

**Guidance for School Food Authorities:  
Developing a School Food Safety  
Program Based on the Process  
Approach to HACCP Principles**



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Agriculture**

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# **Guidance for School Food Authorities: Developing a School Food Safety Program Based on the Process Approach to HACCP Principles**

## **I. Introduction**

Section 111 of the Child Nutrition and WIC Reauthorization Act of 2004 (Public Law 108-265) amended section 9(h) of the Richard B. Russell National School Lunch Act by requiring school food authorities (SFAs) to implement a food safety program for the preparation and service of school meals served to children in the school year beginning July 1, 2005. The program must be based on Hazard Analysis and Critical Control Point (HACCP) principles and conform to guidance issued by the Department of Agriculture (USDA). All SFAs must have a fully implemented food safety program that complies with HACCP principles or with this optional guidance no later than the end of the 2005 – 2006 School Year.

This document serves as USDA guidance for the implementation of HACCP-based food safety programs in schools participating in the National School Lunch Program (NSLP) or the School Breakfast Program (SBP). This guidance identifies the minimum elements that must be included in a food safety program based on HACCP principles. SFAs may use this guidance to develop a food safety program that meets the needs of each food production and food service facility in their jurisdiction. SFAs that already have a HACCP-based food safety program in place may retain their current program if it includes all the HACCP principles listed in this guidance. This guidance, however, does not address school food safety inspections because they are a separate requirement.

HACCP is a systematic approach to construct a food safety program designed to reduce the risk of foodborne hazards by focusing on each step of the food preparation process--from receiving to service. More information regarding the traditional approach to HACCP may be found at <http://www.fsis.usda.gov/OPHS/NACMCF/past/JFP0998.pdf>. USDA recommends that SFAs use the Process Approach to HACCP because it gives them flexibility to create a program suitable for a variety of situations. The Process Approach, originally developed by the Food and Drug Administration for retail food establishments, categorizes food preparation into three broad categories based on how many times each menu item moves through the temperature danger zone. This guidance presents a modified version of the Process Approach to make it practical for school foodservice operations.

Serving safe food is a critical responsibility for school foodservice and a key aspect of a healthy school environment. Keeping foods safe is also a vital part of healthy eating and a recommendation of the *Dietary Guidelines for Americans 2005*. When properly implemented, HACCP-based food safety programs will help ensure the safety of the school meals served to children across the Nation.

## **II. Overview**

The guidance in this document will help you develop a food safety program for your SFA. All SFAs/schools that participate in the National School Lunch Program and/or the School Breakfast Program must implement a food safety program, as described below.

### **Here is what you need to know to get started:**

The SFA's overall food safety program must include a written plan for each individual school in the SFA and be based on Hazard Analysis and Critical Control Point (HACCP) principles. It is easier than it sounds because we have simplified the process and by following this guidance, your program will adhere to HACCP principles. To help you develop your program, we also have included a food manager's checklist and a sample food safety program as part of this guidance package.

### **Key points:**

Three main points are essential to developing this program: sanitation, temperature control, and Standard Operating Procedures (SOPs).

1. Be sure that all of your food preparation areas are clean and sanitary, such as workers' hands, utensils, and food contact surfaces. Avoid cross contamination.
2. Temperature control means keeping cold foods cold and hot foods hot. Cook to proper temperatures and hold at proper temperatures, and be sure to record those temperatures. A basic, properly calibrated food thermometer (digital or dial) is all you need to check for proper temperatures.
3. SOPs can be used both for sanitation and to verify that proper temperatures are being observed, as well as other aspects of a foodservice operation.

### **New Terms:**

You will learn some new terms in developing the food safety program and individual school plans. Words such as hazard analysis, control measures, critical control points, critical limits, Process Approach, and SOP are defined in the glossary at the back of the guidance and are discussed in the text. Here is a quick look at their definitions:

**Hazard analysis:** review of your food service operation to find areas where food safety problems might occur

**Control measures:** steps you take to reduce the likelihood of food contamination

**Critical control points:** points in food preparation and processing where controlling a step (such as cooking) is essential to assure food safety

**Critical limits:** the time and temperature ranges for food preparation and service (either cold or hot) that keep food safe

**Process Approach:** a method of grouping menu items into one of three processes depending on the number of times the food goes through the temperature "danger zone," which is between 41 °F and 135 °F (per the amendment to the 2001 FDA Food Code issued in August 2003)

**Standard Operating Procedure (SOP):** written instructions for a food service task that reduce food safety hazards

**Here is what you need to do:**

Look at your menu items and decide which food items are meant to be: 1) kept cold from preparation through service; 2) prepared hot and served the same day hot; and 3) prepared hot and served cooled, or possibly reheated. These are the preparation categories in the Process Approach to HACCP that are described in greater detail in the text. You will need to put each menu item (recipe) into one of those three categories and then keep it hot (or cold) while it is being stored, prepared, transported, held, and served.

**Making it work:**

If you see a failure in sanitation or temperature control, be sure to have a means of correcting the problem and verifying that the corrective steps resolved the problem. Once your food safety program is in operation, someone should be checking to see that it is working – perhaps once a month. Then, every year you should review the entire program to incorporate any changes, such as new menu items, new equipment, changes in staff, and remodeling.

**Let's get started!**

### **III. Purpose of a School Food Safety Program**

The purpose of a school food safety program is to ensure the delivery of safe foods to children in the school meals programs by controlling hazards that may occur or be introduced into foods anywhere along the flow of the food from receiving to service (food flow). An effective food safety program will help control food safety hazards that might arise during all aspects of food service (receiving, storing, preparing, cooking, cooling, reheating, holding, assembling, packaging, transporting and serving).

There are two types of hazards: 1) ones specific to the preparation of the food, such as improper cooking for the specific type of food (beef, chicken, eggs, etc.) and 2) nonspecific ones that affect all foods, such as poor personal hygiene. Specific hazards are controlled by identifying Critical Control Points (CCPs) and implementing measures to control the occurrence or introduction of those hazards. Nonspecific hazards are controlled by developing and implementing SOPs.

A school food safety program should control both specific and nonspecific hazards and consist of SOPs and a written plan for applying the basic HACCP principles. This guidance presents HACCP principles adapted to help SFAs develop an overall school food safety program for their jurisdiction and HACCP-based food safety plans tailored specifically for each school foodservice site within their jurisdiction.

## **IV. Requirements of a School Food Safety Program**

The SFA is responsible for developing a comprehensive food safety program for their jurisdiction, including a plan for every school food preparation and service site. A school food safety program must include the following elements:

### **1. Documented SOPs**

SOPs are a very important factor in developing an effective food safety program. Their role is to serve as a basic food safety foundation and to control hazards not outlined specifically in the HACCP plan. For example, soiled and unsanitized surfaces of equipment and utensils should not come into contact with raw or cooked (ready-to-eat) food. Proper procedures to prevent this occurrence should be covered by an SOP.

### **2. A written plan at each school food preparation and service site for applying HACCP principles that includes methods for:**

- Documenting menu items in the appropriate HACCP process category
- Documenting Critical Control Points of food production
- Monitoring
- Establishing and documenting corrective actions
- Recordkeeping
- Reviewing and revising the overall food safety program periodically

Each of these required elements is explained in more detail in Section V.



## **V. Developing a School Food Safety Program**

Before developing your food safety program you should review the foodservice operations within your SFA and describe the facility, functions, and standard procedures for each. Some basic information to consider when doing this initial review includes:

- Types of facilities in your SFA
- Existing SOPs
- Number and type of employees at each site
- Types of equipment
- Processes for food preparation
- Menu items

After describing the operations in your jurisdiction, the following steps will help you develop your food safety program.

- 1. Develop, document in writing, and implement SOPs.**
- 2. Identify and document in writing all menu items according to the Process Approach to HACCP.**
- 3. Identify and document control measures and critical limits.**
- 4. Establish monitoring procedures.**
- 5. Establish corrective actions.**
- 6. Keep records.**
- 7. Review and revise your overall food safety program periodically.**

### **Step 1: Develop, document, and implement SOPs.**

SOPs lay a strong foundation for your overall school food safety program. SOPs are step-by-step written instructions for routine food service tasks that affect the safety of food ('nonspecific' hazards), such as proper dishwashing procedures, or for tasks that are a part of the HACCP-based plan (specific hazards), such as proper cooking procedures. Each SOP should include instructions on monitoring, documentation, corrective actions, and periodic review of the procedures they cover. Adherence to SOPs allows food service managers and employees to effectively control and prevent hazards.

SFAs may already have SOPs developed and in place. If not, USDA is developing a series of SOPs applicable to school food service establishments. The final versions of these SOPs will be posted on the National Food Service Management Institute's (NFSMI) website ([www.nfsmi.org](http://www.nfsmi.org)). NFSMI will also be conducting training sessions subsequent to the release of these documents on customizing these generic SOPs to fit your specific operations.

The main categories of SOPs with some example topics for school foodservice are listed below. See Appendix I for sample SOPs.

**General safety considerations**

- Prohibit bare hand contact with ready-to-eat (RTE) foods.
- Store chemicals away from food and food-related supplies.

**Personnel**

- Require hand washing after restroom use, sneezing, coughing, or after performing any cleaning activity.
- Develop a policy for restricting or excluding ill employees from food production or preparation areas.

**Product procurement**

- Follow recommendations for selecting vendors such as those found in State distributing agency vendor certification procedures.
- Develop buyer product specifications.

**Receiving**

- Reject all cans with swollen sides or ends, flawed seals and seams, rust or dents.
- Put perishable foods into the refrigerator or freezer immediately.

**Storing**

- Store all food and paper supplies 6 to 8 inches off the floor.
- Label all food with name of the school and delivery date.

**Transporting**

- Preheat transfer carts prior to use.
- Limit transport travel time to a maximum of 2 hours.

**Holding**

- Keep hot foods hot (above 135 °F) and cold foods cold (below 41 °F).

**Preparation**

- Do not keep food in the “danger zone” (between 41 °F and 135 °F) for more than 4 hours.
- Handle food with utensils; clean, gloved hands; or clean hands. (Bare hand contact with food during preparation should be limited. Bare hand contact with RTE foods should be prohibited.)

**Cleaning/sanitizing**

- Use clean water, free of grease and food particles.
- Keep wiping cloths in sanitizing solution while cleaning.

**Cooking and documenting temperatures**

- Record all temperatures when they are taken.
- Use only a clean and sanitized thermometer when taking internal temperatures of foods.

### **Cooling**

- Cool rapidly by storing food in small batches in individual containers; cover loosely so that heat can escape quickly.
- Keep cold foods cold by pre-chilling ingredients for salads.

### **Reheating**

- Transfer reheated food to hot-holding equipment only when the food reaches the proper temperature.
- Use only cooking ranges, ovens, steamers, and microwave ovens to reheat foods. Use hot-holding equipment only to maintain temperature and not for rapidly heating food.

## **Step 2: Identify and document in writing all menu items according to the Process Approach to HACCP.**

The Process Approach to HACCP is a method of classifying food preparation into three broad categories. These categories are based on the number of times a menu item makes a complete trip through the temperature danger zone. The way food is prepared at each site determines into which of the three food preparation processes it will fall.

Temperature, if not controlled properly during food preparation and service, can contribute to a higher risk of foodborne illness. Therefore, it is critical to manage the temperature of food. In order to protect foods from potential hazards, it is important to keep hot foods hot and cold foods cold. It is most important to **keep food out of the temperature danger zone** (41°F - 135° F).

**The danger zone temperatures used in this guidance are from the *2001 FDA Food Code (as amended August 29, 2003 in the Supplement to the 2001 Food Code)*. The temperatures in your State may be different so this guidance should be adapted as necessary to include State and local public health department code requirements and school food authority policies and procedures.**

To assign menu items to one of the three processes, consider the processes and procedures used to prepare the food in each of your school district's facilities. Determine whether menu items have no cook step involved, undergo a cook step for same day service, or receive additional cooling and reheating following a cook step. This will enable you to place each menu item into the appropriate process. Identify the number of times each menu item goes up (heating) or comes down (cooling) through the **danger zone** (41°F - 135° F) and classify items into the following food preparation processes:

### **Process #1 – No Cook**

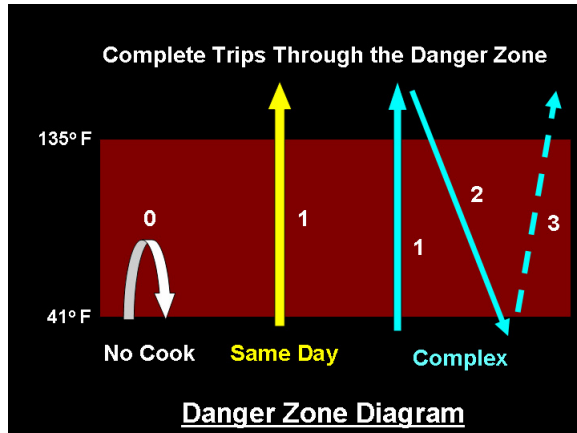
The menu item does not go completely through the danger zone in either direction.

