



# Food Storage & Safety Guide

Best Practices | Guidelines | Resources

 **TriMark**  
Foodservice Equipment, Supplies and Design

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# DRY STORAGE

- ◆ To prevent contamination from liquids, dust, insects and rodents, store food at least **6 inches** above floor.
- ◆ Ensure store room is well ventilated with a humidity level around 50-60%.
- ◆ Allow for a 2-foot ceiling and 18-inch outside wall clearance to protect foods from higher temperatures.
- ◆ Store all cleaning and chemical products on shelves below dry goods (as well as utensils).
- ◆ Follow the **FIFO** inventory management rule: first in, first out.
- ◆ Increase the shelf life of bulk products - such as flour, sugar, rice and grains - by transferring them from their original packaging into air-tight, BPA-free plastic containers.
- ◆ Opt for food grade containers that lock out moisture with easy snap-on lids.
- ◆ Clearly label all containers including the delivery date and best by date.
- ◆ Toss out canned goods that are too dented to stack, bulging at the ends, punctured, or have leakage stains.
- ◆ Adhere to special storage instructions on packaging, such as “store in a cool, dry place” or “refrigerate after opening”.



- ◆ Maintain a room’s temperature between 50°F and 70°F.
- ◆ Use shelving units to maintain a clean and organized work area, decreasing the amount of time employees need to locate items during the day.
- ◆ Set up a regular cleaning and maintenance schedule for shelves and food surfaces.

# COLD STORAGE - Refrigeration

Maintain proper temperatures to prevent cross-contamination between raw and prepared food. Ensure food is thawed, cooled and handled properly with these cold storage guidelines.

## **Refrigeration**

- ◆ Place items on shelves to allow for proper airflow and circulation; do not overload units or block vents.
- ◆ Store food at least **6 inches** above floor to prevent contamination.
- ◆ Properly wrap foods and label each with the date prepared or received.
- ◆ Store uncooked meat, fish and poultry on bottom shelves to avoid juices from leaking on other items.
- ◆ Always refrigerate perishable foods within 2 hours.
- ◆ Keep all prepared foods in sealed containers; cover with aluminum foil, plastic wrap or a tight-fitting lid.
- ◆ Follow the **FIFO** inventory management rule: first in, first out.
- ◆ Discard food after seven calendar days, and habitually check for and toss spoiled foods.
- ◆ Ensure your unit has a working refrigerator thermometer that is accurate to within 2°F.
- ◆ Eliminate bacterial hazards by maintaining stable and safe internal temperatures at or below 38 - 40°F.
- ◆ Regularly monitor and log internal equipment temperatures.
- ◆ Maintain cleanliness by wiping down shelves and mopping walk-in cooler floors on a routine basis.
- ◆ Organize similar products together such as dairy with other dairy products, produce with other produce, etc. so it's easier for your staff to understand. This helps them to remember where items are stored, creating a more efficient system.



# COLD STORAGE - Freezers

## Freezers

- ◆ Maintain proper air flow and circulation; do not overload units or block vents.
- ◆ Use free-standing freezers for long-term storage (months) and mounted freezers for short-term storage (days or weeks).
- ◆ Properly package and cover food to maintain quality and prevent freezer burn.
- ◆ Follow the **FIFO** stock rotation rule: first in, first out.
- ◆ Ensure your unit has a visible, working thermometer that is accurate to within 2°F.
- ◆ Keep frozen foods solid with a unit temperature of 0°F or below to maintain quality.
- ◆ Regularly monitor and log internal equipment temperatures.
- ◆ Do not use freezers for cooling foods.
- ◆ Defrost units periodically and store frozen food in a separate freezer during the defrosting process.
- ◆ Make cleanliness a priority by wiping down shelves on a routine basis.



# COLD STORAGE - Recommended Storage Times

Reprint courtesy of Nutrition & Foodservice Edge magazine.

FOOD PRODUCT	REFRIGERATOR 36-40°F	FREEZER 0°F
<b>Dairy</b>		
Fluid milk	5-7 days after <i>sell by</i> date	1-3 months
Nonfat dry milk (NFDM)	5-6 months	10-12 months
Reconstituted NFDM	3-5 days	Freezes poorly
Buttermilk	1-2 weeks	Freezes poorly
Cheese Spread, opened	2 weeks	Freezes poorly
Condensed milk, opened	3-5 days	1 month
Evaporated milk, opened	3-5 days	Freezes poorly
Whipping cream	10 days	2 months
Whipped cream	< 1 day	1 month
Cream cheese	2 weeks	Freezes poorly
Cream - half and half	3-4 days	4 months
Margarine	4-5 months	12 months
Butter	1-3 months	6-9 months
Pudding	Package date; 2 days after opening	Freezes poorly
Sour cream	7-21 days	Freezes poorly
Yogurt	1 week after <i>sell by</i> date	1-2 months
<b>Dough</b>		
Tube cans of rolls, biscuits, pizza dough, etc.	<i>Use by</i> date	Freezes poorly
Ready-to-bake pie crust	<i>Use by</i> date	2 months
Cookie dough	<i>Use by</i> date unopened or opened	2 months
<b>Fish</b>		
Lean fish (cod, flounder, sole, haddock)	1-2 days	6 months
Fatty fish (bluefish, mackerel, salmon)	1-2 days	2-3 months
Cooked fish	3-4 days	4-6 months
Smoked fish	14 days or date on	2 months in vacuum

