preventative measure associated with a CCP. Critical limits may be set for preventive measures such as temperature, time, physical dimensions, humidity, moisture level, water activity, pH, acidity, salt concentration, available chlorine, preservatives, or sensory information such as texture, aroma, and visual appearance.

- *Incorporate control procedures* into the written recipe; for example:

Chicken Breast

Minimum internal cooking temperature of chicken: 165°F

Oven temperature: _____ °F

Time: rate of heating, cooling, reheating

- *Enforce* employee hand-washing and hygiene practices.
- *Establish illness policy* for employees with flu-like symptoms of diarrhea/vomiting.
- *Enforce* proper cleaning and use of sanitizer solutions.

STEP 4: ESTABLISH MONITORING PROCEDURES

Monitoring is a planned sequence of observations or measurements to assess whether a CCP is under control and to produce an accurate record for future use in verification. Examples of measurements for monitoring include:

- Visual observations
- Temperature
- Time
- pH
- Moisture level

Assignment of the responsibility for monitoring is an important consideration for each CCP. The person responsible for monitoring must also report a process or product that does not meet critical limits so that immediate corrective action can be taken. For example:

- Assign one person to make and test sanitizer solution each day.
- Assign responsibility for equipment temperature logs.
- Assign responsibility for food temperature logs for cooking, cooling, and reheating.

All records and documents with CCP monitoring are to be signed or initialed by the person doing the monitoring.

STEP 5: ESTABLISH CORRECTIVE ACTION

The HACCP system for food safety management is designed to identify potential health hazards and to establish strategies to prevent their occurrence. However, ideal circumstances do not always prevail. Therefore, when deviation occurs, corrective action plans must be in place to:

- Determine whether food should be disposed of;
- Correct or eliminate the cause of the problem;
- Maintain records of corrective action taken.

Actions must demonstrate that the CCP has been brought under control. Individuals who have a thorough understanding of HACCP process, product, and plan are to be assigned responsibility for taking corrective action. Corrective action procedures must be documented in the HACCP plan.

STEP 6: ESTABLISH EFFECTIVE RECORD-KEEPING PROCEDURES

The associated records should be on file at the food establishment. Generally, such records include the following:

- Listing of the HACCP team members and assigned responsibilities;
- Description of the food and its intended use/product description/specifications;
- Listing of all regulations that must be met;
- Ensure adequate environment, facilities, and equipment;
- Monitor equipment with temperature logs;
- Copies of flow charts from receiving to consumption;

- Hazard assessment at each step in flow diagram (include calibration of equipment);
- The critical limits established for each hazard variable at each step:

Management	Equipment
Customers	Employees
Environment	Materials and supplies
Facility	Food production methods: handling from source to consumption.
- Monitoring requirements for temperature, sanitation, finished product specifications, and distribution;
- Corrective action plans when there is a deviation in policy, procedure, or standard CCP;
- Procedures for verification of HACCP system.

STEP 7: ESTABLISH PROCEDURES FOR VERIFICATION

Verification procedures may include:

- Establishment of appropriate verification inspection schedules;
- Review of the HACCP plan;
- Review of CCP records;
- Review of deviations and dispositions;
- Visual inspection of operations to observe whether CCPs are under control;
- Random sample collection and analysis;
- Review of critical limits to verify that they are adequate to control hazards;
- Review of written record of verification inspections covering compliance, deviations, or corrective actions taken;
- Review of modifications of the HACCP plan.



HACCP

Principle #6

Establish Effective Recordkeeping Procedures

Records that indicate that you are following effective food safety procedures can be critical in the event of an outbreak of foodborne illness – not only to discover the source of a problem, but also to protect your department, A'viands and your client from being falsely identified as the source of an outbreak. Your record system needs to be simple and easy for your employees to use. Use recordkeeping and routine reviews of records to make sure that controls work.

A daily record review ensures that controls are working – that proper information was recorded and that workers handled foods properly. If records indicate potential problems, investigate immediately and document your findings. Documentation on your investigation should be written directly on the record in which the potential problem was identified. Remember to date and initial your findings.

Staff responsibility:

All foodservice staff will be held responsible for recordkeeping duties as assigned. Overall, the foodservice manager will be responsible for making sure that records are being taken and for filing records.

