

## Food Storage Guidelines For Consumers

*Renee Boyer, Extension specialist, Food Science and Technology, Virginia Tech*  
*Julie McKinney, Project Associate, Food Science and Technology, Virginia Tech*

### Purchase Fresh Food

Provide safe and nutritious food for you and your family by purchasing 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. Also, the "sell by date" allows a reasonable amount of time after the purchase 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 "use by date" or "best quality 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 (APR02) stamped on top of the can. APR02 means the food should be consumed by April of 2002. The first letter and number (corresponding to month and year) of the stamped code also may indicate "use by dates." F2 would indicate that the product is of highest quality if consumed by June of 2002. 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,

[www.ext.vt.edu](http://www.ext.vt.edu)

meats, poultry, eggs, and fresh fruits and vegetables, will spoil rapidly if not stored at proper temperatures. For optimal quality and safety, 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. Always store refrigerated foods 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 safe to eat if 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. **Discard all foods that may have been at room temperature more than 2 hours. Therefore, when in doubt throw it out!**

To ensure food stored in the refrigerator, freezer, or pantry is consumed 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. Portion leftovers in clean, sanitized, shallow containers, and cover, label, and date. 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. Discard canned goods that are swollen, badly dented, rusted, and/or leaking.

**For safety, always store food separate from non-food 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. 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.



Copyright © 2001 by the National Restaurant Association  
Educational Foundation's International Food Safety Council

## 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. However, bread stored in the refrigerator will have a longer shelf-life due to delayed mold growth and may be firmer. Expect a 2- to 3-month shelf-life of bread stored in the freezer. Refrigerate *cream style bakery goods* containing eggs, cream cheese, whipped cream and/or custards 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. *Brown and wild rice* stored at room temperature will 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 elevated starch content. *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. *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. For more information on home food preservation see VCE Publication 348-576, *Freezing Fruits & Vegetables* (<http://pubs.ext.vt.edu/348-596/>).

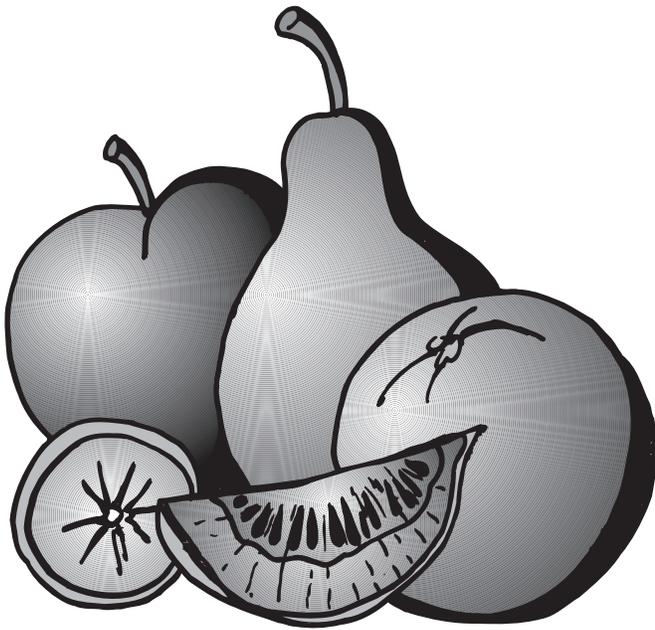
### Fresh Fruit

In general, store fresh fruit in the refrigerator or in a cold area to extend shelf-life. Reduce loss of moisture from fresh fruit by using, 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 then 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. Store ripe peaches in the refrigerator but consume 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 stemmed 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. Store ripe melons 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. Handle reconstituted milk like fluid milk and store 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. Refrigerate opened canned milk and consume 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.

Store commercial *ice cream* 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. Store ice cream 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.