# COLD STORAGE - Recommended Storage Times

FOOD PRODUCT	REFRIGERATOR 36-40°F	FREEZER 0°F
<b>Shellfish</b>		
Shrimp, scallops, crayfish, shucked clams, mussels and oysters	1-2 days	3-6 months
Live clams, mussels, crab, and oysters	2-3 days	2-3 months
Live lobster	1-2 days	2-3 months
Cooked shellfish	3-4 days	3 months
<b>Processed Meats</b>		
Hot dogs, opened package	1 week	1-2 months
Hot dogs, unopened package	2 week	1-2 months
Luncheon meats, opened package	3-5 days	1-2 months
Luncheon meats, unopened package	2 weeks	1-2 months
Bacon	7 days	1 month
Sausage, raw	1-2 days	1-2 months
Smoked breakfast links, patties	7 days	1-2 months
Hard sausage	2-3 weeks	1-2 months
Summer sausage – labeled “Keep refrigerated” Opened	3 weeks	1-2 months
Summer sausage – labeled “Keep refrigerated” Unopened	3 months	1-2 months
<b>Ham, Corned Beef</b>		
Corned beef, in pouch with pickling juices	5-7 days	Drained, 1 month
Ham, canned – labeled “Keep refrigerated” Opened	3-5 days	1-2 months
Ham, canned – labeled “Keep refrigerated” Unopened	6-9 months	1-2 months
Ham, fully cooked vacuum-sealed at plant, undated, unopened	2 weeks	1-2 months
Ham, fully cooked vacuum-sealed at plant, dated, unopened	<i>Use by date on package</i>	1-2 months
Ham, fully cooked, whole	7 days	1-2 months
Ham, fully cooked, half	3-5 days	1-2 months
Ham, fully cooked, slices	3-4 days	1-2 months

# COLD STORAGE - Recommended Storage Times

FOOD PRODUCT	REFRIGERATOR 36-40°F	FREEZER 0°F
<b>Fresh Beef, Veal, Lamb, Pork</b>		
Hamburger and stew meat	1-2 days	3-4 months
Steaks	3-5 days	6-12 months
Chops	3-5 days	4-6 months
Roasts	3-5 days	6-12 months
Pre-stuffed, uncooked chops or chicken breast stuffed with dressing	1 day	Freezes poorly
Soups or stews with meat	3-4 days	2-3 months
<b>Meat Leftovers</b>		
Cooked meat and meat casseroles	3-4 days	2-3 months
Gravy and meat broth	1-2 days	2-3 months
<b>Poultry</b>		
Raw chicken or turkey, whole	1-2 days	1 year
Raw chicken or turkey, pieces	1-2 days	9 months
Cooked poultry casseroles	3-4 days	4-6 months
Fried chicken	3-4 days	4 months
Pieces covered with broth or gravy	1-2 days	6 months
<b>Eggs</b>		
Fresh, in shell	3-5 weeks	Freezes poorly
Raw yolks, whites	2-4 days	1 year
Hardcooked	Up to 7 days	Freezes poorly
Liquid pasteurized eggs, egg substitutes Opened	3 days	Freezes poorly
Liquid pasteurized eggs, egg substitutes Unopened	10 days	Freezes poorly
<b>Fruit Beverages</b>		
Juices in cartons, fruit drinks, punch Opened	7-10 days	8-12 months
Juices in cartons, fruit drinks, punch, Unopened	3 weeks	8-12 months

1. Table adapted from Refrigeration and Food Safety, USDA Food Safety and Inspection Service [www.foodsafety.gov](http://www.foodsafety.gov)

2. Table adapted from "Recommended Food Storage Times, Cold & Dry, Refrigerated & Frozen Foods," University of Kentucky, Cooperative Extension Service, College of Agriculture, ([www.ca.uky.edu/HES/fcs/factshts/FN-SSB.085.PDF](http://www.ca.uky.edu/HES/fcs/factshts/FN-SSB.085.PDF))

# HOT STORAGE

Safe temperatures and careful food handling are critical to destroy potential contaminants and prevent the spread of bacteria. Follow these hot storage tips to keep guests healthy and happy.