Recordkeeping Procedure:

- All pertinent information on CCPs, time, temperature and corrective actions will be kept on clip boards in the kitchen for ease of use.
- All applicable forms will be replaced timely by Foodservice Director or designee.
- The foodservice manager is responsible for making sure that all forms are updated, available for use and filed properly after completion.
- All completed forms will be filed in the manager's office.
- The foodservice manager is also responsible for educating all foodservice personnel on the use and importance of recording critical information.

Review of the Food Safety Program

The District Manager will review the food safety program at least annually and when any significant changes occur in the operation.

DOCUMENTATION (RECORDS)

SCHEDULE

Refrigerator and Freezer Temperature Log	Twice daily
Dishmachine Temperature Log	Each Meal
Food Temperature Log	Each Meal
Pot and Pan Sink Temperature/PPM Log (If sink is used to sanitize Pots and Pans)	Each Meal
Dining Room Observation	Weekly
Test Tray	Weekly
Thermometer Calibration	Weekly
Sanitation and Safety QA checklist	Monthly
Receiving Log (or delivery invoice)	Monthly
Food Preparation Process Observation Checklist	Monthly
Meal Service Audit	Monthly
Quality Assurance Review	Annually
Food Safety Hazard Analysis Inspection	Annually
Training Logs	Ongoing
Corrective Action Records	As necessary

All HACCP recordkeeping documents must be kept on file for one year.

HACCP

Principles #2, #3, #4 and #5 Identify Critical Control Points (CCPs) and Establish Critical Limits, Monitoring and Corrective Action

A **critical control point** is defined as that step in the flow of food where hazards can be prevented, reduced to an acceptable level, or eliminated entirely. **Critical limits** are standards that potentially hazardous foods must meet at each critical control point. The critical limits are easily observable and measurable. The following flow chart lists the steps that the potentially hazardous food goes through on the way to final service and helps identify procedures and standards that can prevent, reduce, or eliminate hazards at each step. The flow chart also includes corrective actions to follow when something does not meet the critical limits that have been established for the critical control points.

Standard operating procedures (SOPs) are procedures that must be followed as food goes through its way to final service in order to meet the critical control standards and prevent hazards, reduce hazards to an acceptable level, or eliminate hazards entirely. SOPs are step-by-step written instructions for routine food service tasks to help employees complete a job safely.

HACCP Flow of Food Standards, Critical Limits and Corrective Action

Standard	Critical Limits and Monitoring	Corrective Action
Receiving: All food items are checked for acceptability as they are received. Initial, date and write time on the invoice upon acceptance.	All cold food must be at or below 41°F. All frozen food must be at 0°F or below. All foods must be in good condition as identified in the A'viands receiving policy.	Return any product back to the vendor immediately that does not meet receiving standards and critical limits.

Standard	Critical Limits and Monitoring	Corrective Action
<p>Delivery: Immediately move all temperature sensitive foods to either refrigerator or freezer.</p> <p>Place dry items in dry storage area unpacking cases and remove boxes to waste disposal areas.</p> <p>Date ALL products with the receiving date moving old product to the front rack and new items to the back assuring proper rotation. If cases are being unpacked, mark each unit i.e. can, bag.</p>	<p>Refrigerator storage to be kept at 41°F or below with temperatures taken and logged at start and again at the end of the day.</p> <p>Freezer storage to be kept at 0° or below with temperatures taken and logged at start and again at the end of the day.</p>	<p>If it is determined that refrigerator or freezer spaces are not within the Critical Limits set, immediately take sample temperatures of the food located in the unit.</p> <p>If the food temperatures have not reached the Critical Limit, begin to monitor the unit hourly to determine if the unit recovers the proper temperature. Take corrective action to repair the unit immediately. If the unit temperature recovers, re-sample the food to ensure that no temperature compromise has occurred.</p> <p>If the unit temperature does not recover immediately, move all food from the defective unit and place in a properly operating one. Once the unit is repaired monitor it for 24 hours before placing the food back in the unit.</p>
<p>Cooking: Ensure all foods that are to be served hot are cooked to the minimum safe temperatures as defined on the recipe information. There is no exception to this standard.</p> <p>Limit the time that cold and/or frozen food is in the temperature danger zone (41° to 140°) during preparation.</p> <p>All frozen foods must be thawed properly per A'viands thawing policy. Frozen foods must never be thawed in the open air.</p>	<p>Cook all foods to an internal temperature of at least 165° F for 15 seconds. Recipes indicate final cooking temperatures as does the Food Temperature Record.</p>	<p>If the minimum safe internal cooking temperature is not reached, continue cooking the product until the minimum safe internal temperature is reached and validated with a thermometer.</p> <p>Any foods left in the temperature danger zone in excess of 2 hours must be discarded.</p>