### **Process #2 – Same Day Service**

The menu item takes one complete trip through the danger zone (going up during cooking) and is served.

### Process #3 – Complex Food Preparation

The menu item goes through both heating and cooling, taking two or more complete trips through the danger zone.



You should document the appropriate process for each menu item. This can be done in a variety of ways, including writing the process number directly on the recipe, or developing a list of menu items in each of the processes.

In some cases the menu item may not appear to fit into any of the processes. However, these types of items should still be handled and prepared properly. Salad bar items, such as fresh fruits and vegetables cut and ready-to-eat on a salad bar or served whole, should be treated as Process 1 items and kept cold. The goal is to control hazards associated with Process 1 and to prevent further contamination by ensuring good hygienic practices are followed by food employees. Keep in mind that for fresh fruits and vegetables, this includes no bare hand contact on ready-to-eat foods. SOPs to address fresh fruits and vegetables should be included in your food safety plan. Guidance on receiving, storage, and preparation of whole fruits and vegetables and salad bar items can be found in *Fruits & Vegetables Galore*, U.S. Department of Agriculture, Food and Nutrition Service, 2004. It can be accessed at [http://www.fns.usda.gov/tn/Resources/fv\\_galore.html](http://www.fns.usda.gov/tn/Resources/fv_galore.html).

It is especially important to consider all the steps taken when a menu item is prepared at one site and served at another in order to be aware of potential hazards and control for them. A combination of central and satellite kitchens is found in many school districts. In these situations, the SFA must identify and categorize the appropriate overall food preparation process for menu items and also must develop a plan for each site involved in the preparation and service of the item to clarify the responsibilities for each site.

For example, a central kitchen cooks Broccoli, Cheese and Rice Casserole (a Process #2 menu item) and transports it hot to a satellite kitchen for service on the same day. The central kitchen has the responsibility for following the recipe and adhering to all applicable control points and SOPs. The satellite kitchen has the responsibility for the

control points specific to the site, for example checking the temperature of the food upon arrival and keeping the food at a safe temperature until service. Both must adhere to all applicable SOPs.

In addition to initial food preparation, some foodservice operations make use of leftovers. If your State or local authority has allowed for the use of leftovers, a procedure for handling leftovers should be implemented. Generally, leftovers will fall into Process #3 as they have most likely been cooked and cooled prior to being stored and used again. A sample of a procedure for handling leftovers can be found in Appendix II.

### **Step 3: Identify and document control measures and critical limits.**

Control measures are any means taken to prevent, eliminate, or reduce hazards. Collectively, control measures include SOPs as well as the Critical Control Points (CCPs) and the corresponding critical limits established in each of the three processes.

Once you identify the appropriate process for each menu item, determine what control measures are needed to prevent the introduction of hazards at each stage of food preparation from receiving to service. Decide which of the control measures are absolutely essential to ensuring safe food.

#### Identifying CCPs and Implementing Essential Control Measures in the Process Approach

The control measures that are absolutely essential must be applied at key points, known as CCPs, during the food preparation process to control specific hazards (physical, chemical, or biological). A CCP is a key point where a step can be taken to prevent, eliminate, or reduce a food safety hazard to an acceptable level. Loss of control at this point may result in an unacceptable health risk. You will find that despite the different specific hazards, the control measures used to prevent, eliminate, or reduce hazards in all menu items under each of the three processes are similar.

The following are CCPs, related to each food preparation process:

#### **For Process #1 – No Cook:**

- Cold holding or limiting time in the danger zone to inhibit bacterial growth and toxin production (e.g., limiting time would be holding at room temperature for 4 hours and then discarding)

#### **For Process #2 – Same Day Service:**

- Cooking to destroy bacteria and other pathogens
- Hot holding or limiting time in the danger zone to prevent the outgrowth of spore-forming bacteria

#### **For Process #3 – Complex Food Preparation:**

- Cooking to destroy bacteria and other pathogens
- Cooling to prevent the outgrowth of spore-forming bacteria
- Hot and cold holding or limiting time in the danger zone to inhibit bacterial growth and toxin formation
- Reheating for hot holding, if applicable

#### CCPs and Corresponding Critical Limits

Each CCP includes boundaries that define safety. These boundaries or critical limits are the time and/or temperatures that must be achieved or maintained to control a food safety hazard. When critical limits are not met, the food may not be safe. The *2001 FDA Food Code (as amended August 29, 2003 in the Supplement to the 2001 Food Code)* provides critical limits designed to prevent, eliminate, or reduce hazards in food. For example, when cooking chicken, the *Food Code* sets the critical limit at 165 °F for 15 seconds. Critical limits (time/temperature) are measurable and observable.

The following graphic demonstrates minimum temperatures and holding times (critical limits) for some common food service menu items.

# Temperature Rules! Cooking for Food Service



Hold all hot food  
at **135 °F** or above  
after cooking

**USDA Meat and  
Poultry Hotline  
1-888-MPHotline**

**FDA Food  
Information Line  
1-888-SAFE FOOD**



Food Safety and  
Inspection Service

U.S. Department  
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Fall 2004

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## Minimum Temperatures and Holding Times

### **165 °F** (15 seconds)

- Poultry—chicken, turkey, duck, goose—whole, parts or ground
- Soups, stews, stuffing, casseroles, mixed dishes
- Stuffed meat, poultry, fish and pasta
- Leftovers (to reheat)
- Food, covered, cooked in microwave oven (hold covered **2 minutes** after removal)

### **155 °F** (15 seconds)

- Hamburger, meatloaf and other ground meats; ground fish\*
- Fresh shell eggs—cooked and held for service (such as, scrambled)\*

### **145 °F** (15 seconds)

- Beef, corned beef, pork, ham—roasts (hold **4 minutes**)\*
- Beef, lamb, veal, pork—steaks or chops
- Fish, shellfish
- Fresh shell eggs—broken, cooked and served immediately

### **140 °F** (15 seconds)

- Ham, other roasts—processed, fully-cooked (to reheat)
- Fruits and vegetables that are cooked

\*For alternative times and temperatures, see the **FDA Food Code 2001** <http://vm.cfsan.fda.gov/~dms/foodcode.html>

#### Documenting CCPs and Critical Limits:

You must document in writing the CCPs and critical limits for each Process Approach category in your food safety program and in each site plan. Each of the three processes in the Process Approach has specific CCPs, such as, cooking, cooling, hot holding, cold holding, and reheating. The CCPs for each of the processes will remain the same regardless of the menu item. However, the critical limits will vary depending upon the menu item and the recipe used to prepare each item. Critical limits for cooking, hot holding, and reheating are demonstrated by the Thermy graphic on page 15 of this guidance. Critical limits for cooling can be found in the Cooling Potentially Hazardous Foods SOP on page 33 of this guidance in Appendix I. The graphics on pages 20 – 22 of this guidance provide examples of menu items for each process with general control measures, CCPs, and critical limits. Also, see Appendix III for a sample school food safety program that includes documentation of control measures.

USDA's *Quantity Recipes for School Food Service* was recently revised to include CCPs and critical limits and is an excellent resource when preparing food by recipe. These recipes are available through the National Food Service Management Institute's website at [http://www.nfsmi.org/Information/school\\_recipe\\_index\\_alpha.html](http://www.nfsmi.org/Information/school_recipe_index_alpha.html). Having the recipes on file and following the recipes exactly will fulfill the requirement for documenting CCPs and critical limits within the Process Approach specifically for these recipes.

Although CCPs are identified in each of the USDA recipes, it is important for you to consider the complete process used at each school/site. Considering the complete process will help determine the need for CCPs when modifying recipes and in the absence of recipes. For instance, a particular school may cool leftover chicken, although cooling may not be identified as an operational step in the recipe. Therefore, a CCP must be determined and documented for the cooling step.

#### Using SOPs to Complement the Process Approach by Bridging Gaps

SOPs are also control measures and should not be forgotten when using the Process Approach. In addition to the established CCPs for each of the three processes, applicable SOPs should be followed for the preparation and service of all menu items. As mentioned earlier in this guidance, SOPs serve as general control measures for nonspecific hazards. Therefore, SOPs complement the Process Approach by providing a general safety net. Whereas, the CCPs determined for each of the three processes safeguard against specific hazards.

USDA is developing SOPs for use in the preparation of food in schools. These SOPs include critical limits, as well as monitoring, corrective action, verification, and recordkeeping procedures. The final versions will be posted on the NFSMI website. By accessing the NFSMI website ([www.nfsmi.org](http://www.nfsmi.org)), you will be able to customize these SOPs to best suit your particular operation.



#### **Step 4: Establish monitoring procedures.**

Monitoring is an important step for an effective food safety program. Control measures, including CCPs and SOPs, must be monitored, controlled, and documented in writing. Monitoring involves making direct observations or taking measurements to see that the food safety program is being followed. For example, the CCPs are managed by adhering to the established critical limits. Monitoring will identify when there is a loss of control so that corrective action can be taken.

In establishing your monitoring procedures, consider the following questions:

- How will you monitor CCPs and SOPs?
- When and how often will you monitor?
- Who will be responsible for monitoring?

What you are going to monitor depends on the critical limits associated with each CCP for a menu item. Final temperature and time measurements are very important, and you should determine how you will effectively monitor the critical limits for them.

Determining the appropriate means for monitoring is an important factor. If equipment is selected to monitor a specific CCP, you should ensure that it is accurate. The equipment you choose should also be appropriate for the monitoring function.

When deciding how often you will monitor, you should ensure that the monitoring interval will be reliable enough to ensure hazards are being controlled. Your procedure for monitoring should be simple and easy to follow.

Individuals chosen to be responsible for a monitoring activity may be a manager, line supervisor, or other reliable employee. Employees should be given the training and equipment necessary to properly perform the monitoring activities.

Monitoring examples:

The CCP for cold foods is cold holding. The critical limit is holding at 41 °F or below. Therefore, the temperature of the refrigerator must be recorded on a refrigeration temperature monitoring chart at least three times daily to make sure the temperature is 41 °F or below.

A CCP for chicken is cooking. The critical limit is cooking at 165 °F for 15 seconds. Therefore, the internal temperature of the chicken must be monitored and recorded to make sure it is at or above 165 °F for 15 seconds.

### **Step 5: Establish corrective actions.**

Whenever a critical limit is not met, a corrective action must be carried out immediately. A corrective action may be simply continuing to heat food to the required temperature. Other corrective actions may be more complicated, such as rejecting food items that were not delivered at the right temperature, or discarding food that has been held without temperature control too long.

Your food safety program must include corrective actions. Employees must know what these corrective actions are, and be trained in making the right decisions. This preventive approach is the heart of HACCP. Problems will arise, but you need to find them and correct them before they cause illness or injury. It is also important to document corrective actions when they are taken.

Corrective action examples:

#### SOP:

If the temperature in the refrigerator is above 41 °F, then the equipment must be checked to see if it is working properly. Also, the thermometer that is used to record the temperature must be calibrated regularly and checked to see if it is working properly.

#### CCP:

When cooking raw poultry, corrective action must be taken if the internal temperature does not reach 165 °F for 15 seconds at the end of the designated cooking period. The corrective action would be to continue cooking the chicken until the internal temperature reaches 165 °F for at least 15 seconds.

Corrective actions should be determined for all SOPs and CCPs. A list of appropriate corrective actions must be included in your school food safety program. See Appendices I and III for sample SOPs and a sample school food safety program. Both, the appendices and the sample program, include corrective actions.

### **Step 6: Keep records.**

There are certain written records or kinds of documentation that are needed to verify that the food safety program is working. These records will normally involve the food safety plan and any monitoring, corrective action, or calibration records produced in the operation of the food safety program based on HACCP principles. Recordkeeping also provides a basis for periodic reviews of the overall food safety program. In the event your operation is implicated in a foodborne illness, documentation of activities related to monitoring and corrective actions can provide proof that reasonable care was exercised in the operation of your facility.

Maintain records of cooking, cooling, and reheating temperatures and other CCPs in the food preparation process. Keep documentation as simple as possible to make recordkeeping easy for employees. You do not necessarily need to develop new records. For example, you may use existing paperwork such as delivery invoices for documenting product temperature when receiving food items. Employees are an important source for developing simple and effective recordkeeping procedures.

Determine what records must be kept, where to keep them, and which staff member(s) will be responsible for maintaining them.

Some of the types of records that should be maintained include:

- Records documenting the SOPs
- Time and temperature monitoring records
- Corrective action records
- Verification or review records
- Calibration records
- Training logs
- Receiving logs

The clipboard icons in the following visual shows a recordkeeping duty for CCPs and SOPs for sample menu items in each of the processes. See Appendix IV for more recordkeeping examples.

# Process 1: NO COOK

## Example: Fruit Salad

### RECEIVE

Control Measures: Known Source, Receiving Temperatures



### STORE

Control Measures: Proper Storage Temperatures, Prevent Cross Contamination, Store away from chemicals



### PREPARE

Control Measures: Personal Hygiene, Restrict Ill Employees, Prevent Cross Contamination

### CCP: COLD HOLDING

Critical Limit: Hold at 41°F or Below.\*  
Check and record temperatures.