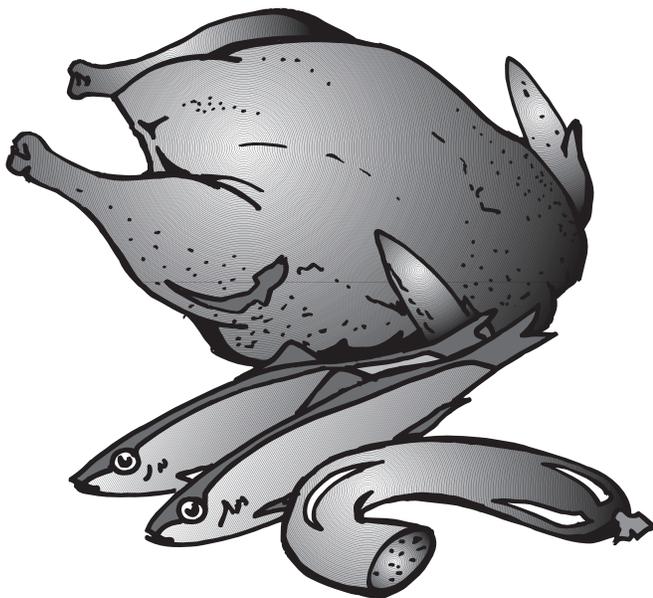
*Poultry* should be prepared within 24 hours of purchase or stored in the freezer. Poultry may be stored in the freezer (0°F) for 12 months. **Thaw poultry in the refrigerator, under cold running water, or in the microwave. Cook poultry parts (i.e. breast and roast) and whole poultry to an internal temperature of 170°F, and 180°F, respectively.** 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 lean 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. Use eggs within 3 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. Cover egg yolks with water. *Hard-boiled eggs* may be stored in the refrigerator for 1 week, whereas *pasteurized liquid eggs* may be stored in the refrigerator for 10 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. For more information on bottled water see VCE publication 356-486, *Buying Bottled Water* (<http://pubs.ext.vt.edu/356-486/>).



## Recommended Food Storage Chart

The following charts provide general recommended storage times from date of purchase for various food products stored under optimum conditions. Storage generally is not recommended under conditions where no time is listed in the chart. For maximum shelf-life, consumers should always purchase fresh food and never temperature abuse food. If a product has a "use-by" date, follow that date. If a product has a "sell-by" date or no date, cook or freeze the product within the times indicated on this chart.

Food	Pantry (Room Temperature)	Refrigerator (33°F to 40°F)	Freezer (32°F)
<b>Bread and Cereal Products</b>			
Baked quick breads	4-5 days	1-2 weeks	2-3 months
Bread	5-7 days	1-2 weeks	2-3 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, all-purpose, white	6-8 months	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
Pizza		3-4 days	1-2 months
Rice, brown	6 months		
Rice, white	1 year	6-7 days <sup>+</sup>	6 months <sup>+</sup>
Tacos, enchiladas, and burritos (frozen)		2 weeks	1 year
Waffles		4-5 days	1 month
<b>Packaged Foods and Mixes</b>			
Biscuit, brownie, and muffin mixes	9 months		
Cakes, prepared	2-4 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, pretzels	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		

\* Opened

<sup>+</sup> Cooked

<sup>^</sup> Refrigerate after opening

<sup>#</sup> After manufacture date

<b>Food</b>	<b>Pantry</b> (Room Temperature)	<b>Refrigerator</b> (33°F to 40°F)	<b>Freezer</b> (32°F)
<b>Spices, Herbs, Condiments, Extracts</b>			
Catsup, chili, and cocktail sauce	1 year		
	1 month*	6 months	
Herbs	6 months		1-2 years
Herb/spice blends	2 years		1-2 years
	1 year *		
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		
<b>Other Food Staples</b>			
Bacon bits	4 months		
Baking powder	18 months		
Baking soda	2 years		
Bouillon products	1 year		
Carbonated soft drinks (12 oz. cans)	6-9 months		
Carbonated soft drinks, diet (12 oz. cans)	3-4 months		
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		1 year
	6 months*		
Cornstarch	18 months		2 years
Gelatin	18 months		
Honey, jams, jellies, and syrup	1 year	6-8 months*	
Marshmallows	2-3 months		
Marshmallow cream	3-4 months		
Mayonnaise	2-3 months	12 months	
		2 months*	
Molasses	2 years		
Nuts, shelled	4 months	6 months	
Nuts, unshelled	6 months		
Nuts, salted			6-8 months

