



Home Storage of Foods: Refrigerator and Freezer Storage

Bulletin: E340



Cooperative Extension

FAMILY AND COMMUNITY HEALTH SCIENCES

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Quality and Safety

We store food to make meal preparation easier, take advantage of lower prices and to be prepared for emergencies. We want food to be safe and high quality. The quality of a food will be better if you use it within the recommended storage time.

Quality and safety are not the same. High quality food tastes, smells and looks good. A safe food will not make you sick. However, sometimes food contains microbes that can make people ill. These include: bacteria, viruses, molds and parasites. People need to be careful because an unsafe food may look and smell fine, but contain microbes that cause illness. For example, a huge pot of hot chili in the refrigerator will not cool quickly and may support bacterial growth that will make someone sick. On the other hand, chicken with freezer burn is safe, yet poor in quality. The goal of proper food storage is to provide both safe and high quality foods.

A food's quality depends on several factors: the condition of the raw food, how the food is made, the way the food is stored and the length of storage. For example, wrapping or covering food in the refrigerator will keep it from drying out. The following guidelines will help you keep food fresh and safe.

Buy Good Quality

- Buy fresh fruits and vegetables that have good color and smell, and the right amount of softness or firmness for the food. Produce does not have to look "perfect"; small cuts, spots, soft spots or bruises are "ok". Avoid produce that is starting to show spoilage such as mold, major soft spots or deep cuts.

- Refrigerated foods should be cold with packages sealed and clean. Only buy what food you will use within the recommended storage times, so food does not spoil before use.
- Frozen foods should be frozen solid. Packages should not be discolored or have food residue on the outside since these may be signs of thawing and refreezing.
- Use dates on packaged foods, if available.
 - "Sell by date" is the last recommended day of sale in the store. These foods are safe to eat after this date, but may not taste as fresh. Examples: milk and other dairy foods.
 - "Use by" or "Best if Used By (or Before)" is recommended for best flavor or quality. It is not a purchase or safety date.
 - "Expiration date" or "Do not use after" is the last day you should eat or use the food. The food may lose quality, may not work correctly in a recipe or it may be unsafe after that date. Yeast and infant formula have "expiration dates."
 - "Code date or number" is a number that the manufacturer uses to track their products. It does not tell you how long the food will be good in your home.

Store It Right

If a food is not handled correctly, it will not keep very long. Follow the rule: **First In, First Out**. This means you use the oldest foods first. Put newly purchased foods behind the same foods already on the shelf. It may help to write purchase dates on products without dates on the package. Write dates on leftovers and foods you put in the freezer.

RUTGERS

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Refrigerator:

- **Keep a thermometer in the refrigerator and keep the temperature at 35° F to 40° F.**
- Open the door as little as possible. Every time the door opens, warm air enters which can raise the temperature of the refrigerator and lower food quality. It also increases electricity costs.
- Wrap or cover food to prevent the loss of flavor and moisture. It also prevents the mixing of flavors and odors, so your milk does not taste like onion or fish.
- Place raw meat, poultry, or fish on a plate or tray and put on the lowest shelf in the refrigerator. This will keep the food from dripping onto and contaminating other foods.
- Wrap or package leftovers to keep them from leaking and drying out. Plastic bags and containers work well. Most leftovers are best used within 3 to 4 days.



Freezer:

- **Keep a thermometer in the freezer and keep the temperature at or below 0°F. If the temperature is higher than 0°F, the food will not keep its good quality as long.**
- Keep your freezer full with food or add ice. A full freezer holds its temperature better.
- Open the door as little as possible. Every time the door opens, warm air enters which can raise the temperature of the freezer and lower food quality. It also increases electricity costs.
- Wrap foods in moisture-proof, freezer-weight wrap or use plastic containers. Examples of wrap are plastic freezer bags, heavy foil, and freezer paper. Label and date packages.
- Keep a list of foods in the freezer. This will help with meal planning, knowing what to purchase, and minimize searching for food.

- Freezer burn on a food looks like a dry spot and food may be white or gray in color. It is the result of cold air getting to the food's surface and drying the food out. Freezer burn will not make you sick, but the food will be dry and tough. Wrapping food tightly and sealing out air will help protect the food.
- Ice crystals or frost may appear on food or in packaging during storage in the freezer. This is moisture evaporation from the food and will result in a dried out product. It is more common in baked goods, fruit and vegetables. Wrapping food tightly, sealing out air and following storage guidelines will help minimize moisture loss.
- Frozen food stored beyond the recommended time will be safe to eat. However, the food may be dried out, tough and flavor or texture may change.

