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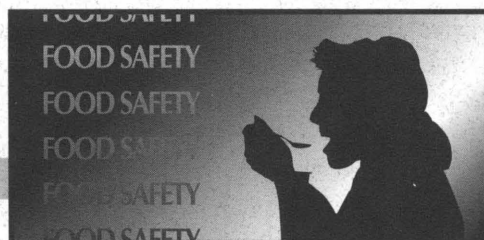
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Food Safety

PUBLICATION 348-960



Food Storage Guidelines For Consumers

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Purchase Fresh Food

Provide safe and nutritious food for you and your family by purchasing fresh food within the food manufacturer's freshness dates. Meat, fish, poultry, dairy, and fresh bakery products are dated with a "sell by date" to indicate how long the food can be displayed for sale. The "sell by date" allows for a reasonable amount of time in which the product can be used. Consumers should always purchase food before the "sell by date" expires. Cereals, snack foods, frozen entrees, and dry packaged foods may be marked with a "best if used by date." The products are not at their best quality after this date, but can still be used safely for a short period of time thereafter. Other foods, such as unbaked breads, are marked with an "expiration" or "use by date," which means the product should not be consumed after that

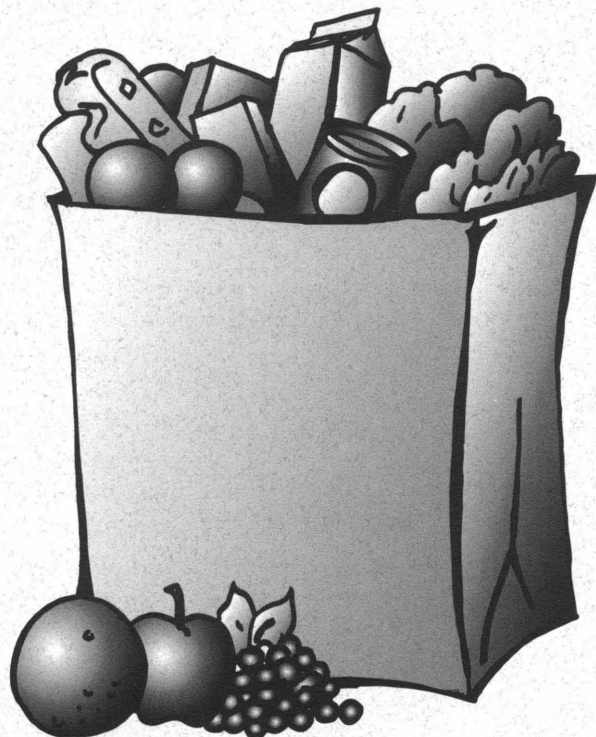
date. Do not purchase any food not used by that date. The freshness date is located on the food package and serves as an indicator of product quality.

Some foods, such as canned foods, have a product code stamped on the bottom or top of each container providing information such as "best quality date" or "use by date," the name of the plant where the food was manufactured, and the lot number. The code number may not be consistent from one manufacturer to another. For instance, food manufacturers may indicate the "use by date" as month and year (APR00) stamped on top of the can. APR00 means the food should be consumed by April of 2000. The first letter and number (corresponding to month and year) of the stamped code also may indicate "use by dates." B0 would indicate that the product is of highest quality if consumed by February of 2000. Consumers may contact the food manufacturer directly to determine "use by dates." Many food manufacturers provide a 1-800 number for consumer questions. Generally, canned goods have a one-year expiration date from the date of manufacture before quality diminishes.

When grocery shopping, pick-up refrigerated and frozen foods just prior to checkout. Refrigerated foods should be cold and frozen foods should be solid with no evidence of thawing. Refrigerated and frozen food should be bagged together. After grocery shopping, drive straight home and store food in the refrigerator or freezer. It is important to keep refrigerated and frozen foods out of the danger zone of 40°F to 140°F.