\* Opened

+ Cooked

^ Refrigerate after opening

# After manufacture date

<b>Food</b>	<b>Pantry</b> (Room Temperature)	<b>Refrigerator</b> (33°F to 40°F)	<b>Freezer</b> (32°F)
<b>Other Food Staples (continued)</b>			
Nuts, unsalted			9-12 months
Oil, salad	3 months <sup>^</sup> 2 months*		
Parmesan grated cheese	10 months 2 months*		
Pasteurized process cheese spread	3 months	3-4 weeks*	4 months
Peanut butter	6-9 months 2-3 months*	4-6 months	
Popcorn	1-2 years	2 years	2-3 years
Pectin	1 year		
Salad dressings, bottled	1 year <sup>^</sup>	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	6 months 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		
<b>Vegetables</b>			
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
Mushrooms		2 days	
Onions	1 week	3-5 days	

\* Opened

+ Cooked

<sup>^</sup> Refrigerate after opening

<sup>#</sup> After manufacture date

<b>Food</b>	<b>Pantry</b> (Room Temperature)	<b>Refrigerator</b> (33°F to 40°F)	<b>Freezer</b> (32°F)
<b>Vegetables (continued)</b>			
Onion rings (precooked, frozen)			1 year <sup>#</sup>
Peppers		1 week	
Pickles, canned	1 year	1 month*	
Frozen potatoes			8 month
Sweet potatoes	2-3 weeks		
White potatoes	2-3 months		
Potato chips	1 month		
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	
Turnips		2 weeks	
Commercial baby food, jars	1-2 years <sup>^</sup>	2-3 days	
Canned vegetables	1 year <sup>^</sup>	3-5 days*	
Canned vegetables, pickled	1 year <sup>^</sup>	1-2 months*	
Dried vegetables	6 months		
Frozen vegetables			8 months
Vegetable soup		3-4 days	3 months
<b>Fruits</b>			
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	3-5 days*	
Cherries	Until ripe	3 days	
Citrus fruit	Until ripe	2 weeks	
Dried fruit	6 months	2-4 days <sup>+</sup>	
Frozen fruit			1 year
Fruit juice concentrate		6 days	1 year
Fruit pies, baked		2-3 days	8 months
Fruit, pre-cut, fresh	Until ripe	2-4 days	1 year
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	

\* Opened

<sup>+</sup> Cooked

<sup>^</sup> Refrigerate after opening

<sup>#</sup> After manufacture date

<b>Food</b>	<b>Pantry</b> (Room Temperature)	<b>Refrigerator</b> (33°F to 40°F)	<b>Freezer</b> (32°F)
<b>Dairy Products</b>			
Butter		1-2 months	9 months
Buttermilk		2 weeks	
Cottage cheese		1 week	3 months
Cream cheese		2 weeks	
Cream-light, heavy, half- and-half		3-4 days	1-4 months
Eggnog commercial		3-5 days	6 months
Margarine		4-5 months	12 months
Condensed, evaporated and dry milk	12-23 months <sup>^</sup>	8-20 days*	
Milk		8-20 days	3 months
Ice cream and sherbet			2 months
Hard natural cheese (e.g. cheddar, swiss)		3-6 months 3-4 weeks*	6 months
Processed cheese		3-4 weeks	6-8 months
Soft cheese (e.g. brie)		1 week	6 months
Pudding		1-2 days*	
Snack dips		1 week*	
Sour cream		2 weeks	
Non-dairy whipped cream, canned		3 months	
Real whipped cream, canned		3-4 weeks	
Yogurt		2 weeks	1-2 months
<b>MEATS, FISH, POULTRY, AND EGGS</b>			
<b>Meats</b>			
Fresh beef and bison steaks		3-5 days	6-9 months
Fresh beef and bison roasts		3-5 days	9-12 months
Fresh pork chops		3-5 days	4-6 months
Fresh lamb chops		3-5 days	6-8 months
Fresh veal		1-2 days	4-6 months
Fresh ground meat (e.g. beef, bison, veal, lamb)		1-2 days	3-4 months
Cooked meat		2-3 days	2-3 months
Canned meat	1 year	3-4 days*	3-4 months
Ham, whole		1 week	1-2 months
Ham, canned	2 years	1 week*	3-4 months
Ham, canned “keep refrigerated”		6-9 months 3-5 days*	3-4 months
Shelf-stable unopened canned meat (e.g. chili, deviled ham, corn beef)	1 year	1 week*	
Ham, cook before eating		1 week	
Ham, fully cooked		2 weeks 1 week*	
Ham, dry-cured	1 year	1 month	
Ham salad, store prepared or homemade		3-5 days	
Bacon		2 weeks 1 week*	1 month
Corned beef, uncooked		5-7 days	1-2 months