Standard	Critical Limits and Monitoring	Corrective Action
<p>Log final cooking temperatures on the Food Temperature Record. This action must be done at all times to ensure a safe internal temperature is reached.</p>		
<p>Hot Food Holding: All hot food must be held at a minimum safe temperature of 140° or above. (Follow state/local Health Dept. regulations if more stringent i.e. MN Healthcare is 150°F).</p> <p>Hot food must not be placed in the steamtable more than 30 minutes before serving time.</p> <p>Hot food holding temperatures must be monitored at a minimum of 2 hour intervals.</p>	<p>Hot food holding temperature of 140° or above. (150°F for MN Healthcare).</p> <p>Temperature monitoring a minimum of once every 2 hours using the Food Temperature Record.</p>	<p>Any hot food not maintained at 140° (150°F for MN Healthcare) must be handled in one of the following ways:</p> <p>If less than 2 hours, re-heat the hot food to an internal temp of 165° for 15 seconds and place back in the hot food holding area.</p> <p>If more than 2 hours, dispose of the food.</p>
<p>Reheating: All foods intended to be reheated for service must be cooked to a safe internal temperature of 165° for 15 seconds within 2 hours.</p> <p>All reheated foods must be held at a safe internal temperature of 140° until served or disposed of. Time and temperature of reheated foods will be monitored during the reheating process to ensure compliance with the critical limit standard.</p> <p>Final cooking temperature information will be taken and logged in the Food Temperature Record at a minimum of 2 hour intervals.</p>	<p>Heat all leftover or reheated foods to 165° for 15 seconds within 2 hours.</p>	<p>If the food being reheated has not reached the minimum safe cooking temperature of 165° and the time has <u>not</u> exceeded the 2 hour limit continue cooking.</p> <p>If the food being reheated has not reached the minimum safe cooking temperature of 165° and time <u>has</u> exceeded the 2 hour limit, dispose the food.</p>

Standard	Critical Limits and Monitoring	Corrective Action
<p>Minimize the production time on each chilled item produced. Prevent foods needed for multiple menu items to be present at room temperature at one time. Menu times should be produced one at a time.</p> <p>Immediately move completed cold food menu items back into the refrigerator storage area until time to move to the serving area. This will limit the cold food exposure to unsafe temperatures and allow the food to re-chill after being worked on at room temperatures.</p>		
<p>Cold Food: All cold foods prepared for service must be maintained at 41° or below during service</p> <p>Any cold food that is in the temperature danger zone of 41° to 140° for more than 2 hours must be disposed of.</p> <p>Temperatures of cold food must be monitored and recorded on the Food Temperature Record a minimum of 2 hour intervals.</p>	<p>Minimum safe cold food temperatures of 41° or below.</p> <p>Minimum temperature recording at 2 hour intervals.</p>	<p>Any cold food that is in the temperature danger zone of 41° or above for more than 2 hours <u>must</u> be disposed of.</p>

Standard	Critical Limits and Monitoring	Corrective Action
<p>Storage of Leftover Foods: Foods being returned for storage must be handled in accordance with hot and cold food holding standards.</p> <p>No food that has exceeded 2 hours in the temperature danger zone can be reutilized.</p> <p>Foods must be labeled, dated and wrapped to protect from cross-contamination.</p> <p>Leftover foods must be utilized within 7 calendar days or less from the day of preparation, including the day of preparation.</p> <p>Hot foods must be chilled according to one of the two standards for chilling hot food before being placed in cool food storage.</p>	<p>Hot food must be chilled to 41° or below before storage according to the 2-stage cooling method policy.</p> <p>Cold foods must be maintained at 41° or below before storage.</p>	<p>If log records indicate the food to be stored has exceeded the time and temperature limits for either hot or cold food, dispose of the food rather than saving it.</p>
<p>Food Sample Trays (Corrections Segment only): Food samples of all food served will be saved for testing in the event an allegation of foodborne illness arises.</p> <p>A'viands Food Sampling Procedure will be followed at all times.</p> <p>A minimum of 3 days worth of food samples (9 meals) must be on hand at all times.</p>	<p>Hot food must be chilled to 41° or below before storage according to the 2-stage cooling method policy.</p> <p>Cold foods must be maintained at 41° or below before storage.</p>	<p>A'viands procedures for Suspected Foodborne Illness will be followed when there is an allegation of foodborne illness.</p>