### SERVE

Control Measures: No Bare Hand Contact with Ready to Eat Food, Personal Hygiene, Restrict Ill Employees



Thermometer icon means that taking a temperature is necessary.

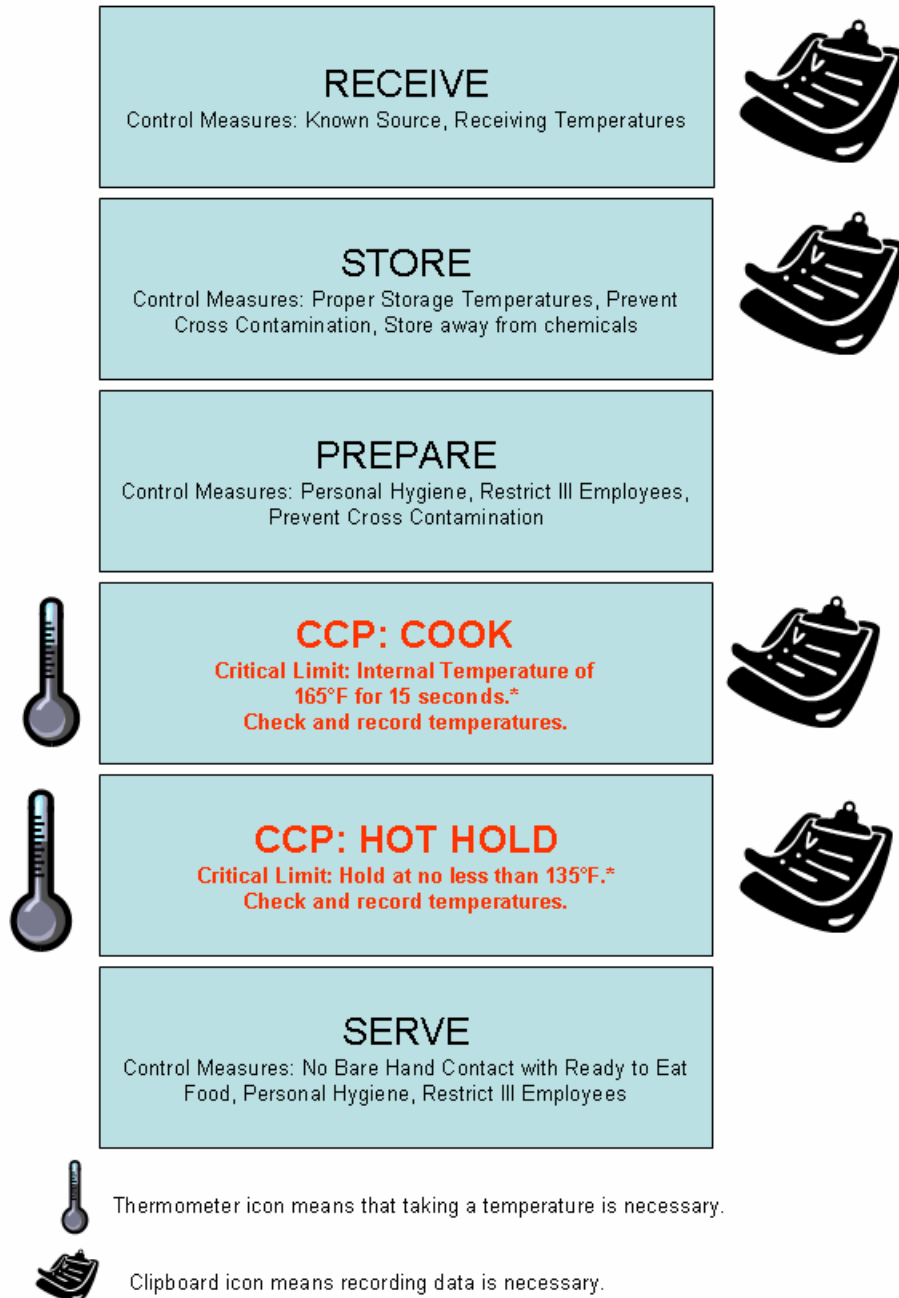


Clipboard icon means recording data is necessary.

\*From the 2001 FDA Food Code (as amended August 29, 1993 in the Supplement to the 2001 Food Code).

## Process 2: SAME DAY SERVICE

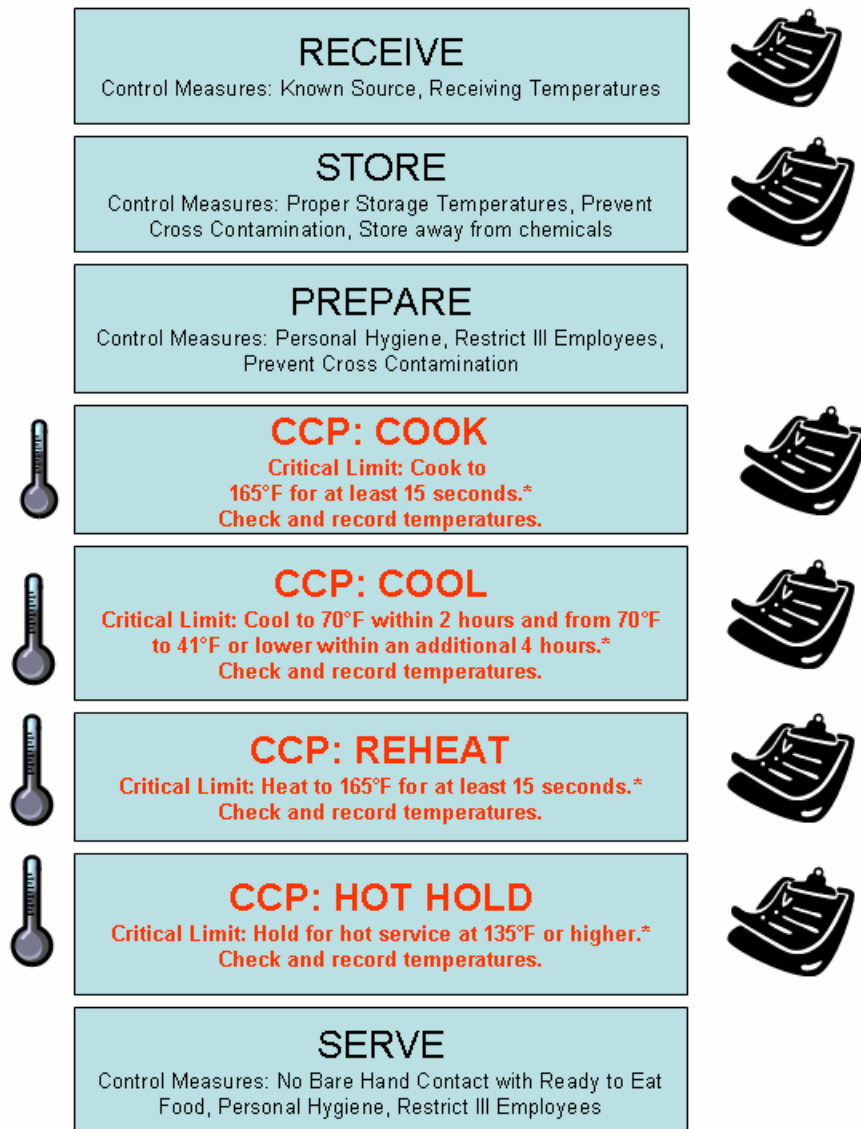
### Example: Baked Chicken



\*From the 2001 FDA Food Code (as amended August 29, 2003 in the Supplement to the 2001 Food Code).

# Process 3: Complex Food Preparation

## Example: Beef and Bean Tamale Pie



Thermometer icon means that taking a temperature is necessary.



Clipboard icon means recording data is necessary.

\*From the 2001 FDA Food Code (as amended August 29, 2993 in the Supplement to the 2001 Food Code).

**Step 7: Review and revise your overall food safety program periodically.**

There should be an ongoing as well as a periodic review of the activities described in your food safety program. This step ensures that the food safety program is operating according to what is specified in each school's plan. Designated individuals such as the manager should periodically make observations of employees' monitoring activities, calibrate equipment and temperature measuring devices, review records/actions, and discuss procedures with employees. All of these activities should take place regularly to verify that the program is addressing the food safety concerns and, if not, checking to see if it needs to be modified or improved.

Review and revise your food safety program at least annually or as often as necessary to reflect any changes in your facility. These may include new equipment, new menu items, reports of illness or comments on health inspections, or other factors that indicate how well your food safety program is working. Determine who will review the current plan, when it will be done, and how it will be documented.

## **VI. Other Factors in the Success of your Food Safety Program**

The success of a food safety program is dependent upon facilities, equipment, and people. The facilities and equipment should be selected or designed to promote safe food preparation and handling practices by employees. Review your facilities and correct or modify barriers to safe food preparation. For example, faulty or out-dated plumbing or lack of appropriate thermometers could be a barrier to safe food production.

Managers and employees need to be properly trained to successfully reduce the occurrence of foodborne risk factors. A food safety program is effective when each employee knows his/her role and is committed to making it work. Also consider obstacles such as high employee turnover or communication barriers when designing and implementing a food safety program.

The following practices contribute to a successful food safety program:

- Providing on-going food safety training for all employees.
- Reviewing food safety principles, including SOP guidelines, for all employees on an annual basis.
- Requiring new employees, including substitutes and volunteers, to complete initial food safety training before handling food.
- Maintaining training and attendance records on all employees at each facility.
- Holding facility managers responsible for maintaining employee training standards.



## **VII. Getting Started**

You can develop your own food safety program based on HACCP principles by applying the principles in this guidance. The appendices provide a variety of tools and resources, including recordkeeping logs, checklists, sample SOPs, and a sample food safety plan. You can use or adapt these tools to your unique operation.

## GLOSSARY

All of the definitions in this glossary, except those marked with an asterisk (\*), have been taken from the Food and Drug Administration document *Managing Food Safety: A Manual for the Voluntary Use of HACCP Principles for Operators of Food Service and Retail Establishments* (draft September 29, 2004).

**APPROVED SOURCE:** An acceptable supplier to the regulatory authority based on a determination of conformity with principles, practices, and generally recognized standards that protect public health.

**CCP:** Critical Control Point.

**CONTAMINATION:** The unintended presence in food of potentially harmful substances, including micro-organisms, chemicals, and physical objects.

**CONTROL MEASURE:** Any action or activity that can be used to prevent, eliminate, or reduce an identified hazard. Control measures determined to be essential for food safety are applied at critical control points in the flow of food.

**CORRECTIVE ACTION:** An activity that is taken by a person whenever a critical limit is not met.

**CRITICAL CONTROL POINT (CCP):** An operational step in a food preparation process at which control can be applied and is essential to prevent or eliminate a hazard or reduce it to an acceptable level.

**CRITICAL LIMIT:** One or more prescribed parameters that must be met to ensure that a CCP effectively controls a hazard.

**CROSS-CONTAMINATION:** The transfer of harmful substances or disease-causing micro-organisms to food by hands, food contact surfaces, sponges, cloth towels and utensils that touch raw food, are not cleaned, and then touch ready-to-eat foods. Cross contamination can also occur when raw food touches or drips onto cooked or ready-to-eat foods.

**DANGER ZONE:** The temperature range between 5 °C (41 °F) and 57 °C (135 °F) that favors the growth of pathogenic micro-organisms.

**EXCLUDE:** To prevent a person from working as a food employee or entering a food establishment except for those areas open to the general public.

**FOOD:** Raw, cooked, or processed edible substance, ice, beverage, chewing gum or ingredient used or intended for use or for sale in whole or in part for human consumption.

**FOOD ESTABLISHMENT:** An operation at the retail or food service level, i.e., that serves or offers food directly to the consumer and that, in some cases, includes a production, storage, or distributing operation that supplies the direct-to-consumer operation (satellite kitchens).

**FOOD PREPARATION PROCESS:** A series of operational steps conducted to produce a food ready to be consumed.

**FOODBORNE ILLNESS:** A sickness resulting from the consumption of foods or beverages contaminated with disease-causing micro-organisms, chemicals, or other harmful substances.

**FOODBORNE OUTBREAK:** The occurrence of two or more cases of a similar illness resulting from the ingestion of a common food.

**HACCP:** Hazard Analysis and Critical Control Point.

**HACCP PLAN:** A written document that is based on the principles of HACCP and describes the procedures to be followed to ensure the control of a specific process or procedure.

**HAZARD:** A biological, physical, or chemical property that may cause a food to be unsafe for human consumption.

**HAZARD ANALYSIS AND CRITICAL CONTROL POINT (HACCP):** A prevention-based food safety system that identifies and monitors specific food safety hazards that can adversely affect the safety of food products.

**INTERNAL TEMPERATURES:** The temperature of the internal portion of a food product.

**MEAT:** The flesh animals used as food including dressed flesh of cattle, swine, sheep, or goats and other edible animals, except fish, poultry and wild game animals.

**MICRO-ORGANISM:** A form of life that can be seen only under the microscope; including bacteria, viruses, yeast, and single-celled animals.