Proper Storage Extends Shelf-Life of Food

The shelf-life of food will depend upon the food itself, packaging, temperature, and humidity. If the food is not sterilized, it will ultimately spoil due to the growth of microorganisms. Foods, such as dairy products,



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meats, poultry, eggs, and fresh fruits and vegetables, will spoil rapidly if not stored at proper temperatures. Dairy products should be stored at refrigerated temperatures between 34°F and 38°F, meats between 33°F and 36°F, and eggs 33°F to 37°F. Fresh vegetables and ripe fresh fruits should be stored between 35°F and 40°F. Refrigerated foods should always be stored at temperatures less than 40°F. Place a thermometer in the refrigerator and monitor the temperature often. This is especially important during the hot summer months.

Frozen foods should be stored below 0°F in moisture-proof, gas-impermeable plastic or freezer wrap. Make sure to label and date frozen foods. Frozen foods may be stored beyond the recommended storage time but quality may diminish. Sometimes consumers will overload a freezer and block the circulation of coolant throughout the freezer compartment. This will lower the efficiency of the freezer in keeping the food below 0°F.

Food that is temperature abused will spoil rapidly as evidenced by off-odors, off-flavors, off-color, and/or soft texture. For instance, spoiled milk exhibits a fruity off-odor, acid taste, and may curdle, whereas spoilage of fresh fruits and vegetables may exhibit an off-color and soft texture. Slime on the surface of meat, poultry, and fish indicates spoilage. As microorganisms grow, they utilize the food as a nutrient source and may produce acids. There is an increased risk of foodborne illness from consumption of spoiled food. Food may be spoiled without a detectable off-odor. **Therefore, when in doubt throw it out!**

To help ensure that you and your family are consuming food stored in your refrigerator, freezer, or

pantry within the expiration dates, practice FIFO (First-In-First-Out). When stocking food storage areas, place recently purchased items behind the existing food items. This will help ensure that you are consuming food prior to expiration date/spoilage and will save you money by reducing the amount of food to discard. Leftovers should always be portioned in clean, sanitized, shallow containers that are covered, labeled, and dated. Generally, leftovers should be discarded after 48 hours in the refrigerator.

Dry food staples such as flour, crackers, cake mixes, seasonings, and canned goods should be stored in their original packages or tightly closed airtight containers below 85°F (optimum 50°F to 70°F). Humidity levels greater than 60% may cause dry foods to draw moisture, resulting in caked and staled products. Canned goods stored in high humidity areas may ultimately rust, resulting in leaky cans. Dry, stable foods should be stored in original containers or, when opened, packaged in plastic bags or in clean, dry airtight sealed containers. Always purchase pantry foods in good condition in the original package. Discard canned goods that are swollen, badly dented, rusted, and/or leaking.

For safety, always store food separate from nonfood items such as paper products, household cleaners, and insecticides. Contamination of food or eating utensils with a household cleaner or insecticide could result in a chemical poisoning.

What To Do When The Power Goes Out

When the power goes out in the home, minimize opening the refrigerator and freezer. Refrigerators and freezers are insulated, aiding in keeping foods cold. However, if the refrigerator or freezer door is opened often, the cooling will be lost. Perishable refrigerated foods (i.e. foods of animal origin) should be discarded after a 6-hour period. Using block ice may increase shelf-life of refrigerated foods. Food stored in fully loaded freezers may last for approximately two days, whereas food stored in partially loaded freezers may last for only one day. Freezer foods may be refrozen if ice crystals are present. Exceptions include ice cream, pizza, and casseroles. If the frozen food has completely thawed but is cold, it must be cooked within a 24-hour period; or foods may be refrozen within 24 hours after thawing. However, quality may be diminished. If in doubt about when the food actually thawed in the freezer, discard the thawed food. Discard all foods that may have been at room temperature more than 2 hours. Dry ice may be used to keep frozen foods frozen and cold foods cold. Be careful not to handle dry ice with bare hands or breathe the vapors.



Recommended Storage For Various Foods

Breads, Cereals, Flour and Rice

Bread should be stored in the original package at room temperature and used within 5 to 7 days. Bread stored in the refrigerator will have a longer shelf-life due to delaying mold growth. Expect a 2- to 3-month shelf-life of bread stored in the freezer. Cream style bakery goods containing eggs, cream cheese, whipped cream and/or custards should be refrigerated for no longer than 3 days.