Standard	Critical Limits and Monitoring	Corrective Action
<p>Transportation of Food: All hot and cold food prepared for transport to another location or facility must be maintained at safe food temperatures.</p> <p>*Hot food at a minimum safe temperature of 140° (150°F for MN Healthcare) or above.</p> <p>*Cold food at a minimum safe temperature of 41° or below.</p> <p>Transport logs must be maintained recording time and temperatures of foods being transported at the point of departure and the receiving location.</p> <p>Food transported from the main production area must be held in accordance with the standards for hot and cold food holding until served.</p> <p>Due to the difficulty in maintaining safe food temperatures and the risk of cross-contamination it is recommended that any food left over from transportation to another location be disposed of once it is returned to the main production facility.</p>	<p>All hot food must be held at a minimum safe internal temperature of 140° or above. (150°F for MN Healthcare).</p> <p>All cold food must be held at a minimum safe internal temperature of 41° or below.</p> <p>Foods may not exceed being in the temperature danger zone for more than 2 hours through the entire transportation and serving process.</p>	<p>Dispose of all foods that have been in the temperature danger zone for more than 2 hours.</p> <p>Dispose of all food that has been transported from the main production location to reduce the risk of food becoming contaminated during the transportation process.</p>

Standard	Critical Limits and Monitoring	Corrective Action
<p>Dish Machine Final Rinse: The dish machine must maintain a final rinse temperature of 180°F at the manifold and 160°F at the surface contact point. If a low temperature dish machine with a chemical sanitizer is used, the dish machine must maintain a wash temperature of 120-150° F depending on the type of machine.</p> <p>Final rinse temperatures must be monitored using the Dish Machine Temperature Record a minimum of once per meal shift to ensure final rinse temperatures comply with this standard.</p>	<p>180°F at the manifold and 160°F at the surface contact point.</p> <p>Low Temperature Dish Machine with a chemical sanitizer must be maintained at 120-150°F.</p>	<p>If the final rinse temperature is inadequate either manually wash all service utensils or utilize disposable service utensils until the machine is repaired.</p> <p>Dish machines should be turned on ½ hour prior to being used. It is also recommended that a “test” rack be run through the machine to test the temperature prior to washing all utensils.</p> <p>If the final rinse temperature reads below 180°F, the temperature should be checked using a holding thermometer or temperature strips to test that the surface contact point is at 160°F to ensure proper operation of the dish machine.</p>
<p>Manual Pot and Pan washing: Manual washing must include a minimum of a 3-compartment sink. Sink one should be provided with detergent and must maintain a minimum temperature of 110°F. Sink two should be provided with a clean water rinse with a temperature of at least 110°F. Sink three is for sanitizing. If an immersion heater is used the temperature must be at 171°F or the temperature required by local health regulations. If a chemical sanitizer is used they must be maintained in accordance with the following standards: *Chlorine Based Sanitizer: 50-100 PPM *Iodine Based Sanitizer: 12.5-25.0 PPM *Quaternary Ammonium Sanitizer: 200 PPM</p>	<p>Maintaining clean water with minimum temperatures is critical to a manual pot and pan washing process. Water temperatures need to be monitored frequently and changed often. Chemical sensitive test strips should be used to monitor the concentration of the final rinse.</p>	<p>Change the wash, rinse and sanitizer sinks frequently to ensure proper manual washing standards are maintained.</p> <p>Check the concentration of chemical sanitizer with test strips and place on the sanitizer concentration log.</p>

