



HEALTH

Food Storage for Safety and Quality no. 9.310

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Quick Facts...

Foods vary in the temperature and moisture they need to retain quality in storage.

Stock only the kind and amount of food you can store properly to retain high quality and nutritive value.

Use a thermometer to check that the refrigerator is at 35 to 40 degrees F and the freezer at 0 F degrees or below.

Use fresh, perishable foods soon after harvest or purchase. If they are stored, maintain the proper temperature and humidity. Even under proper storage conditions, foods lose freshness and nutritive value if they are stored too long.

Signs of spoilage that make food unpalatable but not a bacterial hazard are the rancid odor and flavor of fats caused by oxidation, slime on the surface of meat, and the fermentation of fruit juices due to yeast growth. Off-odors in foods and a sour taste in bland foods can indicate dangerous bacterial spoilage. However, food can be high in bacteria count even without such signals.

Food Selection

Buy food from reputable dealers, with a known record for safe handling. Select dated products only if the “sell by” or “use by” date has not expired. While these dates are helpful, they are reliable only if the food has been kept at the proper temperature during storage and handling. Although many products bear “sell by” or “use by” dates, product dating is not a federal requirement.

Select products labeled “keep refrigerated” only if they are stored in a refrigerated case and are cold to the touch. Frozen products should be solidly frozen. Packages of precooked foods should not be torn or damaged.

Avoid cross-contamination when purchasing foods. Place raw meat and poultry in individual plastic bags to prevent meat from contaminating foods that will be eaten without further cooking. Put packages of raw meat and poultry in your shopping cart where juices cannot drip on other foods.

Shop for perishables last. Keep refrigerated and frozen items together so they will remain cold. Place perishables in the coolest part of your car during the trip home. If the time from store to home refrigerator is more than one hour, pack them in an insulated container with ice or an ice pack.

Food Storage

To retain quality and nutritive value, stock only the kinds and amounts of food you can store properly. Proper storage means maintaining a clean refrigerator and freezer. Avoid overcrowding the refrigerator. Arrange items so cold air can circulate freely. To reduce dehydration and quality loss, use freezer wrap, freezer-quality plastic bags, or aluminum foil over commercial wrap on meat and poultry that will be stored in the freezer for more than two months.

Table 1 gives short but safe time limits that will help keep refrigerated food from spoiling or becoming dangerous to eat. The time limits for frozen foods are to maintain flavor and texture. It is still safe to eat frozen foods that have been stored longer. This table is adapted from *Refrigerator/Freezer - Approximate Storage Times*, Karen Penner, Kansas State University Cooperative Extension Service, 1990, and USDA publications.

Table 1: Safe food storage guidelines.

Product	Refrigerator (35-40 degrees F)	Freezer (0 degrees F)	Comments
BREADS, PASTRIES AND CAKES			
Breads: baked breads (no preservatives)	2-3 weeks	2-3 months	Store in refrigerator to inhibit mold growth.
baked muffins	*	2-3 months	
baked quick breads	*	2-3 months	
partially baked cinnamon rolls	1-2 weeks	2-3 months	Longer storage inactivates yeast, weakens gluten.
unbaked rolls and bread	3-4 days	1 month	
Cakes: frosted, baked	*	2-4 months	
unfrosted, baked	*	2-4 months	
Cookies: baked	2-3 weeks	6-12 months	
dough	3-4 days	3 months	
Flour: white or whole wheat	6-8 months	12 months	Keep in airtight container.
Pies: fruit, baked	2-3 days	2-4 months	
fruit, unbaked	1-2 days	2-4 months	
pumpkin or chiffon	2-3 days	1-2 months	
Waffles	1-2 days	1 month	
*Not necessary to refrigerate unless product cannot be used within 4-5 days or time recommended on package.			
DAIRY PRODUCTS			
Butter	2-3 months	12 months	Freeze in original carton, overwrap in plastic freezer bag.
Buttermilk	1-2 weeks	NR	Check date on carton. Will keep several days after date.
Cheese: cottage, ricotta	5-7 days	1 month	Freezing changes texture of soft cheeses.
cream cheese	2 weeks	1 month	Becomes crumbly when frozen; can be used in cooking when creaminess is not important.
Natural, aged cheeses (cheddar, Swiss, brick, gouda, mozzarella, etc.)			Natural and processed cheeses can be frozen. Defrost in refrigerator; cheese will be less likely to crumble. Use soon after thawing.
large pieces, packaged or wax coated	2-3 months	6-8 months	
slices or opened packages	2-3 weeks	6-8 months	
Parmesan, Romano (grated)	12 months		
Pasteurized process cheese	3-4 weeks	6-8 months	
Coffee whitener (liquid)	3 weeks	See package	
Cream, light or half & half (UHT processed-opened)	1 week	3-4 weeks	
(UHT processed-unopened)	4 weeks		
whipping or heavy	1 week	NR	Whipping cream will not whip after thawing. Whipped cream may be frozen and stored for 1-2 weeks.
Dip, sour cream: commercial	2 weeks	NR	
homemade	3-4 days	NR	
Margarine	3 months	12 months	Overwrap in plastic freezer bag for frozen storage.
Milk: evaporated, opened	3-5 days	1-3 months	Freezing affects milk's flavor, appearance; use for cooking.
fluid whole or low-fat	1 week	1-3 months	
reconstituted nonfat dry	1 week	1-3 months	
sweetened, condensed, opened	3-5 days	1-3 months	
Sour cream	2-3 weeks	NR	Sour cream will separate if frozen.
Whipped topping: frozen carton (thawed)	2 weeks	NR	
in aerosol can	3 weeks	NR	
prepared from mix	3 days	NR	
Yogurt	1 month	NR	Yogurt will separate if frozen.
EGGS AND EGG PRODUCTS			
Eggs: fresh yolks or whites	4 days	12 months	To freeze, break eggs out of shell; stir until yolk is well blended with white or other yolks. Add small amount of salt, sugar or corn syrup to improve keeping quality.
in shell, fresh	3 weeks	NR	Decorated Easter eggs: If you intend to eat them, keep refrigerated. If eggs are at room temperature for more than 2 hours, do not eat them.
in shell, hard-cooked	1 week	NR	
Eggs: liquid pasteurized eggs or egg substitutes, opened	4-5 days	1 year	
Egg-containing products:			
Canned puddings, opened	1-2 days	NR	
Custards, custard sauces, puddings, custard-filled pastries and cakes	1-2 days	NR	