Cereals may be stored at room temperature in tightly closed containers to keep out moisture and insects. Whole wheat flour may be stored in the refrigerator or freezer to retard rancidity of the natural oils.

Store raw white rice in tightly closed containers at room temperature and use within one year. At room temperature, brown and wild rice have a shorter shelf-life (6 months) due to the oil becoming rancid. Shelf-life of raw white and brown rice may be extended by refrigeration. Cooked rice may be stored in the refrigerator for 6 to 7 days or in the freezer for 6 months.

Fresh Vegetables

Removing air (oxygen) from the package, storing the vegetables at 40°F refrigerated temperatures, and maintaining optimum humidity (95 to 100%) may extend shelf-life of fresh vegetables. Most fresh vegetables may be stored up to 5 days in the refrigerator. Always wrap or cover fresh leafy vegetables in moisture-proof bags to retain product moisture and prevent wilting. Root vegetables (potatoes, sweet potatoes, onions, etc.) and squashes, eggplant, and rutabagas should be stored in a cool, well-ventilated place

between 50°F and 60°F. Tomatoes continue to ripen after harvesting and should be stored at room temperature. Removing the tops of carrots, radishes, and beets prior to refrigerator storage will reduce loss of moisture and extend shelf-life. Palatability of corn diminishes during cold storage due to conversion of starch to sugar. Corn and peas should be stored in a ventilated container. Lettuce should be rinsed under cold running water, drained, packaged in plastic bags, and refrigerated. Proper storage of fresh vegetables will maintain quality and nutritive value.

Processed Vegetables

Canned vegetables can be stored in a cool, dry area below 85°F (optimum 50°F to 70°F) for up to one year. After one year, canned vegetables may still be consumed. However, overall quality and nutritional value may have diminished. Discard badly dented, swollen, and/or rusty cans.

Frozen vegetables may be stored in the freezer for 8 months at 0°F, whereas dehydrated vegetables should be stored in a cool, dry place and used within 6 months since they have a tendency to lose flavor and color. Home prepared vegetables should be blanched prior to freezing.

Fresh Fruit

In general, fresh fruit should be stored in the refrigerator or a cold area to extend shelf-life. Prevent loss of moisture from fresh fruit by using ventilated, covered containers. Always store fresh fruit in a separate storage area in the refrigerator, since fresh fruits may contaminate or absorb odors from other foods. Prior to consumption, rinse fresh fruits and vegetables under cold running water to remove possible pesticide residues, soil, and/or bacteria. Peeling, followed by washing of fresh fruits and vegetables, is also very efficient in removing residues.

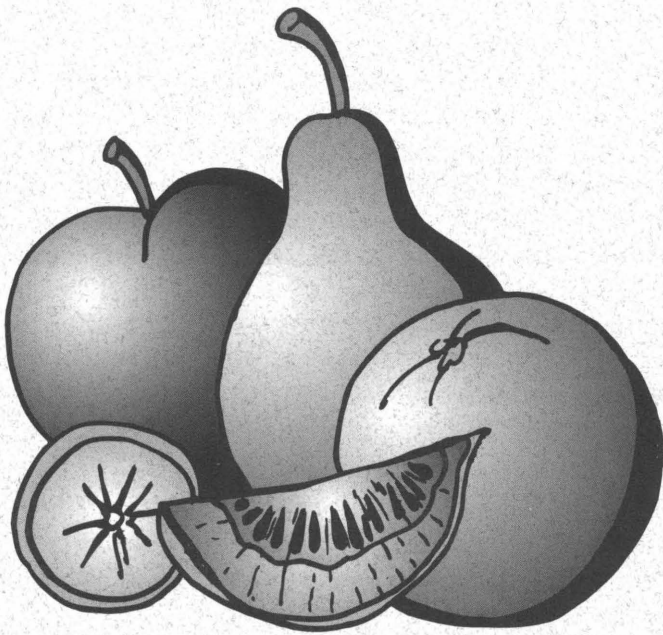
Ripe eating apples should be stored separately from other foods in the refrigerator and eaten within one month. Apples stored at room temperature will soften rapidly within a few days. Remember to remove apples that are bruised or decayed prior to storage in the refrigerator. Do not wash apples prior to storage.