Keep It Clean

Since bacteria can get into food during food handling, keep everything – hands, counter tops, dishes, utensils, and the refrigerator and freezer - clean. Wash your hands with soap and warm water for at least 20 seconds before putting away groceries, preparing food, or putting away leftovers. This will greatly reduce the risk spreading bacteria and viruses and getting sick.

For More Food Safety Information:

Websites:

Rutgers Cooperative Extension: njaes.rutgers.edu

FightBAC!™: www.fightbac.org

Food Safety and Inspection Service : fsis.usda.gov

General: www.FoodSafety.gov

Telephone:

Call the county Cooperative Extension office or your county government. Offices are listed on the NJAES website.

USDA Meat & Poultry Hotline: Weekdays 10 to 4 PM EST, 1-800-535-4555

Food and Drug Administration Food Information Line: 1-888-723-3366



Food	Refrigerator: 35° - 40°F (*= not recommended ; NA= not applicable)	Freezer: 0°F (*= not recommended ; NA= not applicable)	Notes
DAIRY			
Buttermilk	1-2 weeks	3 months	
Butter or margarine	1-3 months	6-9 months	Read labels, some margarines do not freeze well
Condensed & evaporated milk (opened)	4-5 days	*	
Cottage cheese, Ricotta	1 week	*	
Cream - heavy, whipping, half & half, light (unwhipped)	10 days	*	
Cream - whipped in aerosol can	3 months	*	
Milk	1 week	1 month	
Cheese (hard) - cheddar, Monterey Jack, swiss, block Parmesan, etc.	6 months unopened & 3-4 months opened	6 months	
Cheese - grated or shredded	1 month	3-4 months	
Cheese - processed food products	3-4 weeks	4 months	
Cheese - cream (opened)	2 weeks	*	
Cheese spreads & processed cheese	3-4 weeks	*	
Ice cream, frozen yogurt	*	2-4 months	
Sour cream	1-3 weeks	*	
Yogurt	7-14 days	1-2 months	Check package date
BEEF, LAMB, PORK, VEAL			
Chops	3-5 days	4-6 months	
Pre-stuffed uncooked chops	1 day	*	
Roasts	3-5 days	4-12 months	
Steak	3-5 days	6-12 months	
Stew meat	1-2 days	3-4 months	
Ground meat	1-2 days	3-4 months	
Sausage, smoked - pepperoni, jerky	2-3 weeks	1-2 months	
Sausage - raw from chicken, turkey, beef or pork	1-2 days	1-2 months	
Sausage - summer (labeled "keep refrigerated")	unopened - 3 months; opened 3 weeks	1-2 months	

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BEEF, LAMB, PORK, VEAL (cont'd)			
Smoked breakfast links or patties	7 days	1-2 months	
Whole ham (fully cooked)	7 days	1-2 months	
Half ham (fully cooked)	3-5 days	1-2 months	
Sliced ham (fully cooked)	3-4 days	1-2 months	
Canned ham - labeled "keep refrigerated"	6-9 months unopened & 3-5 days opened	1-2 months	Do not freeze in can
Bacon	7 days	1 month	
Corned beef	5-7 days (in pouch with juices)	1 month (drained)	
Hotdogs	2 weeks unopened & 1 week opened	1-2 months	
OTHER MEATS			
Bison (Buffalo)	Ground or stew meat - 2 days; larger cuts - 3-5 days	Ground or cut-up - 4 months; Chops, steak & roasts - 6-9 months	
Other game - Elk, rabbit	3-5 days	6-9 months	Less time for ground, stew meat or chops. Longer time for roast.
Smoked game, vacuum-sealed	Sealed - 2 weeks (or 1 week after "Use-By" date); opened 7 days	1-2 months	
Variety Meats - heart, liver, kidney, tongue, etc.	1-2 days	3-6 months	
Venison - Roasts, steaks, chops	3-5 days	9-12 months	Less time for ground, stew meat or chops. Longer time for roast.
DELI & VACUUM-PACKED MEAT PRODUCTS			
Lunch meats (vacuum packed & unopened)	2 weeks	1-2 months	
Lunch meats (vacuum packed or fresh cut, opened)	3-5 days	1-2 months	
COOKED, LEFTOVER MEAT			
Meat & meat casseroles	3-4 days	2-3 months	
Gravy & meat broth	3-4 days	2-3 months	
Soups & stews	3-4 days	2-3 months	