**MONITORING:** The act of observing and making measurements to help determine if critical limits are being met and maintained.

\* **NSLP:** National School Lunch Program.

**OPERATIONAL STEP:** An activity or stage in the flow of food through a food establishment, such as receiving, storage, preparation, cooking, etc.

**PATHOGEN:** A micro-organism (bacteria, parasites, viruses, or fungi) that causes diseases in humans.

**PERSONAL HYGIENE:** Individual cleanliness and habits.

**POTENTIALLY HAZARDOUS FOOD:** A food that is natural or synthetic and that requires temperature control because it is capable of supporting:

- the rapid and progressive growth of infectious or toxigenic micro-organisms.
- the growth and toxin production of *Clostridium botulinum* or
- in raw eggs, the growth of *Salmonella enteritidis*; and

Includes foods of animal origin that are raw or heat-treated; foods of plant origin that are heat treated or consists of raw sprouts, cut melons, and garlic in oil mixtures that are not acidified or otherwise modified at a processing plant in a way that results in mixtures that do not support growth of pathogenic micro-organisms as described above.

**PROCESS APPROACH:** A method of categorizing food operations into one of three categories:

- Process 1: Food preparation with no cook step, wherein ready-to-eat food is received, stored, prepared, held and served;
- Process 2: Food preparation for same day service wherein food is received, stored, prepared, cooked, held and served; or
- Process 3: Complex food preparation wherein food is received, stored, prepared, cooked, cooled, reheated, hot held, and served.

**RECORD:** A documentation of monitoring observations and verification activities.

**REGULATORY AUTHORITY:** A Federal, State, local, or tribal enforcement body or authorized representative having jurisdiction over the food establishment.

**RESTRICT:** To limit the activities of a food employee so that there is no risk of transmitting a disease that is transmissible through food and the food employee does not work with exposed food, clean equipment, utensils, linens, and unwrapped single-service or single-use articles.

**RISK:** An estimate of the likely occurrence of a hazard.

**RISK FACTOR:** One of the factors identified by the Centers for Disease Control and Prevention (CDC) as contributors to the foodborne outbreaks that have been investigated and confirmed. The factors are unsafe sources, inadequate cooking, improper holding, contaminated equipment, and poor personal hygiene.

\* **SFA:** School Food Authority

**SEVERITY:** The seriousness of the effect(s) of a hazard.

**SOP:** Standard Operating Procedure.

**STANDARD OPERATING PROCEDURE (SOP)** –A written method of controlling a practice in accordance with predetermined specifications to obtain a desired outcome.

**TEMPERATURE MEASURING DEVICE** –A thermometer, thermocouple, thermistor, or other device for measuring the temperature of food, air, or water.

## **Appendix I. (Samples) Standard Operating Procedures**

- A. Cooking Potentially Hazardous Foods
- B. Cooling Potentially Hazardous Foods
- C. Holding Hot and Cold Potentially Hazardous Foods
- D. Date Marking Ready-to-Eat, Potentially Hazardous Foods
- E. Personal Hygiene
- F. Reheating Potentially Hazardous Foods
- G. Receiving Deliveries
- H. Storing and Using Poisonous or Toxic Chemicals
- I. Using Suitable Utensils When Handling Ready-to-Eat Foods
- J. Washing Fresh Fruits and Vegetables
- K. Washing Hands

## **Cooking Potentially Hazardous Foods**

(Sample SOP)

**Purpose:** To prevent foodborne illness by ensuring that all foods are cooked to the appropriate internal temperature

**Scope:** This procedure applies to foodservice employees who prepare or serve food.

**Key Words:** Cross-Contamination, Temperatures, Cooking

### **Instructions:**

1. Train foodservice employees who prepare or serve food on how to use a food thermometer and cook foods using this procedure.
2. If a recipe contains a combination of meat products, cook the product to the highest required temperature.
3. Follow State or local health department requirements regarding internal cooking temperatures.
4. If State or local health department requirements are based on the *2001 FDA Food Code*, cook products to the following temperatures:
5. 145 °F for 15 seconds
  - a. Seafood, beef, and pork
  - b. Eggs cooked to order that are placed onto a plate and immediately served
6. 155 °F for 15 seconds
  - a. Ground products containing beef, pork, or fish
  - b. Fish nuggets or sticks
  - c. Eggs held on a steam table
  - d. Cubed or Salisbury steaks
7. 165 °F for 15 seconds
  - a. Poultry
  - b. Stuffed fish, pork, or beef
  - c. Pasta stuffed with eggs, fish, pork, or beef (like lasagna or manicotti)
8. 135 °F for 15 seconds
  - a. Fresh, frozen, or canned fruits and vegetables that are going to be held on a steam table or in a hot box

### **Monitoring:**

1. Use a clean, sanitized, and calibrated probe thermometer (preferably a thermocouple).
2. Avoid inserting the thermometer into pockets of fat or near bones when taking internal cooking temperatures.
3. Take at least two (2) internal temperatures from each batch of food by inserting the thermometer into the thickest part of the product (usually the center).

## **Cooking Potentially Hazardous Foods, continued**

(Sample SOP)

4. Take at least two (2) internal temperatures of each large food item, like a turkey, to ensure that all parts of the product reach the required cooking temperature.

### **Corrective Action:**

Continue cooking food until the internal temperature reaches the required temperature.

### **Verification and Record Keeping:**

Foodservice employees will record product name, time, the two (2) temperatures/times, and any corrective action taken on the Cooking - Reheating Temperature Log.

Foodservice manager will verify that foodservice employees has taken the required cooking temperatures by visually monitoring foodservice employees and preparation procedures during the shift and reviewing, initialing, and dating the temperature log at the close of each day. The Cooking – Reheating Temperature Log are kept on file for a minimum of one year.

**Date Implemented:**

**By:**

**Date Reviewed:**

**By:**

**Date Revised:**

**By:**



## Cooling Potentially Hazardous Foods

(Sample SOP)

**Purpose:** To prevent foodborne illness by ensuring that all potentially hazardous foods are cooled properly

**Scope:** This procedure applies to foodservice employees who prepares, handles, or serves food.

**Key Words:** Cross-Contamination, Temperatures, Cooling, Holding

### Instructions:

1. Train foodservice employees who prepare or serve food on how to use a food thermometer and how to cool foods using this procedure.
1. Modify menus, production schedules, and staff work hours to allow for implementation of proper cooling procedures.
2. Prepare and cool food in small batches.
3. Chill food rapidly using an appropriate cooling method:
  - Place food in shallow containers (no more than 4 inches deep) and uncovered on the top shelf in the back of the walk-in or reach-in cooler
  - Use a quick-chill unit like a blast chiller
  - Stir the food in a container placed in an ice water bath
  - Add ice as an ingredient
  - Separate food into smaller or thinner portions
  - Pre-chill ingredients and containers used for making bulk items like salads
4. Follow State or local health department requirements regarding required cooling parameters.
5. If State or local requirements are based on the *2001 FDA Food Code*, chill cooked hot food from:
  - 135 °F to 70 °F within 2 hours. Take corrective action immediately if food is not chilled from 135 °F to 70 °F within 2 hours.
  - 70 °F to 41 °F or below in remaining time. The total cooling process from 135 °F to 41 °F may not exceed 6 hours. Take corrective action immediately if food is not chilled from 135 °F to 41 °F within the 6 hour cooling process.
6. Chill prepared, ready-to-eat foods such as tuna salad and cut melons from 70 °F to 41 °F or below within 4 hours. Take corrective action immediately if ready-to-eat food is not chilled from 70 °F to 41 °F within 4 hours.

## **Cooling Potentially Hazardous Foods, continued**

(Sample SOP)

### **Monitoring:**

1. Use a clean, sanitized, and calibrated probe thermometer to measure the internal temperature of the food during the cooling process.
2. Monitor temperatures of products every hour throughout the cooling process by inserting a thermometer into the center of the food and at various locations in the product.

### **Corrective Action:**

1. Reheat cooked hot food to 165 °F for 15 seconds and start the cooling process again using a different cooling method when the food is
  - Above 70 °F and 2 hours or less into the cooling process; and
  - Above 41 °F and 6 hours or less into the cooling process.
2. Discard cooked hot food immediately when the food is
  - Above 70 °F and more than 2 hours into the cooling process; or
  - Above 41 °F and more than 6 hours into the cooling process.
3. Use a different cooling method for prepared ready-to-eat foods when the food is above 41 °F and less than 4 hours into the cooling process.
4. Discard prepared ready-to-eat foods when the food is above 41 °F and more than 4 hours into the cooling process.

### **Verification and Record Keeping:**

Foodservice employees will record temperatures and corrective actions taken on the Cooling Temperature Log. Foodservice employees will record if there are no foods cooled on any working day by indicating “No Foods Cooled” on the Cooling Temperature Log. Foodservice manager will verify that foodservice employees are cooling food properly by visually monitoring foodservice employees during the shift and reviewing, initialing, and dating the temperature log each working day. The Cooling Temperature Logs are kept on file for a minimum of one year.

**Date Implemented:**

**By:**

**Date Reviewed:**

**By:**

**Date Revised:**

**By:**

## **Holding Hot and Cold Potentially Hazardous Foods**

(Sample SOP)

**Purpose:** To prevent foodborne illness by ensuring that all potentially hazardous foods are held at the proper temperature

**Scope:** This procedure applies to foodservice employees who prepare or serve food.

**Key Words:** Cross-Contamination, Temperatures, Holding, Hot Holding, Cold Holding, Storage

### **Instructions:**

1. Train foodservice employees who prepare or serve food about proper hot and cold holding procedures. Include in the training a discussion of the temperature danger zone.
2. Follow State or local health department requirements regarding required hot and cold holding temperatures. If State or local health department requirements are based on the *2001 FDA Food Code*:
  - Hold hot foods at 135 °F or above; and
  - Cold foods at 41 °F or below.
3. Preheat steam tables and hot boxes.

### **Monitoring:**

1. Use a clean, sanitized, and calibrated probe thermometer to measure the temperature of the food.
2. Take temperatures of foods by inserting the thermometer near the surface of the product, at the thickest part, and at other various locations.
3. Take temperatures of holding units by placing a calibrated thermometer in the coolest part of a hot holding unit or warmest part of a cold holding unit.
4. For hot-held foods:
  - Verify that the air/water temperature of any unit is at 135 °F or above before use.
  - Reheat foods in accordance with the Reheating for Hot Holding SOP.
  - All hot potentially hazardous foods should be 135 °F or above before placing the food out for display or service.
  - Take the internal temperature of food before placing it on a steam table or in a hot holding unit and at least every 2 hours thereafter.
5. For cold foods held for service:
  - Verify that the air/water temperature of any unit is at 41 °F or below before use.
  - Chill foods, if applicable, in accordance with the Cooling SOP.

## **Holding Hot and Cold Potentially Hazardous Foods, continued**

(Sample SOP)

- All cold potentially hazardous foods should be 41 °F or below before placing the food out for display or service.
  - Take the internal temperature of the food before placing it onto any salad bar, display cooler, or cold serving line and at least every 2 hours thereafter.
6. For cold foods in storage:
- Take the internal temperature of the food before placing it into any walk-in cooler or reach-in cold holding unit.
  - Chill food in accordance with the Cooling SOP if the food is not 41 °F or below.
  - Verify that the air temperature of any cold holding unit is at 41 °F or below before use and at least every 4 hours thereafter during all hours of operation.

### **Corrective Action:**

For hot foods:

- Reheat the food to 165 °F for 15 seconds if the temperature is found to be below 135 °F and the last temperature measurement was 135 °F or higher and taken within the last 2 hours. Repair or reset holding equipment before returning the food to the unit, if applicable.
- Discard the food if it cannot be determined how long the food temperature was below 135 °F.

For cold foods:

- Rapidly chill the food using an appropriate cooling method if the temperature is found to be above 41 °F and the last temperature measurement was 41 °F or below and taken within the last 2 hours:
  - Place food in shallow containers (no more than 4 inches deep) and uncovered on the top shelf in the back of the walk-in or reach-in cooler
  - Use a quick-chill unit like a blast chiller
  - Stir the food in a container placed in an ice water bath
  - Add ice as an ingredient
  - Separate food into smaller or thinner portions
- Repair or reset holding equipment before returning the food to the unit, if applicable.
- Discard the food if it cannot be determined how long the food temperature was above 41 °F.

## **Holding Hot and Cold Potentially Hazardous Foods, continued**

(Sample SOP)

### **Verification and Record Keeping:**

Foodservice employees will record temperatures of food items and document corrective actions taken on the Hot and Cold Holding Temperature Log. A designated foodservice employee will record air temperatures of coolers and cold holding units on the Refrigeration Logs. Foodservice manager will verify that foodservice employees have taken the required holding temperatures by visually monitoring foodservice employees during the shift and reviewing the temperature logs at the close of each day. The temperature logs are kept on file for a minimum of one year.