Green pears and apricots should be ripened at room temperature and stored in the refrigerator. Expect a 5-day refrigerated shelf-life for these fruits.

Unripe peaches may be ripened at room temperature and eaten after 2 days. Ripe peaches should be stored in the refrigerator and consumed at room temperature.

Grapes and plums should be stored in the refrigerator and eaten fresh within 5 days of purchase. Store unwashed grapes separately from other foods in the





refrigerator and wash prior to consumption.

Ripe strawberries can be stored in the refrigerator separately from other foods for approximately 3 days. Strawberries should be washed and hulled prior to consumption.

Citrus fruits, such as lemons, limes, and ripened oranges, can be stored in the refrigerator for 2 weeks. Grapefruit may be stored at a slightly higher temperature of 50°F.

Melons, such as the honeydew melon, cantaloupe, and watermelon, may be ripened at room temperature for 2, 3, and 7 days, respectively. Ripe melons should be stored in the refrigerator.

Avocados and bananas should be ripened at room temperature for 3 to 5 days. Never store unripe bananas in the refrigerator, since cold temperatures will cause the bananas to rapidly darken.

Processed Fruit

Canned fruit and fruit juices may be stored in a cool, dry place below 85°F (optimum 50°F to 70°F) for one year. As with canned vegetables, badly dented, bulging, rusty, or leaky cans should be discarded. Dried fruits have a long shelf-life because moisture has been removed from the product. Unopened dried fruits may be stored for 6 months at room temperature.

Dairy Products

The shelf-life of fluid milk stored in the refrigerator (<40°F) will range from 8 to 20 days depending upon the date of manufacture and storage conditions in the grocers' shelf. Milk is a very nutritious and highly perishable food. Milk should never be left at room

temperature and always capped or closed during refrigerator storage. Freezing milk is not recommended, since the thawed milk easily separates and is susceptible to development of off-flavors.

Dry milk may be stored at cool temperatures (50°F to 60°F) in airtight containers for one year. Opened containers of dry milk, especially whole milk products, should be stored at cold temperatures to reduce off-flavors. Reconstituted milk should be handled like fluid milk and stored at refrigeration temperatures if not immediately used.

Canned evaporated milk and sweetened condensed milk may be stored at room temperature for 12 to 23 months. Opened canned milk should be refrigerated and consumed within 8 to 20 days.

Natural and processed cheese should be kept tightly packaged in moisture-resistant wrappers and stored below 40°F. Surface mold growth on hard natural cheese may be removed with a clean knife and discarded. Rewrap cheese to prevent moisture loss. Presence of mold growth in processed cheese, semi-soft cheese, and cottage cheese is an indicator of spoilage and thus these foods should be discarded.

Commercial ice cream should be stored at temperatures below 0°F. Expected shelf-life of commercial ice cream is approximately 2 months before quality diminishes. Immediately return opened ice cream to the freezer to prevent loss of moisture and development of ice crystals. Ice cream should be stored at constant freezer temperatures to slow growth of ice crystals.



Meats, Poultry, Fish, and Eggs

Meat, poultry, fish, and eggs are highly perishable and potentially hazardous due to their high moisture and high protein content. Generally, fresh cuts of meat contain spoilage bacteria on the surface that will grow, produce slime, and cause spoilage after 3 days of refrigerator storage in oxygen-permeable packaging film. Ground meat products are more susceptible to spoilage due to the manufacturing process and increased surface area of the product. Bacteria in ground meats are distributed throughout, providing rapid growth in the presence of air. Ground meats should be stored on the lower shelf of the refrigerator and used within 24 hours of purchase. Refrigerator storage slows bacterial growth; however, the product will eventually spoil. Optimum storage temperature of refrigerated meats, including ground beef, is 33°F to 36°F.

Freezing inhibits the growth of bacteria. Whole cuts of meat may be stored in the freezer ranging from 4 to 12 months, whereas ground meat may be stored for 3 to 4 months. For maximum storage, wrap meats in moisture-proof, gas impermeable packaging to prevent freezer burn.