\* Opened    + Cooked    ^ Refrigerate after opening    # After manufacture date

<b>Food</b>	<b>Pantry</b> (Room Temperature)	<b>Refrigerator</b> (33°F to 40°F)	<b>Freezer</b> (32°F)
<b>Meats (continued)</b>			
Restructured (flaked) meat products			9-12 months
Sausage, fresh		1-2 days	1-2 months
Smoked breakfast sausage links, patties		1 week	2 months
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 3-7 days*	1-2 months
Luncheon meat		2 weeks 3-7 days*	1-2 months
Meat gravies		1-2 days	2-3 months
TV beef and pork dinners			18 months <sup>#</sup>
Meat based casseroles		3-4 days	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 <sup>^</sup>	2 weeks*	
<b>Fish</b>			
Breaded fish			4-6 months
Canned fish	1 year	1-2 days*	
Cooked fish or seafood		3-4 days	3 months
Lean fish (e.g. cod, flounder, haddock)		1-2 days	6-10 months
Fatty fish (e.g. bluefish, salmon, mackerel)		1-2 days	2-3 months
Dry pickled fish		3-4 weeks	
Smoked fish		2 weeks	4-5 weeks
Seafood-clams, crab, lobster in shell		2 days	3 months
Seafood-oysters and scallops		4-5 days	3-4 months
Seafood-shrimp		4-5 days	3 months
Seafood-shucked clams		4-5 days	3 months
Tuna salad, store prepared or homemade		3-5 days	
<b>Poultry</b>			
Chicken nuggets or patties		1-2 days	
Chicken livers		1-2 days	3 months
Chicken and poultry TV dinners			6 months
Canned poultry <sup>^</sup>	2-5 years	3-4 days*	4-6 weeks
Cooked poultry		2-3 days	4-6 months
Fresh poultry		1-2 days	1 year
Frozen poultry parts		1-2 days	6-9 months
Canned poultry		1 day	3 months
Poultry pies, stews, and gravies		1-2 days	6 months
Poultry salads, store prepared or homemade		3-5 days	
Poultry stuffing, cooked		3-4 days	1 month

\* Opened

<sup>+</sup> Cooked

<sup>^</sup> Refrigerate after opening

<sup>#</sup> After manufacture date

<b>Food</b>	<b>Pantry</b> (Room Temperature)	<b>Refrigerator</b> (33°F to 40°F)	<b>Freezer</b> (32°F)
<b>Eggs</b>			
Eggs, in shell		3-5 weeks	
Eggs, hard-boiled		1 week	
Eggs, pasteurized, liquid		10 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)			
<b>Wild Game</b>			
Frog legs		1 day	6-9 months
Game birds		2 days	9 months
Small game (rabbit, squirrel, etc.)		2 days	9-12 months
Venison ground meat		1-2 days	2-3 months
Venison steaks and roasts		3-5 days	9-12 months
* Opened	+ Cooked	^ Refrigerate after opening	# After manufacture date

## 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.
- National Restaurant Association. 2001. Be cool-chill out! Refrigerate promptly. National Restaurant Association Education Foundation's International Food Safety Council, Washington, D.C.
- USDA. 1997. Basics for handling food safely. U.S. Department of Agriculture, Food Safety and Inspection Service, Washington, D.C.

*Originally written by:*  
*Tim Roberts, Assistant Professor and Extension Specialist, Food Safety,*  
*Department of Human Nutrition, Foods and Exercise, Virginia Tech*  
*Paul Graham, Associate Professor and Extension Specialist, Muscle Foods,*  
*Department of Food Science and Technology, Virginia Tech*