- ◆ Always clean [holding units](#) prior to use.
- ◆ Pre-heat holding units before storing food to maintain a consistent food temperature.
- ◆ Keep hot foods hot – maintain temperatures at or above 140°F and reheat food to 165°F before serving.
- ◆ Monitor internal food temperatures with a [food thermometer](#), accurate to within 3°F.
- ◆ Ensure food is cooked to internal temperatures of at least 160°F before storing in holding units, such as [steam table pans](#).
- ◆ Do not use hot holding units to reheat or cook food.
- ◆ Stir food-filled [chafing dishes](#) and [food pans](#) frequently to prevent burning and to keep temperatures uniform.
- ◆ Place [utensils](#) in the food during meal service to prevent contamination.
- ◆ Transport hot items in food-safe carriers that meet [NSF requirements](#).
- ◆ Begin meal service within 30 minutes of putting food on display.
- ◆ Use properly installed [sneeze guards](#) to protect food display areas from contamination.



## THE DANGER ZONE

When potentially hazardous foods are exposed to warm temperatures for more than two hours, they develop bacterial microbes that cause food poisoning.

Coined by the FDA, The Danger Zone ranges between 40° and 140°F. Avoid harmful bacterial growth and protect customers from illness by closely monitoring the temperature for your refrigerated units.

# CATERING - *Best Practices*

From preparing food for wedding banquets to overseeing a buffet for a corporate event, catering operations must take extra care to prevent foodborne illnesses and bacterial contamination. Off-site food transportation poses an increased safety risk, as there is more opportunity for food to be mishandled or exposed to the temperature Danger Zone.

Use these best practices to create a memorable (and safe) event:

- ◆ Apply for an operating permit and renew it annually.
- ◆ Check with a local health inspector to ensure your catering operation meets health code regulations.
- ◆ Clean and sanitize catering vehicles prior to event.
- ◆ Prepare, package, and store food in designated foodservice establishments (commissaries), never in private homes or on-site at the event.
- ◆ Prevent food poisoning by maintaining optimal food temperatures for the duration of the event. [Stainless steel chafers](#) and [ice displays](#) are excellent food safety tools that double as stylish additions to your [buffet](#).
- ◆ Monitor temperatures of potentially hazardous foods. Keep a [thermometer](#) on hand and regularly check internal temperatures of perishable foods.
- ◆ Bring sufficient equipment such as [holding cabinets](#) or [food carriers](#) to further ensure proper temperatures are maintained.



# CATERING - *Best Practices*



- ◆ Reheat solid foods to at least 165°F and liquid foods to a boil before serving.
- ◆ Avoid using food holding equipment to reheat food, such as [heat lamps](#) or steam tables, as these do not have the capacity to bring internal food temperatures to a piping hot 165°F.
- ◆ Opt for electrical or insulated carriers to safely transport food while maintaining appropriate temperatures. Always keep hot and cold foods in separate carriers—never mix.
- ◆ Develop a transport checklist to guarantee all food, equipment and [supplies](#) are accounted for and not left behind. Use a new checklist for every event.

## FOOD HANDLER'S GEAR

Ensure your serving staff is properly equipped with the apparel and tools they need:

- Portable hand wash stations
- Disposable [gloves](#), and other sanitary food handling supplies
- Serving [tongs](#), [forks](#), [spoons and ladles](#)
- Clean [aprons](#) and outer garments
- Hair nets or other restraints
- First aid [kits](#)

# FOOD SAFETY DURING STORAGE

## *Preventing Cross-Contamination or Food Borne Illnesses*

Build a system for storing, using and throwing out items to maintain food safety in any commercial kitchen. Properly label, organize and stock ingredients and prep work in order to reduce harmful bacteria and keep food fresh for as long as possible.

- ◆ Prepare raw and cooked food in separate work spaces.
- ◆ Washing hands and exposed areas of the arms as often as necessary, such as before or after all food handling, or when changing tasks during food prep.
- ◆ Proper hand washing calls for 20 seconds in soap and warm water that is 110°F.
- ◆ Avoid preparing foods with bare hands; instead, use food safe [gloves](#).
- ◆ Prevent bacterial growth by cooking foods until they are finished (never cook them partially).
- ◆ Store raw meat items, such as poultry, beef and seafood, below prepared foods to prevent juices from spilling into them.
- ◆ Ensure all foods are covered and stored in appropriate [containers](#).
- ◆ Abide by “best before” dates and other food packaging guidelines, such as “store in a cool, dry place” or “refrigerate after opening”.
- ◆ Establish personal hygiene policies for employees, and post reminders to stress importance.
- ◆ Remember the “when in doubt, throw it out” principle: food inside containers that are damaged, improperly sealed, or otherwise questionable, has likely spoiled and should be tossed.