Cured meats, such as bacon, should be stored in their original packaging in the refrigerator. Cured meats have a tendency to become rancid when exposed to air. Therefore, rewrap cured meats after opening the package. Expect approximately a 1-week shelf-life for cured meats. Vacuum-packaging (absence of air) and modified atmospheric packaging (partial removal of air) extends shelf-life of meats and meat products (i.e. luncheon meats). The shelf-life of vacuum-packaged meats and gas-flushed meats is 14 days and 7 to 12 days, respectively.

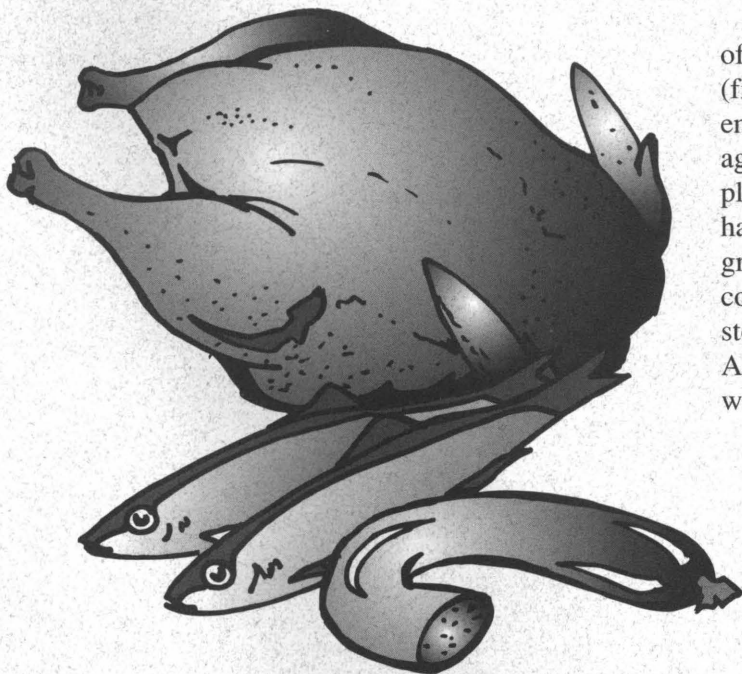
Poultry should be prepared within 24 hours of purchase or stored in the freezer. Poultry may be stored in the freezer (0°F) for 12 months. Thaw poultry in the refrigerator, under cold running water, or in the microwave. Cook poultry to an internal temperature of 180°F. Leftovers stored in the refrigerator should be consumed within 3 days and reheated to 165°F prior to consumption. Poultry broth and gravy should not be stored more than 2 days in the refrigerator and reheated to a full boil (212°F) before consuming.

Fresh fish, shrimp and crab stored in the refrigerator (slightly above 32°F) should be consumed within 1 to 2 days. Never store fresh fish in water due to leaching of nutrients, flavor, and pigments. Frozen fresh fish and seafood (except shrimp) may be stored for 3 to 6 months at 0°F. Shrimp may be stored for 12 months at 0°F.

Eggs should be purchased refrigerated and stored in the refrigerator (33°F to 37°F) in their original carton. Storage of eggs in the original carton reduces absorption of odors and flavors from other foods stored in the refrigerator. Eggs should be used within 4 to 5 weeks of the pack date listed on the carton (1 to 365 representing pack date day within the year). Leftover egg yolks and egg whites may be stored in the refrigerator covered for 2 and 4 days, respectively. Egg yolks should be covered with water. Hard-boiled eggs may be stored in the refrigerator for 5 days. Pasteurized liquid eggs may be stored in the refrigerator for 12 days. Egg whites and pasteurized eggs may be stored at freezer temperatures for one year. Shell eggs should never be stored in the freezer. Dried eggs may be stored in tightly closed containers in the refrigerator for one year.

Water

Commercial bottled water has an extended shelf-life of one to two years due to extensive water treatment (filtration, demineralization, and ozonation) and strict environmental controls during manufacturing and packaging. Bottled water should be stored in a cool, dry place in the absence of sunlight. Household tap water has a limited shelf-life of only a few days due to the growth of microorganisms during storage. Therefore, consumers should purchase bottled water if planning to store water for extended periods. The Food and Drug Administration (FDA) regulates commercial bottled water as a food.



