

ServSafe© Food Safety Manager Exam Study Guide

Chapter 7: Preparation of Food

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Chapter 7: Preparation of Food

General Preparation Practices

- Equipment. Make sure all equipment, workstations, cutting boards, and utensils are clean and sanitized.
- Quantity. Remove food from coolers only as much as you can prep in a short period of time. Prep food in small batches.
- Storage. Place prepped food back the cooler, or cook it as soon as possible. Do not let food sit.

Thawing

- Freezing does not kill pathogens. When frozen food is thawed and exposed to the temperature danger zone, any pathogens in the food will begin to grow.
- NEVER thaw food at room temperature.
- You can thaw TCS foods in the following ways:
 - Refrigeration. Thaw food in the cooler at a temperature of 41°F (5°C) or lower.
 - Running Water. Submerge food under running water at 70°F (21°C) or lower. Make sure that the water is clean and safe to drink.
 - Microwave. Thaw food in the microwave if it will be cooked just after thawing.
 - Cooking. Thaw food as part of the cooking process itself.

Prepping Specific Food

- Produce – when prepping produce follow these recommendations:
 - Cross contamination. Make sure food and vegetables do not touch surfaces exposed to raw meat and poultry.
 - Washing. Wash all fruits and vegetables thoroughly under running water. Do this before cutting, cooking or combining it with other ingredients. The water should be a little warmer than the produce. Pay special attention to leafy greens – remove the outer leaves and pull the inner leaves completely apart and rinse thoroughly.
 - Sanitizing. Produce can be sanitized by washing it in water containing ozone. Check with your local regulatory agency to see if this is allowed in your area.
 - When soaking or storing produce in standing water or an ice water slurry, DO NOT mix different items or multiple batches of the same item.
 - Fresh cut produce. Refrigerate and hold sliced melons, cut tomatoes, and cut leafy greens at 41°F (5°C) or lower.
 - Raw see sprouts. If the food operation primarily serves high risk populations, do no serve raw seed sprouts.
- Batter and Breadding
 - Batters made with eggs or milk run the risk of time temperature abuse and cross contamination.

- Batch size. Prep batter in small batches. Store what is not needed at 41°F (5°C) or lower in a covered container.
- Discarding. Plan to throw out an unused batter after a set amount of time – this might be after using a batch or at the end of the shift.
- Allergens. Do not use the same batter or breading for different types of food since one of the food items can cause an allergic reaction spread by the batter or breading.
- Eggs and Egg Mixtures
 - Pooled eggs. If your local regulatory agency allows you to pool eggs, handle them carefully. Pooled eggs are eggs that are cracked open and combined in a container. Cook them promptly after mixing, or store them at 41°F (5°C) or lower. Remember to wash and sanitize the containers used to hold pooled eggs before making a new batch.
 - Pasteurized eggs. Always use pasteurized shell eggs or egg products when prepping dishes that need little or no cooking.
 - High risk populations. If you mainly serve high risk populations (such as those in nursing homes and hospitals), use only pasteurized eggs and egg products.
- Salads Containing TCS Foods
 - Salads such as chicken, tuna, pasta and egg all have been commonly found to be causes of foodborne illnesses.
 - These salads are usually not cooked after preparation and therefore do not have chance to get rid of pathogens such as Hepatitis A, which may have gotten into the food while it was being prepared.
 - Using leftovers. Make sure that leftover food that will be used in salads has been handled the right way – foods such as pasta, chicken and potatoes should be used only if it has been properly stored, cooked, held and cooled correctly.
 - Storing leftovers. Throw out any leftover food held at 41°F (5°C) or lower after seven (7) days. Always check the expiration date before using stored food items.
- Fresh juice Packaged On-site
 - If you package fresh fruit juice on site for sale at a later time, you must pasteurize the juice according to an approved Hazard Analysis Critical Control Point (HACCP) plan.
 - If you do not pasteurize the juice, it must have a warning label as specified by federal regulations.
- Ice
 - Consumption. Make ice from water that is safe to drink.
 - Cooling food. Never use ice as an ingredient if it was already used to keep food cold.
 - Containers and scoops. Use clean, sanitized ice containers and scoops to transfer ice from an ice machine to other containers.
 - Store ice scoops outside of the ice machine in a clean, protected location.
 - Never hold or carry ice in containers that have held raw meat, seafood, poultry or chemicals.

- Never use a glass to scoop ice or touch ice with hands.

Preparation Practices that Require a Variance

- A variance is a document issued by your regulatory authority that allows a requirement to be waived or changed.
- You must get a variance when prepping foods in any of these ways:
 - Smoking food as a way to preserve it.
 - Using a food additive or adding components such as vinegar to preserve or alter food so it no longer needs time and temperature control for safety.
 - Curing food
 - Custom processing animals.
 - Packaging food using a reduced oxygen packaging (ROP) method.
 - Sprouting seeds or beans.
 - Offering live, molluscan shellfish from a display tank.

Cooking Food

- The only way to reduce pathogens in food to safe levels is to cook it to its minimum internal temperature.
- The minimum internal temperature to which food should be cooked is different for each kind of food.
- Once the minimum internal cooking temperature is reached, you must hold the food at this temperature for a specified amount of time.
- While cooking reduces pathogens in food, it still does not destroy spores or toxins that may have been produced. So you still must handle food correctly before you cook it.

How to Check Food Temperature

- Pick a thermometer with a probe that is right size for the food that is going to be checked.
- Check the temperature in the thickest part of the food.
- Take at least two different readings in different locations.