# FOOD SAFETY DURING STORAGE

## Food Temperatures

- ◆ Use the appropriate thermometers on your equipment so that food remains outside the temperature danger zone (40°F to 140°F), where bacteria thrives and grows rapidly.
- ◆ Utilize kitchen [thermometers](#) to verify foods are cooked to minimum internal temperatures, checking in at least two places to make certain even temperatures are throughout.
- ◆ Check temperatures for prepared foods like soups and stews a minimum of every two hours to ensure food is above 140°F.
- ◆ Hold hot foods in food warmers such as [chafing dishes](#), [soup warmers](#), [steam tables](#), warming trays, and slow cookers.
- ◆ Store cold foods in cold holding units, such as refrigerated [display cases](#) or [ice displays](#).

Food	Safe Internal Temperature
Steak and Roast	145° F
Fish	145° F
Pork	160° F
Ground Beef	160° F
Egg Dishes	160° F
Chicken Breasts	165° F
Whole Poultry	165° F
Casseroles/ Mixed Dishes	165° F



# FOOD SAFETY DURING STORAGE

## *Storage Containers*

- ◆ Store prepared ingredients in air-tight containers to prevent food from spoiling or spilling. For refrigerator or freezer storage, be certain the containers are designed for use in this equipment.
- ◆ Label and date all containers appropriately and implement the **FIFO** storage system (first in, first out).
- ◆ Utilize color-coded storage containers or lids to keep ingredients organized and fresh. This is very important when it comes to food allergies.
- ◆ Only use containers that are clean, sanitized and dry.



# ALLERGY PREVENTION

With food allergies becoming a popular topic in the foodservice industry, establishments need to properly prepare for customers that have an allergy. One of the most important points is to store and prep ingredients separate from others to avoid cross-contact.

Here are simple storage guidelines to follow for allergen safety:

- ◆ Always keep allergen-free food in air-tight **purple** storage containers to help your staff easily identify these ingredients.
- ◆ Shared workspace and cooking tools should not be used, but if you must, be sure to wash and sanitize all utensils and prep areas thoroughly.
- ◆ **Label** all equipment and supplies that will store allergen-free foods. This includes shelving, refrigerators, mixing bowls and other essentials. Most manufacturers are starting to offer purple color-coded supplies to make it easier to find.

## Most common foods that cause allergic reactions:

- Peanut
- Tree Nuts
- Milk
- Egg
- Wheat
- Soy
- Fish
- Shellfish



# CLEANING AND SANITIZING

Maintaining a clean commercial kitchen is a necessity for a foodservice establishment. While washing only removes visible surface soils, sanitizing takes cleaning a step further by banishing harmful bacteria and invisible germs.

Follow these guidelines for ensuring food preparation areas and supplies are ready for use.

- ◆ Prevent bacterial growth in storage units by routinely cleaning and sanitizing shelves.
- ◆ Keep floors free of dirt and food spills.
- ◆ Hold regular internal inspections of all storage areas.
- ◆ Wash prep surfaces and tools frequently in hot, soapy water.
- ◆ Remove food and other contaminants from surfaces; then clean with an appropriate detergent and water solution of 110°F.
- ◆ After rinsing with hot water, use a sanitizing solution based on the manufacturer's directions to reduce the number of bacteria present.
- ◆ Keep all food at least 6 inches off the floor.





# FOOD STORAGE & SAFETY RESOURCES

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## **USDA**

[http://www.fsis.usda.gov/shared/PDF/Refrigeration\\_and\\_Food\\_Safety.pdf](http://www.fsis.usda.gov/shared/PDF/Refrigeration_and_Food_Safety.pdf)

## **FDA**

<http://www.fda.gov/Food/ResourcesForYou/Consumers/ucm114299.htm>

## **Gourmet Sleuth**

<http://www.gourmetsleuth.com/articles/detail/food-storage-guidelines>

## **Foodsafety.gov**

<http://www.foodsafety.gov/>

## **CA Department of Education**

<http://www.cde.ca.gov/ls/nu/fd/mb00404.asp>

## **NFSMI**

<http://www.nfsmi.org/documentlibraryfiles/pdf/20080610114058.pdf>

## **FoodSafety.com**

<http://www.foodsafety.com/>

## **ServeSafe**

<http://www.servsafe.com/home>

## **Food Safety Magazine**

<http://www.foodsafetymagazine.com/>

## **Center for Disease Control**

<http://www.cdc.gov/foodsafety/>

## **Food Allergy Research and Education**

<http://www.foodallergy.org/>