**Date Implemented:**                      **By:**

**Date Reviewed:**                      **By:**

**Date Revised:**                      **By:**

## **Date Marking Ready-to-Eat, Potentially Hazardous Food** (Sample SOP)

**Purpose:** To ensure appropriate rotation of ready-to-eat food to prevent or reduce foodborne illness from *Listeria monocytogenes*

**Scope:** This procedure applies to foodservice employees who prepares, stores, or serves food.

**Key Words:** Ready-to-Eat Food, Potentially Hazardous Food, Date Marking, Cross-Contamination

### **Instructions:**

1. Establish a date marking system and train employees accordingly. The best practice for a date marking system would be to include a label with the product name, the day or date, and time it is prepared or opened. Examples of how to indicate when the food is prepared or opened include:
  - Labeling food with a calendar date, i.e. cut cantaloupe, 5/26/05, 8:00 a.m.,
  - Identifying the day of the week, i.e. cut cantaloupe, Monday, 8:00 a.m., or
  - Using color-coded marks or tags, i.e. cut cantaloupe, blue dot, 8:00 a.m. means “cut on Monday at 8:00 a.m.”.
2. Label ready-to-eat, potentially hazardous foods that are prepared on-site and held for more than 24 hours.
3. Label any processed, ready-to-eat, potentially hazardous foods when opened, if they are to be held for more than 24 hours.
4. Refrigerate all ready-to-eat, potentially hazardous foods at 41° F or below.
5. Serve or discard refrigerated, ready-to-eat, potentially hazardous foods within 7 days.
6. Indicate with a separate label the date prepared, the date frozen, and the date thawed of any refrigerated, ready-to-eat, potentially hazardous foods.
7. Calculate the 7-day time period by counting only the days that the food is under refrigeration. For example:
  - On Monday, 8/1/05, lasagna is cooked, properly cooled, and refrigerated with a label that reads, “Lasagna – Cooked – 8/1/05.”
  - On Tuesday, 8/2/05, the lasagna is frozen with a second label that reads, “Frozen – 8/2/05.” Two labels now appear on the lasagna. Since the lasagna was held under refrigeration from Monday, 8/1/05 – Tuesday, 8/2/05, only 1 day is counted towards the 7-day time period.
  - On Tuesday, 8/16/05, the lasagna is pulled out of the freezer. A third label is placed on the lasagna that reads, “Thawed – 8/16/05.” All three labels now appear on the lasagna. The lasagna must be served or discarded within 6 days.
8. Follow State and local public health requirements.

## **Date Marking Ready-to-Eat, Potentially Hazardous Food, continued**

(Sample SOP)

### **Monitoring:**

A designated employee will check refrigerators daily to verify that foods are date marked and that foods exceeding the 7-day time period are not being used or stored.

### **Corrective Measure:**

Foods that are not date marked or that exceed the 7-day time period will be discarded.

### **Verification and Record Keeping:**

Foodservice manager will complete the Food Safety Checklist daily.

**Date Implemented:**                      **By:**

**Date Reviewed:**                      **By:**

**Date Revised:**                      **By:**

## **Personal Hygiene**

(Sample SOP)

**Purpose:** To prevent contamination of food by foodservice employees

**Scope:** This procedure applies to foodservice employees who handles, prepares, or serves food

**Key Words:** Personal Hygiene, Cross-Contamination, Contamination

### **Instructions:**

1. Train foodservice employees on the employee health policy (Develop SOP for Implementing an Employee Health Policy) and on practicing good personal hygiene.
2. Follow the employee health policy.
3. Report to work in good health, clean, and dressed in clean attire.
4. Change apron when it becomes soiled.
5. Wash hands properly, frequently, and at the appropriate times.
6. Keep fingernails trimmed, filed, and maintained so that the edges are cleanable and not rough.
7. Avoid wearing artificial fingernails and fingernail polish.
8. Wear single-use gloves if artificial fingernails or fingernail polish are worn.
9. Do not wear any jewelry except for a plain ring such as a wedding band.
10. Treat and bandage wounds and sores immediately. When hands are bandaged, single use gloves must be worn.
11. Cover a lesion containing pus with a bandage. If the lesion is on a hand or wrist, cover with an impermeable cover such as a finger cot or stall and a single-use glove.
12. Eat, drink, use tobacco, or chew gum only in designated break areas where food or food contact surfaces may not become contaminated.
13. Taste food the correct way:
  - Place a small amount of food into a separate container.
  - Step away from exposed food and food contact surfaces.
  - Use a teaspoon to taste the food. Remove the used teaspoon and container to the dish room. Never reuse a spoon that has already been used for tasting.
  - Wash hands immediately.
14. Wear suitable and effective hair restraints while in the kitchen.
15. Follow State and local public health requirements.



## **Personal Hygiene, continued**

(Sample SOP)

### **Monitoring:**

A designated foodservice employee will inspect employees when they report to work to be sure that each employee is following this SOP. The designated foodservice employee will monitor that all foodservice employees are adhering to the personal hygiene policy during all hours of operation.

### **Corrective Action:**

Any foodservice employee found not following this procedure will be retrained at the time of the incident. Affected food will be discarded.

### **Verification and Record Keeping:**

The foodservice manager will verify that foodservice employees are following this policy by visually observing the employees during all hours of operation. The foodservice manager will complete the Food Safety Checklist daily. Foodservice employees will record any discarded food on the Damaged or Discarded Product Log, which will be kept on file for a minimum of one year.

**Date Implemented:** **By:**

**Date Reviewed:** **By:**

**Date Revised:** **By:**

## **Reheating Potentially Hazardous Foods**

(Sample SOP)

**Purpose:** To prevent foodborne illness by ensuring that all foods are reheated to the appropriate internal temperature

**Scope:** This procedure applies to foodservice employees who prepare or serve food.

**Key Words:** Cross-Contamination, Temperatures, Reheating, Holding, Hot holding

### **Instructions:**

1. Train foodservice employees who prepare or serve food on using a food thermometer and how to reheat foods using this procedure.
2. Follow State or local health department requirements regarding reheating temperatures.
3. If State or local requirements are based on the *2001 FDA Food Code*, heat processed, ready-to-eat foods from a package or can, such as canned green beans or prepackaged breakfast burritos, to an internal temperature of at least 135 °F for 15 seconds for hot holding.
4. Reheat the following products to 165 °F for 15 seconds:
  - Any food that is cooked, cooled, and reheated for hot holding
  - Leftovers reheated for hot holding
  - Products made from leftovers, such as soup
  - Precooked, processed foods that have been previously cooled
5. Reheat food for hot holding in the following manner if using a microwave oven:
  - Heat processed, ready-to-eat foods from a package or can to at least 135 °F for 15 seconds
  - Heat leftovers to 165 °F for 15 seconds
  - Rotate (or stir) and cover foods while heating
  - Allow to sit for 2 minutes after heating
6. Reheat all foods rapidly. The total time the temperature of the food is between 41 °F and 165 °F may not exceed 2 hours.
7. Serve reheated food immediately or transfer to an appropriate hot holding unit.

### **Monitoring:**

1. Use a clean, sanitized, and calibrated probe thermometer.
2. Take at least two internal temperatures from each pan of food.

## **Reheating Potentially Hazardous Foods, continued**

(Sample SOP)

### **Corrective Action:**

Continue reheating/heating food if the internal temperature does not reach the required temperature.

### **Verification and Record Keeping:**

Foodservice employees will record product name, time, the two temperatures/times, and any corrective action taken on the Cooking – Reheating Temperature Log. Foodservice manager will verify that foodservice employees have taken the required reheating temperatures by visually monitoring foodservice employees during the shift and reviewing, initialing, and dating the Cooking – Reheating Temperature Log at the close of each day. The Cooking – Reheating Temperature Logs are kept on file for a minimum of one year.

**Date Implemented:** **By:**

**Date Reviewed:** **By:**

**Date Revised:** **By:**

## **Receiving Deliveries**

(Sample SOP)

**Purpose:** To ensure that all food is received fresh and safe when it enters the foodservice operation, and to transfer food to proper storage as quickly as possible

**Scope:** This procedure applies to foodservice employees who handles, prepares, or serves food.

**Key Words:** Cross-Contamination, Temperatures, Receiving, Holding, Frozen Goods, Delivery

### **Instructions:**

1. Train foodservice employees who accept deliveries on proper receiving procedures.
2. Schedule deliveries to arrive at designated times during operational hours.
3. Post the delivery schedule including the names of vendors, days and times of deliveries, and drivers' names.
4. Establish a rejection policy to ensure accurate, timely, consistent, and effective refusal and return of rejected goods.
5. Organize freezer and refrigeration space, loading docks, and store rooms before deliveries.
6. Gather product specification lists and purchase orders, temperature logs, calibrated thermometers, pens, flashlights, and clean loading carts before deliveries.
7. Keep receiving area clean and well lighted.
8. Do not touch ready-to-eat foods with bare hands.
9. Determine whether foods will be marked with the date of arrival or the "use-by" date and mark accordingly upon receipt.
10. Compare delivery invoice against products ordered and products delivered.
11. Transfer foods to their appropriate locations as quickly as possible.

### **Monitoring:**

1. Inspect the delivery truck when it arrives to ensure that it is clean, free of putrid odors, and organized to prevent cross-contamination. Be sure refrigerated foods are delivered on a refrigerated truck.
2. Check the interior temperature of refrigerated trucks.
3. Confirm vendor name, day and time of delivery, as well as driver's identification before accepting delivery. If driver's name is different than what is indicated on the delivery schedule, contact the vendor immediately.
4. Check frozen foods to ensure that they are all frozen solid and show no signs of thawing and refreezing, such as the presence of large ice crystals or liquids on the bottom of cartons.

## **Receiving Deliveries, continued**

(Sample SOP)

5. Check the temperature of refrigerated foods.
  - a. For fresh meat, fish, and poultry products, insert a clean and sanitized thermometer into the center of the product to ensure a temperature of 41 °F or below. The temperature of milk should be 45 °F or below.
  - b. For packaged products, insert a food thermometer between two packages being careful not to puncture the wrapper. If the temperature exceeds 41 °F, it may be necessary to take the internal temperature before accepting the product.
  - c. For eggs, the interior temperature of the truck should be 45 °F or below.
6. Check dates of milk, eggs, and other perishable goods to ensure safety and quality.
7. Check the integrity of food packaging.
8. Check the cleanliness of crates and other shipping containers before accepting products. Reject foods that are shipped in dirty crates.

### **Corrective Action:**

1. Reject the following:
  - a. Frozen foods with signs of previous thawing
  - b. Cans that have signs of deterioration – swollen sides or ends, flawed seals or seams, dents, or rust
  - c. Punctured packages
  - d. Expired foods
  - e. Foods that are out of safe temperature zone or deemed unacceptable by the established rejection policy

### **Verification and Record Keeping:**

Record temperature and corrective action on the delivery invoice or on the Receiving Log. Foodservice manager will verify that foodservice employees are receiving products using the proper procedure by visually monitoring receiving practices during the shift and reviewing the Receiving Log at the close of each day. Receiving Logs are kept on file for a minimum of one year.

**Date Implemented:** \_\_\_\_\_ **By:** \_\_\_\_\_

**Date Reviewed:** \_\_\_\_\_ **By:** \_\_\_\_\_

**Date Revised:** \_\_\_\_\_ **By:** \_\_\_\_\_

## **Storing and Using Poisonous or Toxic Chemicals**

(Sample SOP)

**Purpose:** To prevent foodborne illness by chemical contamination

**Scope:** This procedure applies to foodservice employees who use chemicals in the kitchen.

**Keywords:** Chemicals, Cross-Contamination, Contamination, Material Safety Data Sheet

### **Instructions:**

1. Train foodservice employees on the proper use, storage, and first aid of chemicals and on the proper use of chemical test kits as specified in this procedure.
2. Designate a location for storing the Material Safety Data Sheets (MSDS).
3. Label and date all poisonous or toxic chemicals with the common name of the substance.
4. Store all chemicals in a designated secured area away from food and food contact surfaces using spacing or partitioning.
5. Limit access to chemicals by use of locks, seals, or key cards.
6. Maintain an inventory of chemicals.
7. Store only chemicals that are necessary to the operation and maintenance of the kitchen.
8. Mix, test, and use sanitizing solutions as recommended by the manufacturer, State, or local health department.
9. Use the appropriate chemical test kit to measure the concentration of sanitizer each time a new batch of sanitizer is mixed.
10. Follow manufacturer's directions for specific mixing, storing, and first aid instructions on chemicals.
11. Do not use chemical containers for storing food or water.
12. Use only hand sanitizers that comply with the *2001 FDA Food Code*. Confirm with the manufacturer that the hand sanitizers used meet the requirements of the *FDA Food Code*.
13. Label and store first aid supplies in a container that is located away from food or food contact surfaces.
14. Label and store medicines for employee use in a designated area and away from food contact surfaces. Do not store medicines in food storage areas.
15. Store refrigerated medicines in a covered, leak proof container, where they are not accessible to children, and cannot contaminate food.
16. Follow State and local public health requirements.