Recommended Food Storage Chart

The following charts provide general recommended storage times for various food products stored under optimum conditions. Storage generally is not recommended under conditions where no time is listed in the chart. Consumers should always purchase fresh food and never temperature abuse food for maximum shelf-life.

Food	Pantry (Room Temperature)	Refrigerator (33°F to 40°F)	Freezer (0°F)
Bread and Cereal Products			
Baked quick breads	4-5 days	1-2 weeks	2-3 months
Bread	5-7 days	1-2 weeks	3 months
Bread crumbs and croutons	6 months		
Bread, rolls unbaked		2-3 weeks	1 month
Cereals, ready-to-eat	1 year 2-3 months*		
Cereals, ready-to-cook	6 months		
Corn meal	1 year	18 months	2 years
Doughnuts	4-5 days		3 months
Flour, cake, all-purpose	1 year		1-2 years
Flour, whole wheat		6-8 months	1-2 years
Pasta	2 years		
Pies and pastries		3 days	4-6 months
Pies and pastries, baked			1-2 months
Pies and pastries, cream filled		2-3 days	3 months
Rice, brown	6 months		
Rice, white	1 year		
Rice, white, (cooked)		6-7 days	6 months
Waffles		4-5 days	1 month
Packaged Foods and Mixes			
Biscuit, brownie, muffin mixes	9 months		
Cakes, prepared	2 days		2-3 months
Cake mixes	6-9 months		
Casserole mix	9-12 months		
Chili powder	6 months		
Cookies, packaged	2 months		8-12 months
Crackers	3 months		
Frosting, canned	3 months		
Frosting, mix	8 months		
Fruit cake		2-3 months	1 year
Hot roll mix	18 months		
Instant breakfast products	6 months		
Pancake and piecrust mix	6 months		
Pancake waffle batter		1-2 days	3 months
Toaster pastries	3 months		
Sauce and gravy mixes	6 months		
Soup mixes	1 year		
Spices, Herbs, Condiments, Extracts			
Catsup, chili and cocktail sauce	1 year		
	1 month*	6 months	
Herbs	6 months		1-2 years

* Opened

+ Cooked

^ Refrigerate after opening

RECOMMENDED FOOD STORAGE CHART (CONTINUED)

Food	Pantry (Room Temperature)	Refrigerator (33°F to 40°F)	Freezer (0°F)
Spices, Herbs, Condiments, Extracts (Continued)			
Herb/spice blends	2 years 1 year *		1-2 years
Mustard	2 years	6-8 months*	8-12 months
Spices, ground	6 months		1-2 years
Spices, whole	1-2 years		2-3 years
Vanilla extract	2 years 1 year*		
Other extracts	1 year		
Other Food Staples			
Bacon bits	4 months		
Baking powder	18 months		
Baking soda	2 years		
Bouillon products	1 year		
Chocolate, premelted	1 year		
Chocolate syrup	2 years	6 months*	
Chocolate, semisweet	2 years		
Chocolate, unsweetened	18 months		
Cocoa mixes	8 months		
Coconut, shredded	1 year 6 months*	8 months	1 year
Coffee cans	2 years 2 weeks*	2 months	6 months
Coffee, instant	6 months 2 weeks*		
Coffee, vacuum-packed	1 year ^		
Coffee lighteners (dry)	9 months 6 months*		1 year
Cornstarch	18 months		2 years
Gelatin	18 months		
Honey, jams, jellies, syrup	1 year	6-8 months*	
Marshmallow cream	3-4 months		
Mayonnaise	2 months	12 months	
Molasses	2 years		
Nuts, unshelled	6 months		
Nuts, shelled	4 months	6 months	
Nuts, salted			6-8 months
Oil, salad	3 months^ 2 months*		
Parmesan Grated Cheese	10 months 2 months*		
Pasteurized process cheese spread	3 months	3-4 weeks*	4 months
Peanut butter	6 months 2-3 months*		
Popcorn	1-2 years	2 years	2-3 years

* Opened

+ Cooked

^ Refrigerate after opening

RECOMMENDED FOOD STORAGE CHART (CONTINUED)

Food	Pantry (Room Temperature)	Refrigerator (33°F to 40°F)	Freezer (0°F)
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Other Food Staples (Continued)