Product	Refrigerator (35-40 degrees F)	Freezer (0 degrees F)	Comments
FRUITS			
Apples	1-3 weeks	8-12 months*	
Apricots, cranberries	1 week	8-12 months*	
Avocados	3-5 days	4-6 months*	
Bananas	1-2 days, unpeeled	4-6 months	Peel, dip in lemon juice, tray freeze; store in freezer bag.
Berries, cherries	1-2 days	8-12 months*	
Canned fruits, opened	3-5 days	1-2 months	Texture will be softer after freezing. Refrigerate in glass or plastic to avoid metallic taste.
Citrus fruits	3 weeks	4-6 months*	Wrap cut surfaces to prevent loss of Vitamin C.
Dried fruit: cooked	3-5 days	4-6 months	
uncooked	6 months	12 months	
Grapes, peaches, pears, plums and rhubarb	3-5 days	8-12 months*	
Juices: canned, bottled, frozen concentrate	1 week	12 months	Transfer canned juice to glass or plastic container after opening.
Melons	1 week	8-12 months*	Wrap cut surfaces to prevent Vitamin C loss, control odors.

*Freeze all fruits in moisture- and vaporproof containers. Follow recommended procedures in fact sheet 9.331, *Freezing Fruits*.

MEATS			
Fresh			
Bratwurst: fresh	1-2 days	2-3 months	Meats may be left in the supermarket packaging for refrigerator storage or for very brief freezer storage. For frozen storage beyond two weeks, rewrap in moisture- and vaporproof wrap or freezer bags.
precooked	5-7 days	2-3 months	
Chops: lamb	2-4 days	6-9 months	
pork, veal	2-4 days	4-6 months	
Ground beef, stew meat, ground pork, turkey, veal, lamb	1-2 days	3-4 months	
Roasts: beef	2-4 days	6-12 months	
lamb	2-4 days	6-9 months	
veal or pork	2-4 days	4-8 months	
Sausage: pork, beef, turkey	1-2 days	1-2 months	
Steaks, beef	2-4 days	6-12 months	
Variety meats (tongue, liver, brains, heart, kidneys)	1-2 days	3-4 months	
Cooked			
Canned meat, opened	2-3 days	NR	Quickly refrigerate all cooked meats and leftovers. Use as soon as possible. Cut large roasts into halves to cool in refrigerator. Fats tend to separate in homemade gravies, stews and sauces but usually recombine when heated. Cool leftover gravy and broth quickly, in shallow containers, in the refrigerator.
Cooked meat and meat dishes	3-4 days	2-3 months	
Gravy and meat broth	1-2 days	2-3 months	
Processed and Cured			
Bacon	5-7 days	1 month	Keep packaged meats in original package. For best quality, use within one week of "sell by" date.
Corned beef: drained and wrapped in pouch with pickling juice	5-7 days 5-7 days	1 month NR	
Frankfurters (hotdogs)	3-5 days*	1-2 months	Frozen, cured meats lose quality rapidly; use as soon as possible.
Ham: canned, unopened	8-12 months	NR	Small pieces of canned ham (opened) may be frozen for 4-6 weeks.
half	3-5 days	1-2 months	
whole	7 days	1-2 months	
Luncheon meats	3-5 days*	1-2 months	
Sausage: smoked	7 days	1-2 months	
dry and semidry sausage	2-3 weeks	1-2 months	

*Storage time after vacuum-sealed package is opened. Unopened package may be kept two weeks or according to date on package.