Standard	Critical Limits and Monitoring	Corrective Action
<p>Sanitizing Food Contact Surfaces: Sanitizing of all food contact surfaces is critical to limiting the potential for bacterial growth. A schedule for sanitizing all work surfaces should be established at specific intervals during the course of production and service. It is mandatory that work surfaces be sanitized at least every 4 hours in a continuous food preparation process area.</p> <p>PPM recommendations for Pot and Pan Sink sanitizing should be used.</p> <p>Utilize either Red sanitizer buckets or labeled spray bottles with the solution to accomplish the sanitizing process.</p>	<p>Sanitize a minimum of 4 hour intervals during production and service.</p> <p>Ensure chemical sanitizer is mixed according to the concentration standards noted above by testing with test strips.</p>	<p>Check the concentration of the sanitizing solution with test strips when mixing to ensure it complies with the approved concentration for the type of sanitizer used.</p> <p>Place the sanitizer test strips on the sanitizer concentration log to verify the concentration is correct.</p>

HACCP

Principle #1

Assess Hazards and Determine Risks

Hazard analysis and assessment is the first step of the HACCP system. Its purpose is to identify actual and potential hazards associated with ingredients, the processes, the manner in which the product is handled and served, and its ultimate use.

Hazard analysis requires technical expertise to identify all hazards, assess their severity, and accurately predict risks. Incorrect predictions will not provide the safety desired and may often increase costs.

In any food production, processing, or preparation operation, there are inevitable and specific hazards. These are associated with the ingredients used, the processes to which they are subjected, and the subsequent distribution, service, and handling of the product.

Hazards vary from one establishment to another.

Sources of hazards may include: ingredients, equipment, sanitation procedures, and/or standard operating procedures.

Hazards can be biological, chemical or physical properties that could cause a food to be unsafe for consumption.

Types of Contamination: foodborne illness is a direct result of any harmful substance or disease-producing microorganism that gets into food.

Chemical contaminants include: pesticides/insecticides, cleaning solutions or any unnatural chemical product that comes into contact with food.

Physical contaminants include: plastic wrap, fingernails or nail polish chips, twist ties and bay leaves.

Biological Contaminants include: bacteria, viruses, parasites and fungi.

Conduct a Food Safety Hazard Analysis. Evaluate the processes in your operation that could contaminate food during preparation and cooking.

HACCP

Principle #7

Establish Verification Procedures

How do you ensure that your HACCP system is working? Verification is the process that you and your team use to see that your food safety system is working the way it is supposed to work.

Keep a record of how often you need to take corrective actions. If corrective actions are occurring frequently, you may have a problem with your system. The problem may involve poorly trained or motivated employees, equipment failures, or procedural issues within your operation.

Verification procedures include:

- Review of the HACCP plan
- Review of deviations and corrections
- Visual inspection of operation to observe whether CCPs are under control.
- Review written record of verification inspections covering compliance, deviations and corrective action plan.

The following lists describe the components essential to an effective HACCP plan.

A'viands Responsibilities:

- The A'viands support team will meet at least annually to review the effectiveness of our HACCP program. The support team will be composed of at least 1 Support Dietitian, 1 District Manager and 2 Foodservice Directors.

Manager Responsibilities:

- The Foodservice Director at each site will be responsible for ensuring assigned foodservice staff are properly monitoring control measures and CCPs at the required frequency and are documenting required records.
- The Foodservice Director will also be responsible for monitoring the overall performance of standard operation procedures.

(Specific details regarding monitoring are addressed in each SOP.)

- Monitoring will be a constant consideration. However, the Foodservice Director will use the Food Sanitation and Safety Checklists to formally monitor foodservice staff at least monthly.
- The Foodservice Director will be responsible for follow through on identified corrective actions as noted on the flow chart found under HACCP Principle #2 and #3 sections.
- The Foodservice Director will be responsible for documenting any corrective actions taken while handling and preparing food as well as any actions taken while performing SOPs.

Training:

- In addition to the corrective actions outlined on the SOPs, foodservice staff will be trained on a continuous basis to take corrective actions when necessary.
- All staff will receive Food Safety and Sanitation training within the first 6 months of hire.
- Food Safety "minis" will be incorporated into the Departments monthly meeting.

Foodservice Staff Responsibilities:

- Foodservice staff is responsible for following and monitoring individual critical control points (CCPs) in the handling and preparation of food.
- Food service staff is responsible for monitoring control points as defined in the standard operating procedures.