

PREPARATION

Handling food safely during preparation is critical to preventing foodborne illness. Procedures for how to do so should be part of your restaurant's food safety plan.

Thawing

Freezing prevents bacteria from growing in food. If a food has been temperature abused -- held between 41°F (5°C) and 135°F (57°C) for more than four hours -- before freezing, it could be unsafe to eat after it has thawed. Unsafe thawing allows bacteria to grow to large numbers and possibly produce toxins (or poisons). If the food is then refrozen, large numbers of bacteria and all toxins will survive. When the food is thawed again, these bacteria and toxins could cause foodborne illness. To prevent this from happening, thaw potentially hazardous food using one of the following four methods: (1) in the refrigerator (best way); (2) during cooking; (3) in the microwave oven followed by cooking; or (4) under cold, running water.

Food Safety Procedures for Preparing Specific Foods

Meat, Fish, and Poultry

- Use clean and sanitized work areas, cutting boards, knives, and utensils.
- Wash hands properly before, during, and after handling.
- Remove from refrigerated or frozen storage only as much food as you can prepare within a short time.
- Refrigerate or freeze meats, fish, and poultry immediately after cutting, slicing, dicing, breading, or battering.

Salads Containing Potentially Hazardous Food

- Make sure meat, fish, and poultry has been properly cooked, held, cooled, and stored before adding them to a salad.
- Discard cooked and cooled potentially hazardous foods after seven days if stored in a refrigerator at 41°F (5°C) or colder.
- Chill all ingredients, including those that are not potentially hazardous, in the refrigerator until they are ready to be mixed.
- Chill all containers and utensils before using them to make salad.
- Prepare food in small batches.

Eggs and Egg Mixtures

- Handle pooled eggs (if allowed by your local health department) with special care.
- Always use pasteurized eggs or egg products if serving high-risk populations, such as individuals in hospitals and nursing homes.
- Promptly clean and sanitize all equipment and utensils used to prepare eggs.
- Only use pasteurized shell eggs or pasteurized egg products when preparing egg dishes that require little or no cooking.

Batter and Breading

- Prepare batter in small batches.
- When breading food that will be cooked at a later time, refrigerate or freeze as quickly as possible.
- Throw out any unused batter or breading after it has been at room temperature for four hours or longer.
- Use pasteurized shell eggs or egg products to make batter.

Fruit and Vegetables

- Make sure fruit and vegetables that have been properly cleaned and sanitized before use.
- It is best to cut fruits and vegetables on surfaces that have not been used to prepare raw meat, fish, or poultry.
- Wash fruit and vegetables thoroughly under running water before cutting, cooking, or combining with other ingredients.
- Refrigerate and hold cut melons at 41°F (5°C) or colder.
- Do not serve raw seed sprouts if you primarily serve high-risk populations,.

Ice

- Use safe water to make ice.
- Ice used to chill food or beverages should never be used as an ingredient.
- Use a clean, sanitized container and ice scoop to dispense ice from an ice machine.

Washing Produce

Harmful microorganisms and chemicals might be on the outside surfaces of raw fruits and vegetables. Washing removes most of the microorganisms and/or chemicals present. However if unsafe water is used for washing, the fruits and vegetables could become contaminated. Wash raw fruits and vegetables in safe water before cutting, combining with other ingredients, cooking, serving, or offering for immediate consumption. If chemicals are used to wash fruits and vegetables, they must meet federal requirements. Never use chlorine bleach or other sanitizers to wash.

Cooking

Potentially hazardous food should be cooked to the recommended internal temperature. The only way to determine if a food has been cooked to the proper internal temperature is to use a thermometer. It is very important to include in your food safety plan how you will monitor cooking temperatures.

Food	Minimum internal temperature
Poultry	165°F (74°C)
Stuffing and stuffed meat	165°F (74°C)
Dishes that include potentially hazardous ingredients	165°F (74°C)
Ground meats (including beef, pork, and other meat or fish)	155°F (68°C)
Injected meats (including brined ham and flavor-injected roasts)	155°F (68°C)
Pork, beef, veal, and lamb	145°F (63°C) for steaks/chops 155°F (68°C) for roasts
Fish, whole or fillets Stuffed fish (or stuffing containing fish) Ground, chopped, or minced fish	145°F (63°C) 165°F (74°C) 155°F (68°C)
Shell eggs for immediate service Shell eggs that will be hot-held	145°F (63°C) 155°F (68°C)
Fruits or vegetables that will be hot-held	135°F (57°C)
Commercially processed, ready-to-eat food that will be hot-held	135°F (57°C)
Potentially hazardous food cooked in a microwave oven	165°F (74°C)

Microwave Cooking

All raw animal foods must be rotated or stirred during cooking; covered to retain surface moisture; heated to at least 165°F (74°C); and allowed to stand covered for two minutes after cooking. Raw animal foods include meat, fish, poultry, and eggs that have not been processed.

Cooling Potentially Hazardous Foods

Cool potentially hazardous food rapidly after cooking to prevent the growth of bacteria. When food is cooled too slowly, bacteria can grow to large numbers. Some of these bacteria form toxins (or poisons). Reheating the food to 165°F (74°C) or hotter will not necessarily make improperly cooled food safe to eat. The following are safe methods that can be used to quickly and safely cool foods:

- Reduce the quantity or size of the food you are cooling. Cut large food into smaller pieces or divide large containers into smaller containers or shallow pans.
- Use an ice-water bath. Stir food to cool it faster and more evenly.
- Use a blast chiller to cool food before placing it into a refrigerator.
- After cooking is complete, add ice or cool water as an ingredient.

Regardless of which method you use, the food must be cooled:

- within two hours from 135°F (57°C) to 70°F (21°C) and then within an additional four hours from 70°F (21°C) to 41°F (5°C) or
- within four hours from 135°F (57°C) to 41°F (5°C) or colder.

Cool potentially hazardous food made from ingredients that are at room temperature (such as canned tuna or dried food) within 4 hours to 41°F (5°C) or colder.

Reheating Foods

The total time to reheat a food must not be more than two hours. Harmful bacteria are more likely to grow in reheated cooked foods than they are in raw foods.

- Reheat commercially processed food that will be hot-held to least 140°F (60°C).
- Reheat food that will be hot-held to at least 165°F (74°C) for 15 seconds within two hours.
- Food that is reheated for immediate service to a customer can be reheated to any temperature as long as the food was properly cooked and cooled before it was reheated.

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