MISCELLANEOUS PERISHABLE ITEMS			
Baby food	2-3 days	See comment	Store covered. Do not feed baby from jar. Reheat only enough for 1 feeding. Freeze homemade baby food in ice cube trays, covered. Use in 2-4 weeks.
Candies	6 months	6 months	Chocolates may discolor.
Casseroles	1-2 days	1 month	
Ground spices	6 months*	6-12 months	Can be stored in cupboard.
Salads (store prepared or homemade)- egg, ham, chicken, tuna & macaroni	3-5 days	NR	
Salad dressings, opened	6 months	NR	
Sandwiches	2-3 days	1 month	
Soups, stews	2-3 days	4-6 months	

Refrigerator Product	Freezer		Comments
	(35-40 degrees F)	(0 degrees F)	
Soy milk	1 week after opening	1-3 months	Unopened, aseptically packaged soy milk can be stored at room temperature for several months.
Tofu	1 week	5 months	Change storage water every day or two after opening.

*Refrigeration is not necessary but will help keep flavor fresher.

POULTRY

Fresh			
Chicken and turkey, whole	1-2 days	12 months	
Chicken, pieces	1-2 days	9 months	
Duck and goose, whole	1-2 days	6 months	
Giblets	1-2 days	3-4 months	
Turkey, pieces	1-2 days	6 months	
Cooked			
Canned poultry, opened	1-2 days	NR	Quick-cool meat and broth separately in shallow containers. Add ice cubes to concentrated broth to speed cooling and to aid fat removal.
Cooked poultry dishes	3-4 days	4-6 months	
Fried chicken	3-4 days	4 months	
Pieces, covered with broth	1-2 days	6 months	
not in broth	3-4 days	1 month	

VEGETABLES

Asparagus	2-3 days	8-12 months*	
Beans, green or wax; celery	1 week	8-12 months*	
Beets, cabbage, carrots, turnips	1-2 weeks	8-12 months*	
Broccoli, Brussels sprouts	1 week	8-12 months*	
Cauliflower	1 week	8-12 months*	
Corn, in husks	1-2 days	8-12 months*	
without husks	1-2 days	NR	
Cucumbers	1 week		
Lettuce, other salad greens	1 week	NR	Store in bag or lettuce keeper.
Mushrooms	1-2 days	8-12 months*	Do not wash before refrigerator storage.
Okra	3-5 days	8-12 months*	
Onions: green	3-5 days	NR	
mature	1-2 weeks	3-6 months*	
Peas, lima beans, unshelled	3-5 days	8-12 months*	Store unshelled in refrigerator until used.
Peppers	1 week	8-12 months*	
Radishes	2 weeks	NR	
Tomatoes: canned, open	1-4 days		See 9.341, <i>Canning Tomatoes and Tomato Products</i> .
fresh, ripe	5-6 days	8-12 months*	

*Blanch fresh vegetables and freeze in moisture- and vaporproof materials. See 9.330, *Freezing Vegetables*.

WILD GAME AND SEAFOOD

Wild Game			
Rabbit, squirrel	1-2 days	6-12 months	
Venison	2-4 days	6-12 months	
Wild duck, pheasant, goose, whole	1-2 days	6 months	
Seafood			
Canned fish, seafood, opened	3-4 days	NR	
Clams, oysters (shucked), scallops	1-2 days	3-4 months	Store in coldest part of refrigerator. Do not use if liquid is frothy.
Cooked fish	3-4 days	4-6 months	
Crab	1-2 days	2 months	
Fillets, fatty: mullet, ocean perch, sea perch, sea trout, striped bass	1-2 days	2-3 months	
Fillets, lean: cod, flounder, haddock	1-2 days	4-6 months	
Fresh water fish, cleaned	1-2 days	6-9 months	
Lobster, shelled or not	1-2 days	6-12 months	
Salmon steaks	1-2 days	2 months	
Shrimp	1-2 days	6-12 months	
Smoked fish	14 days or date on vacuum package	2 months in vacuum package	

NR: Not recommended.