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POULTRY PRODUCTS			
Chicken or turkey, whole	1-2 days	1 year	
Chicken or turkey, pieces	1-2 days	9 months	
Giblets	1-2 days	3-4 months	
Ground turkey & chicken	1-2 days	3-4 months	
Duck, whole	1 day	6 months	
Game birds - goose, pheasant, quail	1-2 days	6-12 months	
COOKED, LEFTOVER POULTRY			
Fried chicken	3-4 days	4 months	
Cooked casseroles	3-4 days	4-6 months	
Plain pieces	3-4 days	4 months	
Pieces with broth/gravy	3-4 days	6 months	
Nuggets or patties	3-4 days	1-3 months	
EGGS			
Fresh in shell	3-5 weeks	*	
Raw yolks, whites	2-4 days	1 year	
Hardcooked	1 week	*	
Liquid pasteurized eggs or egg substitute	10 days unopened & 3 days opened	unopened - 1 year; opened not recommended	
Eggnog	commercial 3-5 days; homemade 2-4 days	commercial 6 months, homemade not recommended	
FISH			Keep finfish & shellfish on ice in the refrigerator
Fresh finfish			
Lean fish – cod, flounder, haddock, halibut, pollack, ocean perch, sea trout & rock fish	3 days	6-8 months	
Fatty fish – bluefish, mackerel, mullet, smelts, salmon, swordfish, trout, tuna, etc.	3 days	2-3 months	

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Fresh or live shellfish			
Live crabs & lobster	1-2 days	*	
Live clams, mussels & oysters	4-5 days	*	
Shrimp, scallops, crawfish, squid	4 days	5 months	
Smoked fish	14 days	2 months	
FRUITS			Contact Family & Community Health Sciences for specific directions on how to freeze fruit.
Apples	6 weeks	12 months, cooked	
Apricots	3-4 days	12 months	
Bananas	*	12 months	Refrigerating bananas will cause the skin, but not the flesh to darken.
Berries	1-2 days	12 months	
Cherries	1 week	12 months	
Grapes	1 week	1 month	
Citrus: grapefruit, lemons, limes & oranges	2-8 weeks	3-4 months	
Guavas	1-2 days	12 months	
Kiwis (Chinese gooseberry)	1-2 days	12 months	
Mangos	2-3 days	12 months	
Melons	3-4 days	12 months	
Papayas	1 week	12 months	
Peaches & nectarines	3-4 days	12 months	
Pears	3-4 days	12 months	
Pineapples	3-5 days	12 months	
Plantains	*	12 months	
Plums	3 days	12 months	
Pomegranate	3 months whole	3 months - whole seeds	
Rhubarb	1 week	12 months	
FRUIT JUICES			
Apple or Cider	6 Days	NA	
Bottled or canned (opened)	3-4 Days	NA	
Concentrate	6 Days	1 Year	

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VEGETABLES			Contact Family & Community Health Sciences for specific directions on how to freeze vegetables.
Asparagus	3-4 days	12 months	
Avocados	3-5 days	*	
Beans, shell - lima, fava, soy	2 -3 days in pod & 1-2 days shelled	12 months	
Beets	3 weeks	12 months	
Bok Choy	1-3 days	12 months	
Broccoli	4 days	12 months	
Brussel Sprouts	3-5 days	12 months	
Cabbage - green, red, napa, savoy	1-2 weeks	1 Year	Freeze for cooked dishes only, otherwise soggy
Carrots	2 weeks	12 months	
Cauliflower	5 days	12 months	
Celery	1-2 weeks	10-12 months	
Chilies & hot peppers	2 weeks	12 months	
Cilantro	1-3 days	*	Stand roots or stems in water & cover loosely with plastic bag in refrigerator
Corn	1-2 days	On cob - 8-10 months; kernals - 12 months	Use immediately for best flavor
Cucumbers	1 week	*	
Eggplant	3-4 days	12 months	
Green beans	3-5 days	8 months	
Greens – spinach, collards, swiss chard, kale, mustard, etc.	1-2 days	10-12 months	
Jerusalem artichokes	1 week	12 months	
Jicama	2-3 weeks, uncut	12 months	
Kohlrabi - leaves	2-3 days	12 months	
Kohlrabi - stem	1 week	12 months	
Leeks	1 week	3-6 months	
Mushrooms	3-7 days	10-12 months	Unopened, packaged mushrooms keep longest
Onions, green - scallions	1-2 weeks	3-6 months	
Okra	3-4 days	12 months	
Parsley	2-3 days	*	