Pectin	1 year		
Salad dressings, bottled	1 year [^]	3 months*	
Soft drinks	3 months		
Artificial sweetener	2 years		
Sugar, brown	4 months		
Sugar, confectioners	18 months		
Sugar, granulated	2 years		
Tea bags	18 months		
Tea, instant	2 years		
Vegetable oils	1-3 months		
Vegetable shortening	3 months	6-9 months	
Vinegar	2 years		
	1 year*		
Water, bottled	1-2 years		
Whipped topping, dry	1 year		
Yeast, dry	Pkg. exp. date		

Vegetables

Asparagus	2-3 days	8 months	
Beets	2 weeks		
Broccoli	3-5 days		
Brussels sprouts		3-5 days	
Cabbage		1 week	
Carrots		2 weeks	
Cauliflower		1 week	
Celery		1 week	
Corn (husks)		1-2 days	8 months
Cucumbers		1 week	
Eggplant		1 week	
Green beans		1-2 days	8 months
Green peas		3-5 days	8 months
Lettuce		1 week	
Lima beans		3-5 days	8 months
Onions	1 week	3-5 days	
Peppers		1 week	
Pickles, canned	1 year	1 month*	
Sweet potatoes	2-3 weeks		
White potatoes	2-3 months		
Radishes		2 weeks	
Rhubarb		3-5 days	
Rutabagas	1 week		
Snap beans		1 week	
Spinach		5-7 days	8 months
Squash, Summer		3-5 days	
Squash, Winter	1 week		
Tomatoes		1 week	

* Opened

+ Cooked

[^] Refrigerate after opening

RECOMMENDED FOOD STORAGE CHART (CONTINUED)

Food	Pantry (Room Temperature)	Refrigerator (33°F to 40°F)	Freezer (0°F)
Vegetables (Continued)			
Turnips		2 weeks	
Commercial baby food, jars	1-2 years^	2-3 days	
Canned vegetables	1 year^	1-4 days *	
Dried vegetables	6 months		
Frozen vegetables			8 months
Vegetable soup		3-4 days	3 months
Fruits			
Apples	Until ripe	1 month	
Apricots	Until ripe	5 days	
Avocados	Until ripe	5 days	
Bananas	Until ripe	5 days (fully ripe)	
Berries	Until ripe	3 days	1 year
Canned fruit	1 year	2-4 days*	
Canned fruit juices	1 year	3-4 days*	
Cherries	Until ripe	3 days	
Citrus fruit	Until ripe	2 weeks	
Dried fruit	6 months	2-4 days+	
Frozen fruit			1 year
Fruit juice concentrate		6 days	1 year
Fruit pies, baked		2-3 days	8 months
Grapes	Until ripe	5 days	
Melons	Until ripe	5 days	
Nectarines	Until ripe	5 days	
Peaches	Until ripe	5 days	1 year
Pears	Until ripe	5 days	1 year
Pineapple	Until ripe	5-7 days	1 year
Plums	Until ripe	5 days	
Dairy Products			
Butter		2 weeks	9 months
Buttermilk		2 weeks	
Cottage cheese		1 week	2 weeks
Cream cheese		2 weeks	
Cream-light, heavy, half-and-half		1 week	1-2 months
Margarine		1 month	9 months
Condensed, evaporated and dry milk	12-23 months^	8-20 days*	
Milk		8-20 days	
Ice cream and sherbet			2 months
Hard natural cheese		3 months 4 weeks*	6 months
Hard natural cheese, sliced		2 weeks	
Processed cheese		1 month	6 months
Pudding		1-2 days	

* Opened

+ Cooked

^ Refrigerate after opening

RECOMMENDED FOOD STORAGE CHART (CONTINUED)