## **Storing and Using Poisonous or Toxic Chemicals, continued**

(Sample SOP)

### **Monitoring:**

Foodservice employees and foodservice manager will visually observe that chemicals are being stored, labeled, and used properly during all hours of operation.

### **Corrective Action:**

Discard any food contaminated by chemicals. Label and/or properly store any unlabeled or misplaced chemicals.

### **Verification and Record Keeping:**

Foodservice manager will complete the Food Safety Checklist daily to indicate that monitoring is completed. Foodservice employees will record the name of the contaminated food, date, time, and the reason why the food was discarded on the Damaged and Discarded Product Log. The foodservice manager will verify that appropriate corrective actions are being taken by reviewing, initialing, and dating the Damaged and Discarded Product Log each day. Damaged and Discarded Product Logs are kept on file for a minimum of one year.

**Date Implemented:** **By:**

**Date Reviewed:** **By:**

**Date Revised:** **By:**

## **Using Suitable Utensils When Handling Ready-to-Eat Foods**

(Sample SOP)

**Purpose:** To prevent foodborne illness due to hand-to-food cross-contamination

**Scope:** This procedure applies to foodservice employees who prepare, handle, or serves food.

**Key Words:** Ready-to-Eat food, Cross-Contamination

### **Instructions:**

1. Use proper hand washing procedures to wash hands and exposed arms prior to preparing or handling food or at anytime when the hands may have become contaminated.
2. Do not use bare hands to handle ready-to-eat foods at any time unless washing fruits and vegetables.
3. Use suitable utensils when working with ready-to-eat food. Suitable utensils may include:
  - Single-use gloves
  - Deli tissue
  - Foil wrap
  - Tongs, spoodles, spoons, and spatulas
4. Wash hands and change gloves:
  - Before beginning food preparation
  - Before beginning a new task
  - After touching equipment (such as refrigerator doors) or utensils that have not been cleaned and sanitized
  - After contacting chemicals
  - When interruptions in food preparation occur, such as when answering the telephone or checking in a delivery
  - Handling money
  - Anytime a glove is torn, damaged, or soiled
  - Anytime contamination of a glove might have occurred
5. Follow State and local public health requirements.

### **Monitoring:**

A designated foodservice employee will visually observe that gloves or suitable utensils are used and changed at the appropriate times during all hours of operation.



## **Using Suitable Utensils When Handling Ready-to-Eat Foods,**

### **continued**

(Sample SOP)

#### **Corrective Action:**

Employees observed touching ready-to-eat food with bare hands will be retrained at the time of the incident. Ready-to-eat food touched with bare hands will be discarded.

#### **Verification and Record Keeping:**

The foodservice manager will verify that foodservice workers are using suitable utensils by visually monitoring foodservice employees during all hours of operation. The foodservice manager will complete the Food Safety Checklist daily. The designated foodservice employee responsible for monitoring will record any discarded food on the Damaged and Discarded Product Log. This log will be maintained for a minimum of one year.

**Date Implemented:**

**By:**

**Date Reviewed:**

**By:**

**Date Revised:**

**By:**

## **Washing Fruits and Vegetables**

(Sample SOP)

**Purpose:** To prevent or reduce risk of foodborne illness or injury by contaminated fruits and vegetables.

**Scope:** This procedure applies to foodservice employees who prepare or serve food.

**Keywords:** Fruits, Vegetables, Cross-Contamination, Washing

### **Instructions:**

1. Train foodservice employees who prepare or serve food on how to properly wash and store fresh fruits and vegetables.
2. Wash hands using the proper procedure.
3. Wash, rinse, sanitize, and air-dry all food-contact surfaces, equipment, and utensils that will be in contact with produce, such as cutting boards, knives, and sinks.
4. Follow manufacturer's instructions for proper use of chemicals.
5. Wash all raw fruits and vegetables thoroughly before combining with other ingredients, including:
  - Unpeeled fresh fruit and vegetables that are served whole or cut into pieces.
  - Fruits and vegetables that are peeled and cut to use in cooking or served ready-to-eat.
6. Wash fresh produce vigorously under cold running water or by using chemicals that comply with the *2001 FDA Food Code*. Packaged fruits and vegetables labeled as being previously washed and ready-to-eat are not required to be washed.
7. Scrub the surface of firm fruits or vegetables such as apples or potatoes using a clean and sanitized brush designated for this purpose.
8. Remove any damaged or bruised areas.
9. Label, date, and refrigerate fresh-cut items.
10. Serve cut melons within 7 days if held at 41 °F or below (see SOP for Date Marking, Ready-to-Eat, Potentially Hazardous Food).
11. Do not serve raw seed sprouts to highly susceptible populations such as preschool-age children.
12. Follow State and local public health requirements.

### **Monitoring:**

Foodservice manager will visually monitor that fruits and vegetables are being properly washed, labeled, and dated during all hours of operation. In addition, foodservice employees will check daily the quality of fruits and vegetables in cold storage.

## **Washing Fruits and Vegetables, continued**

(Sample SOP)

### **Corrective Action:**

Unwashed fruits and vegetables will be removed from service and washed immediately before being served. Unlabeled fresh cut items will be labeled and dated. Discard cut melons held after 7 days.

### **Verification and Record Keeping:**

Foodservice manager will complete the Food Safety Checklist daily to indicate that monitoring is being conducted as specified in this procedure.

**Date Implemented:**                      **By:**

**Date Reviewed:**                      **By:**

**Date Revised:**                      **By:**

## **Washing Hands**

(Sample SOP)

**Purpose:** To prevent foodborne illness caused by contaminated hands

**Scope:** This procedure applies to anyone who handles, prepares, and serves food.

**Keywords:** Handwashing, Cross-Contamination

### **Instructions:**

1. Train any individual who prepares or serves food on proper handwashing. Training may include viewing a handwashing video and demonstrating proper handwashing procedure.
2. Post handwashing signs or posters in a language understood by all foodservice staff near all handwashing sinks, in food preparation areas, and restrooms.
3. Use designated handwashing sinks for handwashing only. Do not use food preparation, utility, and dishwashing sinks for handwashing.
4. Provide warm running water, soap, and a means to dry hands. Provide a waste container at each handwashing sink or near the door in restrooms.
5. Keep handwashing sinks accessible anytime employees are present.
6. Wash hands:
  - Before starting work
  - During food preparation
  - When moving from one food preparation area to another
  - Before putting on or changing gloves
  - After using the toilet
  - After sneezing, coughing, or using a handkerchief or tissue
  - After touching hair, face, or body
  - After smoking, eating, drinking, or chewing gum or tobacco
  - After handling raw meats, poultry, or fish
  - After any clean up activity such as sweeping, mopping, or wiping counters
  - After touching dirty dishes, equipment, or utensils
  - After handling trash
  - After handling money
  - After any time the hands may become contaminated

## **Washing Hands, continued**

(Sample SOP)

7. Follow proper handwashing procedures as indicated below:
  - Wet hands and forearms with warm, running water (at least 100 °F) and apply soap.
  - Scrub lathered hands and forearms, under fingernails and between fingers for at least 10 - 15 seconds. Rinse thoroughly under warm running water for 5 - 10 seconds.
  - Dry hands and forearms thoroughly with single-use paper towels.
  - Dry hands for at least 30 seconds if using a warm air hand dryer.
  - Turn off water using paper towels.
  - Use paper towel to open door when exiting the restroom.
8. Follow FDA recommendations when using hand sanitizers. These recommendations are as follows:
  - Use hand sanitizers only after hands have been properly washed and dried.
  - Use only hand sanitizers that comply with the 2001 FDA Food Code. Confirm with the manufacturers that the hand sanitizers used meet these requirements. Use hand sanitizers in the manner specified by the manufacturer.

### **Monitoring:**

A designated employee will visually observe the handwashing practices of the foodservice staff during all hours of operation. In addition, the designated employee will visually observe that handwashing sinks are properly supplied during all hours of operation.

### **Corrective Action:**

Employees that are observed not washing their hands at the appropriate times or using the proper procedure will be asked to wash their hands immediately. Employee will be re-trained to ensure proper handwashing procedure.

### **Verification and Record Keeping:**

Foodservice manager will complete the Food Safety Checklist daily to indicate that monitoring is being conducted as specified.

**Date Implemented:**

**By:**

**Date Reviewed:**

**By:**

**Date Revised:**

**By:**

## **Appendix II. (SAMPLE) Procedure for Handling Leftover Sliced Turkey**

### **A. Roast Turkey. Cook, Serve, Cool Leftovers, Reheat, and Serve**

↓  
Receive:  
Frozen turkey from certified vendor (USDA inspected).  
↓  
Store in walk-in freezer (0°F or below).  
↓  
Thaw bulk turkey in refrigerator (41°F or below).  
↓  
Cook to proper temperature (165 °F for a minimum of 15 seconds).  
↓  
Slice, portion, and serve (hot holding at 135 °F or above).  
↓  
Immediately refrigerate leftovers. Place in shallow pans and cool to 41°F or below within 6 hours but from 135°F to at least 70°F in the first 2 hours. (Take temperature at 1.5 hours.)  
↓  
Remove leftovers from refrigerator and reheat to 165 °F for a minimum of 15 seconds.  
↓  
Hot hold at 135 °F or above.  
↓  
Serve.

## **Appendix III. (SAMPLE): Food Safety Plan**

### **School Food Safety Program Our Town Elementary School**

#### **Table of Contents**

Description of Program Overview and Facility

Standard Operating Procedures (Step 1)  
Detailed SOPs

Food Preparation Action Plan  
Categorize Menu Items by Process (Step 2)  
Identify Control Measures and CCPs (Step 3)

Monitoring (Step 4)  
Food Safety Checklist

Corrective Action (Step 5)

Recordkeeping (Step 6)  
Forms (Listed here)

Review (Step 7)  
Manager's Checklist

## **(SAMPLE: Food Safety Program Cont'd)**

### **Description of Program Overview and Facility**

This program was developed in May 2005 by Jane Doe, foodservice director, Our County School District, Our Town Elementary School. The program follows the USDA guidance on developing a food safety program based on the Process Approach to HACCP. All standards in this food safety program are based on recommendations in the 2001 Food Code.

### **Average Daily Participation**

Breakfasts	100 Meals
Lunches	300 Meals

### **School Foodservice Staff**

Manager  
3 Staff

### **Kitchen Equipment**

1 Mixer  
1 Food Processor  
1 Slicer  
1 Walk-in Freezer  
2 Reach-in Refrigerators  
2 Convection Ovens  
1 Combination Steamer  
2 Heated Cabinets  
2 Heated Serving Counters  
1 Refrigerated Serving Counter  
1 Milk Cooler  
1 Dishmachine

### **Menu**

2 Week Cycle with recipes/instructions in notebook in manager's office

***NOTE: For the purpose of this example, all standards are based on the 2001 FDA Food Code (as amended August 29, 2003 in the Supplement to the 2001 Food Code). You may need to adopt a different set of standards in your particular program based on the authority recognized in your State.***



**(SAMPLE: Food Safety Program Cont'd)**

**STANDARD OPERATING PROCEDURES (SOP)**

Standard Operating Procedures for Our Town Elementary School are listed below. Each SOP will be attached to this food safety program. Foodservice staff will be made aware of all SOPs during initial and in ongoing training.

**1) Facility-Wide**

- a) Washing Hands
- b) Calibrating a Thermometer
- c) Preventing Cross-Contamination
- d) Preventing Bare Hand Contact with Ready-to-Eat Foods
- e) Personal Hygiene
- f) Operating Without Power
- g) Operating Without Hot Water
- h) Storing and Using Chemicals
- i) Implementing an Employee Health Policy
- j) Purchasing from Reputable Vendors
- k) Receiving Deliveries

**2) Storing**

**3) Cooking**

**4) Cooling**

**5) Reheating**

**6) Preparation**

**7) Holding**

**8) Transporting**

*Note: For the purpose of this sample document, some detailed SOPs have been included in Appendix I, Standard Operating Procedures. In an actual food safety program, all applicable SOPs should be documented and included in the written program.*

**(SAMPLE: Food Safety Program Cont'd)**

**FOOD PREPARATION ACTION PLAN**

**Categorizing Menu Items and Identifying Control Measures and Critical Control Points (CCPs):**

The 2 week menu cycle is posted in the kitchen. Each menu item available for service is listed in this food safety program in the table below. When new menu items are added, the list is updated. Each item is evaluated to determine which of the three processes is applicable and to identify the appropriate control measures and critical control points (CCPs) using the Process Approach charts attached. Once the determination is made for each menu item, the food service manager will make the rest of the food service staff aware of the menu items and applicable process and control measures by posting the Process Charts in the kitchen. (These Process Charts containing the list of menu items are attached on the following pages.) In addition, the menu cycle, menus, recipes, product directions, and charts are kept in a notebook in the manager's office.

**Staff:**

- All foodservice personnel will be given an overview of the Process Approach to HACCP after being hired and before handling food.
- Any substitute food service staff will be given instructions on the Process Approach and a list of necessary procedures relevant to the tasks they will be performing and the corresponding records to be kept.
- Periodic refresher training for employees will be provided on a quarterly basis.
- An easily accessible copy of an explanation of the Process Approach taken from the USDA HACCP guidance document will be available in the manager's office.