Cooking Requirements for Specific Foods

- These are general cooking requirements for different types of foods. Check with your local regulatory agency to make sure that you are meeting their requirements.

Minimum Internal Temperature	Type of Food
165°F (74°C) for 15 seconds	<ul style="list-style-type: none"> ● Poultry – including whole or ground chicken, turkey or duck ● Stuffing made with TCS ingredients ● Stuffed meat, seafood, poultry or pasta ● Dishes that include previously cooked TCS ingredients (Raw

	ingredients should be cooked to their minimum internal temperatures.
155°F (68°C) for 15 seconds	<ul style="list-style-type: none"> • Ground meat – including beef, pork, and other meats • Injected meat – including brined ham and flavor injected roasts • Mechanically tenderized meat • Ground seafood – including chopped or minced seafood • Eggs that will be hot held for service
145°F (63°C) for 15 seconds	<ul style="list-style-type: none"> • Seafood – including fish, shellfish, and crustaceans • Steaks/chops of pork, beef, veal and lamb • Eggs that will be served immediately
145°F (63°C) for 4 minutes	<ul style="list-style-type: none"> • Roasts of pork, beef, veal and lamb
135°F (57°C)	<ul style="list-style-type: none"> • Commercially processed ready to eat foods that will be hot held for service (cheese sticks, deep fried vegetables, etc.)
135°F (57°C)	<ul style="list-style-type: none"> • Fruit, vegetables, grains (rice, pasta) and legumes (beans, refried beans) that will be hot held for service

Cooking TCS Foods in the Microwave

- Meat, seafood, poultry, and eggs that you cook in the microwave must be cooked to 165°F (74°C) . Also follow these guidelines:
 - Cover the food to prevent the surface from drying out.
 - Rotate or stir the food halfway through the cooking process so that heat reaches the food more evenly.
 - Let the covered food stand for at least two minutes after cooking to let the food temperature even out.
 - Check the temperature of the food in at least two places to make sure that the food is cooked through.

Partial Cooking During Preparation

- Some operations partially cook food during the prep process and then finish cooking it just before serving it. Following the steps outlined below to partially cook meat, seafood, poultry, eggs, or dishes containing any of those items:
 - Do not cook the food for longer than 60 minutes before the initial cooking.

- Cool the food immediately after the initial cooking.
- Freeze or refrigerate the food after cooling it. If refrigerating the food, make sure it is held at 41°F (5°C) or lower.
- Heat the food to at least 165°F (74°C) before serving it.
- Cool the food if it will not be served immediately or held for service.
- Your local regulatory authority may require you have a written procedure and explain how the cooked food by this process will be prepared and stored.

Consumer Disclosures

- You must cook TCS food to the minimum internal temperatures listed here – or according to the minimum internal temperatures set by the regulatory authority in your area.
- Disclosure. If your menu includes TCS items that are raw or undercooked, you must disclose it on the menu next to the item.
- Reminder. Always advise customers who order food that is raw or undercooked of the increased risk of foodborne illnesses that can result from eating raw or undercooked foods.

Children's Menus

- The FDA advises against offering raw or undercooked meat, poultry, seafood, or eggs to children.

Operations that Mainly Serve High Risk Populations

- Operations such as nursing homes and child care centers can not serve certain items.
- Never serve raw seed sprouts, raw or undercooked eggs, raw or undercooked meat or seafood where high risk populations exist.

Cooling Food

- When you don't serve food immediately, you must get it out of the temperature danger zone as quickly as possible.
- Cool TCS foods from 135°F (57°C) to 41°F (5°) or lower with six hours by following this procedure:
 - First cool food from 135°F (57°C) to 70°F (21°C) within two hours.
 - Then cool it to 41°F (5°) or lower within the next four hours.
 - If food has not reached 70°F (21°C) within the first two hours, it must be thrown out or reheated and then cooled again.
 - If you can cool the food from 135°F (57°C) to 70°F (21°C) in less than two hours, you can use the remaining time to cool it to 41°F (5°) or lower.
 - Keep in mind that total cooling time CAN NOT be longer than six (6) hours.

Methods for Cooling Food

- Thickness and density of the food affect how quickly food will cool.

- Storage containers will also affect the how quickly food cools. For example, stainless steel transfers heat away from food faster than plastic.
- Never place large quantities of hot food in the cooler to cool. Coolers are designed to keep cold foods cold – not to cool hot foods.
- Always reduce the size of the batch of food that you are trying to cool since this will let it cool faster.
- The following methods are designed to cool foods properly:
 - Ice water bath. After dividing the food into smaller containers, place them in a clean prep sink or large pot filled with ice water. Stir the food frequently to cool it faster and more evenly.
 - Ice paddle. Plastic paddles are available that can be filled with ice or ice water and then frozen. Food stirred with these paddles will cool quickly.
 - Foods cool very fast when placed in an ice water bath and stirred with an ice paddle.
 - Blast chiller or tumble chiller. These blast cold air across food at high speeds to remove heat. They are typically used to cool very large amounts of food.
 - Food can also be cooled by adding ice or cold water as an ingredient. This works for certain soups, stews, and other recipes that have water as an ingredient.

Reheating Food

- How you reheat food depends on how you intend to use the food.
- Food reheated from hot holding. From start to finish, you must heat the food to an internal temperature of 165°F (74°C) within two hours. Make sure that food stays at this internal for at least 15 seconds.
- Food reheated for immediate service. You can reheat food that will be served immediately, like beef for a beef sandwich, to any temperature. However you must make sure that the food was initially cooked and cooled correctly.