Food	Pantry (Room Temperature)	Refrigerator (33°F to 40°F)	Freezer (0°F)
Dairy Products (continued)			
Sour cream		2 weeks	
Whipped cream, canned		3 days	
Yogurt		2 weeks	
MEATS, POULTRY, EGGS AND FISH			
Meats			
Fresh beef steaks and roasts		3-4 days	6-12 months
Fresh pork chops		2-3 days	4-6 months
Fresh lamb chops		3-5 days	6-8 months
Fresh veal		1-2 days	4-6 months
Fresh ground meat		1 day	3-4 months
Cooked meat		2-3 days	2-3 months
Canned meat	1 year	1 week*	3-4 months
Ham, whole		1 week	1-2 months
Ham, canned	1 year	1 week*	3-4 months
Ham, canned "keep refrigerated"		6-9 months	
		1 week*	3-4 months
Ham, cook before eating		1 week	
Ham, fully cooked		2 weeks	
		1 week*	
Bacon		2 weeks	3 months
		1 week	
Corned beef, uncooked		5-7 days	
Sausage, fresh		1-2 days	
Sausage, smoked (e.g. Mettwurst)		1 week	1-2 months
Sausage, semi-dry (e.g. Summer sausage)		2-3 weeks*	6 months
Sausage, dry smoked (e.g. Pepperoni, jerky, dry Salami)	1 year	1 month*	6 months
Frankfurters, bologna		2 weeks	1-2 months
		3-5 days*	
Luncheon meat		2 weeks	1 month
		5 days*	
Meat gravies		2 days	2-3 months
TV beef & pork dinners		3-4 months	
Variety meats (giblets, tongue, liver, heart, etc.)		1-2 days	3-4 months
Vinegar pickled meats (e.g. pickled pigs feet)	1 year^	2 weeks*	
Fish			
Breaded fish			3 months
Canned fish	1 year	1-2 days*	

* Opened

+ Cooked

^ Refrigerate after opening

RECOMMENDED FOOD STORAGE CHART (CONTINUED)

Food	Pantry (Room Temperature)	Refrigerator (33°F to 40°F)	Freezer (0°F)
Fish (Continued)			
Cooked fish		3-4 days	1 month
Fish salad		1 day	
Fresh fish		1-2 days	3-6 months
Dry pickled fish		3-4 weeks	
Smoked fish		10 days	4-5 weeks
Seafood-clams, crab, lobster in shell		1-2 days	3 months
Seafood-oysters & scallops		1 day	3-4 months
Seafood-shrimp		1 day	1 year
Seafood-shucked clams		1 day	3 months
Poultry and Eggs			
Chicken livers		1-2 days	3 months
Chicken and poultry TV dinners			6 months
Canned poultry^	1 year	1 day*	
Cooked poultry		2-3 days	4-6 months
Fresh poultry		1 day	1 year
Poultry pies, stews, gravies		1-2 days	6 months
Poultry salads		1 day	
Poultry stuffing		1 day	
Eggs, in shell		4-5 weeks	
Eggs, hard-boiled		5 days	
Eggs, pasteurized		12 days	1 year
		3 days*	
Egg substitute		10 days	1 year
		3 days*	
Egg yolks (covered in water)		2-4 days	1 year
Egg whites		2-4 days	1 year
(For each cup of egg yolk add 1 Tbs. of sugar or salt)			
Wild Game			
Game birds		2 days	9 months
Small game (rabbit, squirrel, etc.)		2 days	9-12 months
Venison		3-5 days	9-12 months

* Opened

+ Cooked

^ Refrigerate after opening

References

- American Meat Institute Foundation. 1994. Yellow pages: answers to predictable questions consumers ask about meat and poultry. American Meat Institute Foundation, Washington, D.C.
- Food Marketing Institute. 1999. The food keeper. Food Marketing Institute, Washington, D.C.
- Freeland-Graves, J.H. and G.C. Peckham. 1996. Foundations of food preparation, 6th ed. Prentice-Hall, Inc. Englewood Cliffs, NJ.
- Hillers, V.N. 1993. Storing foods at home. Washington State University Cooperative Extension, Pullman, WA. Publ. EB 1205.
- Mikel, B.W. and T.R. Vosen. 1991. Storing foods safely. Alabama Cooperative Extension Service, Auburn University, AL. Publ. HE-670.
- Roberts, T. and R.H. Cox. 1998. Drying fruits and vegetables. Virginia Cooperative Extension Publication 348-597.
- USDA. 1997. Basics for handling food safely. U.S. Department of Agriculture, Food Safety and Inspection Service, Washington, D.C.