**(SAMPLE: Food Safety Program Cont'd)**

**MENU ITEMS SORTED BY PROCESS**

PROCESS 1 (NO COOK)	PROCESS 2 (COOK AND SERVE SAME DAY)	PROCESS 3 (COMPLEX FOOD PREPARATION)
Milk	Green Beans in Cheese Sauce	Bean Burrito
Juice	Chili con Carne	Bean Soup
Tuna Salad Sandwich	Macaroni and Cheese	Potato Salad
Waldorf Fruit Salad	Scrambled Eggs	Fruit and Rice Dessert
Cole Slaw	Sloppy Joe on Roll	Rice Salad
Fresh Fruit	Mexicali Corn	
Egg Salad Sandwich	Scalloped Potatoes	
Broccoli Salad	Chicken Taco	
Three Bean Salad	Taco Salad	
Chicken or Turkey Salad	Refried Beans	
	Broccoli, Cheese and Rice Casserole	

***NOTE: For the purpose of this example, only a sampling of menu items was listed. In an actual food safety program, all possible menu items should be included in such a list. This should include all food not only prepared on site, but all food served on site. For example, if the school receives ready-to-eat menu items, these items should also be included on this list. In addition, procedures for receiving ready-to-eat items should be included in the recipes/instructions portion of this program.***

***NOTE: Recipe numbers on Process Charts refer to USDA recipes. A full listing of the recipes can be found at:***

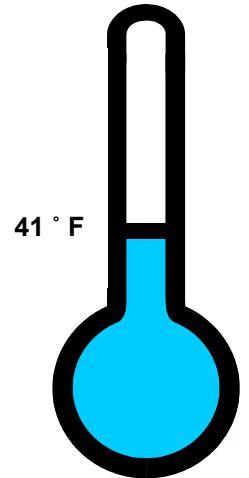
***[http://www.nfsmi.org/Information/school\\_recipe\\_index\\_alpha.html](http://www.nfsmi.org/Information/school_recipe_index_alpha.html)***

**(SAMPLE: Food Safety Program Cont'd)**

**PROCESS CHART – PROCESS 1**

**Process 1 -NO COOK  
Keep Food Below 41 °F Degrees**

<b>Menu Item</b>	<b>Recipe #</b>
Milk	
Juice	
Tuna Salad Sandwich	F-11
Waldorf Fruit Salad	E-14
Cole Slaw	E-09
Fresh Fruit	
Fresh Vegetables	
Egg Salad Sandwich	F-10
Broccoli Salad	E-11
Three Bean Salad	E-04
Chicken or Turkey Salad	E-07



**Control measures**

CCP:

- Cold holding – Critical limit is 41° F or below

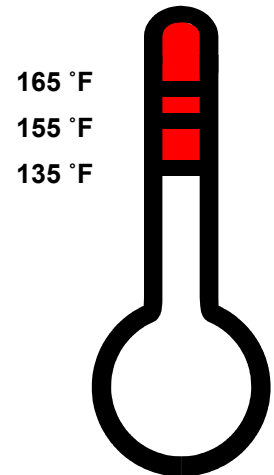
SOP:

- Personal Hygiene
- Washing Fresh Fruits and Vegetables
- Limiting time in the danger zone to inhibit bacterial growth and toxin production (e.g., holding at room temperature for 4 hours and then discarding)
- Verifying receiving temperatures of food
- Date marking of ready-to-eat food

**(SAMPLE: Food Safety Program Cont'd)**  
**PROCESS CHART – PROCESS 2**

**Process 2-COOK and SAME DAY SERVE**  
**Cook to Correct Temperature. Serve at 135 °F or above.**

<b>Menu Item</b>	<b>Recipe Number</b>	<b>Cooking Temperature</b>
Green Beans in Cheese Sauce	I-11	140° F 15s
Chili con Carne	D-20	165° F 15 s
Macaroni & Cheese	D-26	165° F 15 s
Scrambled Eggs	D-34	155° F 15 s
Sloppy Joe on Roll	F-05	155° F 15 s
Mexicali Corn	I-12	140° F 15s
Scalloped Potatoes	I-16	140° F 15s
Chicken Taco	D-13C	165° F 15 s
Taco Salad	E-10	165° F 15 s
Refried Beans	I-15	140° F 15s
Broccoli, Cheese and Rice Casserole	I-08	165° F 15 s



**Control measures**

CCP:

- Cooking to destroy bacteria and other pathogens (CCPs with corresponding critical limits are noted above.)

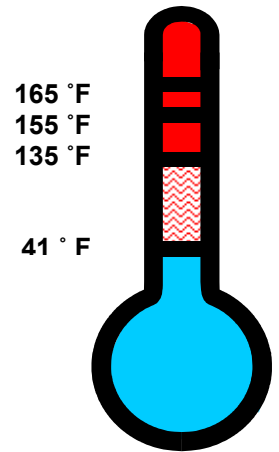
SOP:

- Hot holding or limiting time in the danger zone to prevent the outgrowth of spore-forming bacteria

(SAMPLE: Food Safety Program Cont'd)  
PROCESS CHART – PROCESS 3

**Process 3-COOK, COOL, REHEAT, SERVE**  
**Limit Time in the Danger Zone (41 °F – 135 °F)**

Menu Item	Recipe Number	Cooking Temperature	Cooling Temp.	Reheating Temp.
Bean Soup	H-08	At or above 165°F for at least 15 seconds	Cool to 70° F in 2 hrs or less and then to 41°F in 4 hrs or less.	At or above 165°F for at least 15 seconds
Potato Salad	E-12	Cook potatoes	Cool to 70° F in 2 hrs or less and then to 41°F in 4 hrs or less.	
Bean Burrito	D-21A	At or above 165°F for at least 15 seconds	Cool to 70° F in 2 hrs or less and then to 41°F in 4 hrs or less.	At or above 165°F for at least 15 seconds
Fruit and Rice Dessert	B-09	Cook rice	Cool to 70° F in 2 hrs or less and then to 41°F in 4 hrs or less.	
Rice Salad	E-02	Cook rice	Cool to 70° F in 2 hrs or less and then to 41°F in 4 hrs or less.	



**Control measures**

CCP:

- Cooking to destroy bacteria and other pathogens (CCPs and critical limits are outlined above)
- Reheating for hot holding, if applicable

SOP:

- Cooling to prevent the outgrowth of spore-forming bacteria (SOP)
- Hot and cold holding or limiting time in the danger zone to inhibit bacterial growth and toxin formation (SOP)

**(SAMPLE: Food Safety Program Cont'd)**

**MONITORING**

**Manager Responsibilities:**

- The foodservice manager 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 manager will also be responsible for monitoring the overall performance of standard operating procedures. (Specific details regarding monitoring are addressed in each SOP.)
- Monitoring will be a constant consideration. However, the manager will use the Food Safety Checklist to formally monitor foodservice staff at least once per week. (The checklist form has been included in Appendix IV.)

**Foodservice Staff Responsibilities:**

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

**(SAMPLE: Food Safety Program Cont'd)**

**CORRECTIVE ACTIONS**

**Documenting Corrective Actions:**

- The foodservice director or manager\* will be responsible for developing predetermined corrective actions for the most common deviations from control measures including critical control points (CCPs) and standard operating procedures (SOPs).
- The foodservice director or manager will review and update corrective actions at least annually. Corrective actions for all SOPs are outlined in the written SOPs.
- Foodservice staff will be responsible for documenting any corrective actions taken while handling and preparing food as well as any actions taken while performing SOPs.

***NOTE: Corrective actions in this example are based on standards established in the 2001 FDA Food Code (as amended August 29, 2003 in the Supplement to the 2001 Food Code).***

**Training:**

- In addition to the corrective actions outlined in the SOPs, foodservice staff will be trained on a continuous basis to take corrective actions when necessary.
- Guidance on most common specific corrective actions will be listed in this food safety program and will be posted in an accessible location in the kitchen.

**Corrective actions for common problems are attached.**

**\* Person responsible for foodservice management and operations in the school district.**



**(SAMPLE: Food Safety Program Cont'd)**

**Corrective Actions**

<b>Event</b>	<b>Corrective Action</b>	
Receiving temperature for refrigerated product is at 47° F	Reject product	
Temperature of hamburger patties after standard cooking time is 150° F	Continue cooking to 165 °F for 15 seconds.	
Food service staff handles raw poultry and then begins to cut up raw fruit	Instruct staff to wash hands immediately, discard fruit that has been cut up	
Leftover chili placed in refrigerator is at 80° F after 1.5 hours	Immediately reheat chili to 165 °F for 15 seconds, divide and place in shallow pans in refrigerator, loosely covered. Cool to 70 °F within 2 hours or less, and to 41 °F or less in an additional 4 hours. If these times and temperatures are not met, discard.	

***Note: For the purpose of this sample document, only a few corrective actions have been described. In an actual food safety program, all applicable corrective actions should be documented and included in the written program.***

**(SAMPLE: Food Safety Program Cont'd)**

**RECORDKEEPING**

**DOCUMENTATION (RECORDS)**

**DOCUMENTATION SCHEDULE**

**Food Production Records**

End Point Cooking Temperature  
Time and Temperature for Holding

Daily  
Daily

**Equipment Temperature Records**

Receiving Logs  
Freezer Log  
Cooler Log  
Thermometer Calibration  
Storage Room Logs

Each delivery  
Daily  
Daily  
Weekly (Minimum)  
Daily

**Review Records**

Food Safety Checklist  
Manager's Checklist

Weekly  
Twice yearly

**Training Logs**

On-going

**Corrective Action Records**

As necessary

**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 in the proper place.

**Recordkeeping Procedure:**

- All pertinent information on critical control points, time, temperature, and corrective actions will be kept on clip boards in the kitchen for ease of use.
- All applicable forms for daily records will be replaced on a weekly basis or sooner, if necessary.
- In the case of weekly records, replacement of forms will be on a monthly basis.
- All completed forms will be filed in the filing cabinet in the manager's office.
- The foodservice manager is responsible for making sure that all forms are updated, available for use, and filed properly after completion.
- The foodservice manager is also responsible for educating all foodservice personnel on the use and importance of recording critical information.

***NOTE: For the purpose of this example, the recordkeeping logs may be viewed in Appendix IV Record Keeping Examples. In an actual food safety program, all recordkeeping logs used in the facility should be filed with the description of the program as well as in an accessible location for foodservice staff to get extra copies when necessary.***

**(SAMPLE: Food Safety Program Cont'd)**

**REVIEW OF THE SCHOOL FOOD SAFETY PROGRAM**

The school food service manager will review the school food safety program at the beginning of each school year and when any significant changes occur in the operation. The attached checklist will be used for the review.

(SAMPLE: Food Safety Program Cont'd)

## Food Safety Program Review Checklist

### 1. Documents to review

- ☐ Standard Operating Procedures
- ☐ Food Preparation Process Charts
- ☐ Control Measures in the Process Approach (CCPs and SOPs)
- ☐ Corrective Actions

### 2. Monitoring recordkeeping. Choose at random one week from the previous four.

Type of Record (SOP, CCP, Corrective Action, etc.)	Monitoring Frequency and Procedure (How often? Initialed and dated? Etc.)	Record Location (Where is record kept?)

2. Describe the strengths or weaknesses with the current monitoring or recordkeeping methods.
3. Who is responsible for verifying that the required records are being completed and properly maintained?
4. Describe the training that has been provided to support the food safety program.
5. Do the managers and staff demonstrate knowledge of the plan?
6. Have there been any changes to the menu or operation (new equipment, etc.)?
7. Was the plan modified because of these changes?

## **Appendix IV. (SAMPLES): Record Keeping**

- A.** Food Safety Checklist
- B.** Receiving Log
- C.** Cooking and Reheating Temperature Log
- D.** Cooling Temperature Log
- E.** Damaged or Discarded Product Log
- F.** Refrigeration Log

## FOOD SAFETY CHECKLIST

Date \_\_\_\_\_ Observer \_\_\_\_\_

**Directions:** Use this checklist daily to determine areas in your operations requiring corrective action. Record corrective action taken and keep completed records in a notebook for future reference.