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VEGETABLES (cont'd)			
Peas	1-2 days	12 months	use immediately for best flavor
Peppers - green, red, yellow	1 week	6-8 months	
Radishes - red, Diakon	2 weeks	*	
Squash, hard	*	12 months	
Squash, summer - yellow crookneck, zucchini	4-5 days	12 months	
Tomatillos	1 month	12 months	
Tomatoes	2-3 days	12 months	For best flavor do not refrigerate
Yuca (Cassava)	*	12 months	
BAKED PRODUCTS			
Breads			In general, do not refrigerate. Breads stale faster in the refrigerator. However, refrigeration may reduce mold growth if home is hot & humid.
Bread, yeast	*	2-3 months	
Muffins	*	2-4 months	
Quick breads	*	2-4 months	
Pancakes & waffles	*	2-4 months	
Rolls, yeast	*	2-3 months	
Cakes			
Angel, Chiffon & Sponge	*	6 months	
Cheesecake	7 days	4-6 months	
Fruitcake	*	12 months	
Layer cake	Plain, buttercream icing - not necessary; custard, cream or whipped cream filling or icing - refrigerate	Plain - 3 months Iced - 6 months	
Cookies			
	*	baked - 6 months, unbaked dough - 4 months	
Pies			
Chiffon & custard	3-4 days	*	
Fruit	1-2 days	6-8 months	
Pumpkin	3-4 days	baked 1-2 months	
Unbaked fruit	*	4 months	
Quiche	3-4 days	baked 1-2 months	

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BABY FOOD			
Liquid			
Expressed breast milk	3-5 days	5° F - 2 weeks; 0°F 3-6 months; -4° - 6-12 months	Storage time depends on temperature and conditions. Breast milk has natural antibacterial qualities & may be stored on a counter at 60°-85°F for 3-4 hours. See reference list for more information.
Formula	2 days	*	
Solids (open or freshly made)			
Strained fruits & vegetables	2-3 days	6-8 months	
Strained meat & eggs	1 day	1-2 months	
Strained meat/vegetable combination	1-2 days	6-8 months	
Homemade baby foods	1-2 days	3-4 months	
CONDIMENTS			
Ketchup & Barbecue sauce (opened)	8-12 months	*	
Mayonnaise (commercial, opened)	2 months	*	
Mustard (opened)	8-12 months	*	
Salad dressing - bottled (opened)	4 months	*	
MISCELLANEOUS			
Chestnuts	6 months	*	
Guacamole	Homemade - 1-3 days; commercial - 5-7 days	6 months	
Hummus	Homemade - 2-7 days; commercial - 5-7 days	*	
Nuts	6+ months	1 year	May store in cool & dry cabinet for 3-4 months. Refrigerate or freeze for longer storage.
Pasta, fresh	1 week	1 month	
Pizza	3-4 days	1-2 months	
Salads - chicken, turkey, ham, tuna & pasta	3-5 days	*	
Syrups - maple or panckake	6-8 months	*	
Tofu	1 week	5 months	Store in water in refrigerator & replace water daily.

Foods that do not freeze well

Because of flavor changes

- Garlic (uncooked)
- Onion (raw; better cooked or as ingredient)
- Salt substitutes (not sodium chloride)
- Spices – clove, sage (flavor is stronger or bitter)
- Vanilla, artificial flavor (not real vanilla)

Because of texture changes

- Cake icing - soft or boiled (butter cream freezes well)
- Cream sauces
- Custard or cream filling
- Egg whites (cooked) & meringue
- Fried foods (homemade)
- Gelatin
- Mayonnaise or salad dressing
- Lettuce
- Pasta (cooked, unsauced)
- Potatoes

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