### PERSONAL HYGIENE

	Yes	No	Corrective Action
• Employees wear clean and proper uniform including shoes.-----	<input type="checkbox"/>	<input type="checkbox"/>	_____
• Effective hair restraints are properly worn.-----	<input type="checkbox"/>	<input type="checkbox"/>	_____
• Fingernails are short, unpolished, and clean (no artificial nails). -----	<input type="checkbox"/>	<input type="checkbox"/>	_____
• Jewelry is limited to a plain ring, such as a wedding band and a watch - no bracelets. -----	<input type="checkbox"/>	<input type="checkbox"/>	_____
• Hands are washed properly, frequently, and at appropriate times.-----	<input type="checkbox"/>	<input type="checkbox"/>	_____
• Burns, wounds, sores or scabs, or splints and water-proof bandages on hands are bandaged and completely covered with a foodservice glove while handling food. -----	<input type="checkbox"/>	<input type="checkbox"/>	_____
• Eating, drinking, chewing gum, smoking, or using tobacco are allowed only in designated areas away from preparation, service, storage, and ware washing areas. -----	<input type="checkbox"/>	<input type="checkbox"/>	_____
• Employees use disposable tissues when coughing or sneezing and then immediately wash hands. -----	<input type="checkbox"/>	<input type="checkbox"/>	_____
• Employees appear in good health.-----	<input type="checkbox"/>	<input type="checkbox"/>	_____
• Hand sinks are unobstructed, operational, and clean.-----	<input type="checkbox"/>	<input type="checkbox"/>	_____
• Hand sinks are stocked with soap, disposable towels, and warm water. -----	<input type="checkbox"/>	<input type="checkbox"/>	_____
• A handwashing reminder sign is posted.-----	<input type="checkbox"/>	<input type="checkbox"/>	_____
• Employee restrooms are operational and clean.-----	<input type="checkbox"/>	<input type="checkbox"/>	_____

### FOOD PREPARATION

	Yes	No	Corrective Action
• All food stored or prepared in facility is from approved sources.----	<input type="checkbox"/>	<input type="checkbox"/>	_____
• Food equipment utensils, and food contact surfaces are properly washed, rinsed, and sanitized before every use. -----	<input type="checkbox"/>	<input type="checkbox"/>	_____
• Frozen food is thawed under refrigeration or in cold running water. -----	<input type="checkbox"/>	<input type="checkbox"/>	_____
• Preparation is planned so ingredients are kept out of the temperature danger zone to the extent possible. -----	<input type="checkbox"/>	<input type="checkbox"/>	_____
• Food is tasted using the proper procedure.-----	<input type="checkbox"/>	<input type="checkbox"/>	_____
• Procedures are in place to prevent cross-contamination.-----	<input type="checkbox"/>	<input type="checkbox"/>	_____

- Food is handled with suitable utensils, such as, single use gloves or tongs. ----- ☐ ☐ \_\_\_\_\_
- Food is prepared in small batches to limit the time it is in the temperature danger zone. ----- ☐ ☐ \_\_\_\_\_
- Clean reusable towels are used only for sanitizing equipment, surfaces and not for drying hands, utensils, or floor. ----- ☐ ☐ \_\_\_\_\_
- Food is cooked to the required safe internal temperature for the appropriate time. The temperature is tested with a calibrated food thermometer. ----- ☐ ☐ \_\_\_\_\_
- The internal temperature of food being cooked is monitored and documented. ----- ☐ ☐ \_\_\_\_\_

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### **HOT HOLDING**

**Yes No Corrective Action**

- Hot holding unit is clean.----- ☐ ☐ \_\_\_\_\_
- Food is heated to the required safe internal temperature before placing in hot holding. Hot holding units are not used to reheat potentially hazardous foods. ----- ☐ ☐ \_\_\_\_\_
- Hot holding unit is pre-heated before hot food is placed in unit.----- ☐ ☐ \_\_\_\_\_
- Temperature of hot food being held is at or above 135 °F.----- ☐ ☐ \_\_\_\_\_
- Food is protected from contamination.----- ☐ ☐ \_\_\_\_\_

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### **COLD HOLDING**

**Yes No Corrective Action**

- Refrigerators are kept clean and organized.----- ☐ ☐ \_\_\_\_\_
- Temperature of cold food being held is at or below 41 °F.----- ☐ ☐ \_\_\_\_\_
- Food is protected from contamination.----- ☐ ☐ \_\_\_\_\_

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### **REFRIGERATOR, FREEZER, AND MILK COOLER**

**Yes No Corrective Action**

- Thermometers are available and accurate.----- ☐ ☐ \_\_\_\_\_
- Temperature is appropriate for pieces of equipment.----- ☐ ☐ \_\_\_\_\_
- Food is stored 6 inches off floor or in walk-in cooling equipment.-- ☐ ☐ \_\_\_\_\_
- Refrigerator and freezer units are clean and neat.----- ☐ ☐ \_\_\_\_\_
- Proper chilling procedures are used.----- ☐ ☐ \_\_\_\_\_
- All food is properly wrapped, labeled, and dated.----- ☐ ☐ \_\_\_\_\_
- The FIFO (First In, First Out) method of inventory management is used. ----- ☐ ☐ \_\_\_\_\_
- Ambient air temperature of all refrigerators and freezers is monitored and documented at the beginning and end of each shift. ----- ☐ ☐ \_\_\_\_\_

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**FOOD STORAGE AND DRY STORAGE****Yes No Corrective Action**

- Temperatures of dry storage area is between 50 °F and 70 °F or State public health department requirement.----- ☐ ☐ \_\_\_\_\_
- All food and paper supplies are stored 6 to 8 inches off the floor.----- ☐ ☐ \_\_\_\_\_
- All food is labeled with name and received date.----- ☐ ☐ \_\_\_\_\_
- Open bags of food are stored in containers with tight fitting lids and labeled with common name.----- ☐ ☐ \_\_\_\_\_
- The FIFO (First In, First Out) method of inventory management is used.----- ☐ ☐ \_\_\_\_\_
- There are no bulging or leaking canned goods. ----- ☐ ☐ \_\_\_\_\_
- Food is protected from contamination.----- ☐ ☐ \_\_\_\_\_
- All food surfaces are clean.----- ☐ ☐ \_\_\_\_\_
- Chemicals are clearly labeled and stored away from food and food related supplies.----- ☐ ☐ \_\_\_\_\_
- There is a regular cleaning schedule for all food surfaces.----- ☐ ☐ \_\_\_\_\_

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**CLEANING AND SANITIZING****Yes No Corrective Action**

- Three-compartment sink is properly set up for ware washing.----- ☐ ☐ \_\_\_\_\_
- Dishmachine is working properly (i.e. gauges and chemicals are at recommended levels).----- ☐ ☐ \_\_\_\_\_
- Water is clean and free of grease and food particles.----- ☐ ☐ \_\_\_\_\_
- Water temperatures are correct for wash and rinse.----- ☐ ☐ \_\_\_\_\_
- If heat sanitizing, the utensils are allowed to remain immersed in 171 °F water for 30 seconds.----- ☐ ☐ \_\_\_\_\_
- If using a chemical sanitizer, it is mixed correctly and a sanitizer strip is used to test chemical concentration.----- ☐ ☐ \_\_\_\_\_
- Smallware and utensils are allowed to air dry.----- ☐ ☐ \_\_\_\_\_
- Wiping cloths are stored in sanitizing solution while in use.----- ☐ ☐ \_\_\_\_\_

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**UTENSILS AND EQUIPMENT****Yes No Corrective Action**

- All small equipment and utensils, including cutting boards and knives, are cleaned and sanitized between uses.----- ☐ ☐ \_\_\_\_\_
- Small equipment and utensils are washed, sanitized, and air-dried.-- ☐ ☐ \_\_\_\_\_
- Work surfaces and utensils are clean.----- ☐ ☐ \_\_\_\_\_



- Work surfaces are cleaned and sanitized between uses.----- ☐ ☐ \_\_\_\_\_
- Thermometers are cleaned and sanitized after each use.----- ☐ ☐ \_\_\_\_\_
- Thermometers are calibrated on a routine basis.----- ☐ ☐ \_\_\_\_\_
- Can opener is clean.----- ☐ ☐ \_\_\_\_\_
- Drawers and racks are clean.----- ☐ ☐ \_\_\_\_\_
- Clean utensils are handled in a manner to prevent contamination of areas that will be in direct contact with food or a person's mouth.---- ☐ ☐ \_\_\_\_\_

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### **LARGE EQUIPMENT**

**Yes No Corrective Action**

- Food slicer is clean.----- ☐ ☐ \_\_\_\_\_
- Food slicer is broken down, cleaned, and sanitized before and after every use.----- ☐ ☐ \_\_\_\_\_
- Boxes, containers, and recyclables are removed from site.----- ☐ ☐ \_\_\_\_\_
- Loading dock and area around dumpsters are clean and odor-free.-- ☐ ☐ \_\_\_\_\_
- Exhaust hood and filters are clean.----- ☐ ☐ \_\_\_\_\_

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### **GARBAGE STORAGE AND DISPOSAL**

**Yes No Corrective Action**

- Kitchen garbage cans are clean and kept covered.----- ☐ ☐ \_\_\_\_\_
- Garbage cans are emptied as necessary.----- ☐ ☐ \_\_\_\_\_
- Boxes and containers are removed from site.----- ☐ ☐ \_\_\_\_\_
- Loading dock and area around dumpster are clean.----- ☐ ☐ \_\_\_\_\_
- Dumpsters are clean.----- ☐ ☐ \_\_\_\_\_

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### **PEST CONTROL**

**Yes No Corrective Action**

- Outside doors have screens, are well-sealed, and are equipped with a self-closing device.----- ☐ ☐ \_\_\_\_\_
- No evidence of pests is present.----- ☐ ☐ \_\_\_\_\_
- There is a regular schedule of pest control by licensed pest control operator.----- ☐ ☐ \_\_\_\_\_

### **Receiving Log**

Instructions: Use this Log for deliveries or receiving foods from a centralized kitchen. Record any temperatures and corrective action taken on the Receiving Log. Foodservice manager will verify that foodservice employees are receiving products using the proper procedure by visually monitoring foodservice employees and receiving practices during the shift and reviewing the Receiving Log at the close of each day. The Receiving Log is kept on file for a minimum of one year.

<b>Date</b>	<b>Time</b>	<b>Vendor or School</b>	<b>Product Name</b>	<b>Temperature</b>	<b>Corrective Action Taken</b>	<b>Initials/Date</b>	<b>Manager Initials/Date</b>

### **Cooking and Reheating Temperature Log**

**Instructions:** Record product name, time, the two (2) temperatures/times, and any corrective action taken on this form. Foodservice manager will verify that foodservice employees have taken the required cooking temperatures by visually monitoring foodservice employees and preparation procedures during the shift and reviewing, initialing, and dating this log at the close of each day. Maintain this log for a minimum of one year.

<b>Date and Time</b>		<b>Food Item</b>	<b>Internal Temperature/ Time</b>	<b>Internal Temperature/ Time</b>	<b>Corrective Action Taken</b>	<b>Initials</b>	<b>Verified By/ Date</b>

### **Cooling Log**

**Instructions:** Record temperatures every hour during the cooling cycle. Record corrective actions, if applicable. If no foods are cooled on any working day, indicate “No Foods Cooled” in the **Food Item** column. Foodservice manager will verify that foodservice employees are cooling food properly by visually monitoring foodservice employees during the shift and reviewing, initialing, and dating this log each working day. Maintain this log for a minimum of one year.

Date	Food Item	Time	Time	Time	Time	Time	Time	Corrective Actions Taken	Initials	Verified By/ Date
		Temp	Temp	Temp	Temp	Temp	Temp			

### **Damaged or Discarded Product Log**

Instructions: Foodservice employees will record product name, quantity, action taken, and reason, initials, and date each time a food or food product is damaged and/or will be discarded. Foodservice manager will verify that foodservice employees are discarding damaged food properly by visually monitoring foodservice employees during the shift and reviewing, initialing, and dating this log each working day. Maintain this log for a minimum of one year.

<b>Product Name/ Brand/Company</b>	<b>Quantity</b>	<b>Action Taken (Hold, Return, Discard)</b>	<b>Reason</b>	<b>Initials/Date</b>	<b>Manager Initials/Date</b>

***Refrigeration Log***

Instructions: A designated foodservice employee will record the location or description of holding unit, date, time, air temperature, corrective action, and initials on this log. Foodservice manager will verify that foodservice employees have taken the required temperatures by visually monitoring foodservice employees during the shift and reviewing, initialing, and dating this log each working day. Maintain this log for a minimum of one year.

Instructions: A designated foodservice employee will record the location or description of holding unit, date, time, air temperature, corrective action, and initials on this log. Foodservice manager will verify that foodservice employees have taken the required temperatures by visually monitoring foodservice employees during the shift and reviewing, initialing, and dating this log each working day. Maintain this log for a minimum of one year.

[illegible]

## Appendix V. References and Resources

### References

1. Dietary Guidelines [www.healthierus.gov/dietary guidelines](http://www.healthierus.gov/dietaryguidelines)
2. FDA Food Code <http://www.cfsan.fda.gov/~dms/fc01-sup.html>
3. USDA Temperature Rules [www.fsis.usda.gov/thermy](http://www.fsis.usda.gov/thermy)
4. National Food Service Institute [www.nfsmi.org](http://www.nfsmi.org)

### Resources

1. USDA Recipes  
[http://www.nfsmi.org/Information/school\\_recipe index\\_alpha.html](http://www.nfsmi.org/Information/school_recipe_index_alpha.html)
2. Healthy School Meals Food Safety Resources  
<http://schoolmeals.nal.usda.gov/Safety/index.html>
3. For more information about this document contact:  
[Foodsafety@fns.usda.gov](mailto:Foodsafety@fns.usda.gov)