

# Buying and storing

# Canadian foods for foodservice industry



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## **To restaurateurs and food service operators**

Over the years, Agriculture Canada has provided the food industry with marketing, grading and inspection services to ensure high quality foods on the market. Over 2000 inspectors are constantly checking the health of animals and poultry brought for slaughter, the sanitation of all establishments where there is government grading and, finally, the adherence to grade standards set by regulation for almost all Canadian agricultural foods and food products. These inspectors work in meat packing plants, egg grading stations, canneries, freezing plants, wholesale markets, warehouses and granaries.

Safe, quality foods are available to all, but it takes know-how to buy and keep foods stored with a minimum of waste. The information in this booklet has been specially assembled for food service operators. We hope you find it useful and keep it handy for frequent reference.

We're looking forward to supplying more information to help you make the best use of Canadian foods in your menus. We want to learn more about your needs, so if you have any questions please contact us.

Food Consultants  
Food Advisory Division  
Agriculture Canada  
Ottawa  
K1A 0C5  
(613) 995-5880

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## Food labeling

Labels on prepackaged foods are placed there for good reasons. The factual information provided on the label can be helpful in making successful purchasing decisions.

According to the Food and Drug Act and Regulations a label applied to a food product shall carry 1) **the common name of the food**, 2) **the identity and principal place of business** of the person by or for whom the food was manufactured or produced for resale and 3) **a complete list of ingredients** by their acceptable common names in descending order of their proportions, unless the quantity of each ingredient is stated in terms of percentages.

The Weights and Measures Act requires that the **net quantity** be declared on the label.

All information required to be shown on the label of a food must be shown in both official languages except that the identity and principal place of business of the person by or for whom the food was manufactured, processed, produced or packaged for resale may be shown in one of the official languages.

“PREVIOUSLY FROZEN” — For meat, meat by-products, poultry meat, poultry by-products, fish, or any marine or fresh water animal that has been frozen and thawed before sale, the term “Previously Frozen” must appear on the food label.

## Food safety— what you can do

To assist in preventing food-borne illness, everyone must follow the rules of food sanitation in handling foods during receiving and storage. Here is what you can do:

### Purchasing food

- Buy clean, wholesome food from reputable dealers.
- Buy only inspected meat and poultry products.

- Make sure that frozen foods are frozen, not thawed, when delivered.
- Do not accept bulging, leaking or rusting cans.

### Storing food

- Store all perishable and frozen foods promptly in the refrigerator or freezer.
- Keep cold foods cold, at 4°C (40°F) or lower, and hot foods hot, at 60°C (140°F) or higher.
- Do not hold perishable foods at room temperature for any length of time; serving time should be as short as possible.
- Wrap properly and refrigerate or freeze all left-over foods and any items prepared in advance during slow production periods.

## Dairy foods

### Cheese

Canada produces over 50 varieties of cheese. Canadian cheddar is the most popular, accounting for about two thirds of the cheese consumed. Of the many other cheeses available, those manufactured in the largest quantities include Mozzarella, Brick, Colby, Swiss and Cottage.

### Inspection and Grading

Cheese factories are inspected for sanitation by federal and provincial government departments of both health and agriculture. The milk used in making cheese is inspected by provincial dairy inspectors. Federal dairy inspectors and graders are responsible for grading cheese, and for checking its moisture and milk-fat content, packaging and labeling. Grade standards are provided for cheddar cheese and most of the cheddar made in Canada is First Grade in quality.

### Labeling

Cheddar cheese is labeled Mild, Medium, Old or Extra Old, according to the length of time it has been held to ripen or age—Mild 2 to 3 months; Medium 4 to 5 months; and Old 9 months or longer. The grade may also appear on the label.

In future, many of the less common varieties of cheese will be labeled for relative firmness, e.g., soft, semisoft, firm or hard; and for the most prominent ripening characteristics, e.g., interior ripened, surface ripened, blue veined or unripened. Process cheese includes the name of the natural cheese from which it is made, for example “Process Cheddar Cheese.”

## Buying

- Compare prices per pound of mild, medium and old cheese. Both price and flavor increase with the age of the cheese.
- Compare the price of bulk cheese with that of prepackaged single-portion cheese.
- Cheddar cheese is available in bulk sizes of 20, 40, and 80 to 90 pounds.
- Packaged cheese is available in sizes of 4 ounces, 8 ounces, 1 pound and multiples of 1 pound.
- Compare prices of 'Canadian-made' and 'imported' specialty cheeses. Now that so many European-type cheeses are produced in Canada, a wide selection is available for use on cheese trays and in main dishes.
- Allow about 3 ounces of cheese per person on a cheese tray.

### YIELD PER POUND OF CHEESE

Cheddar cheese, grated	4 cups
Process cheese slices	16 or 24 slices
Cottage cheese	2 cups

## Storage

- To prevent cheese from drying out, wrap it tightly or store in a covered container in the refrigerator. If cheese becomes dry and hard, grate it and store in a tightly covered container for use in cooking.
- If slight surface mold develops on cheese, it can still be used; scrape or cut off any discolored parts before using.
- Freezing cheese is not generally recommended because it may become crumbly. However, freezing retains the flavor of some perishable cheeses for a longer period. Freeze in packages of 1 pound or less and not more than 1 inch thick. Package tightly in freezer wrap. To use, remove wrapping and thaw in refrigerator, 7 to 8 hours per pound.

### STORAGE OF DAIRY PRODUCTS\*

	Refrigerator 4°C (40°F)	Freezer -18°C (0°F)
Butter, salted	2 weeks	1 year
Cheese, cottage	3 to 5 days	Not recommended
firm e.g., cheddar	Several months	3 months
process (opened package)	3 to 4 weeks	3 months
soft, e.g., Camembert, cream	1 or 2 weeks	Not recommended
Cream, table or whipping	3 days	1 month
sour	1 week	Not recommended
Milk	3 to 5 days	6 weeks
Yogurt	7 to 10 days	1 month

\*Check durable date on label

## Skim milk powder

The substitution of reconstituted dry skim milk for fluid milk is becoming increasingly important in institutional food services, because of the comparatively low cost of dry skim milk and its convenience in handling and storage. It may also be added to various foods to increase nutritive value. All instant skim milk powder in Canada is fortified with vitamins A and D so that, with the exception of fat content, it is similar in nutritional value to fresh whole milk.

## Grading

All instant skim milk powder packaged and sold in Canada is Canada First Grade. The powder is graded on the basis of color, flavor, odor, fat and moisture content, solubility and bacterial content.

## Buying

Skim milk powder is sold in packages or bags weighing 1, 3, 5, 8, 10, 12, 24 and 50 pounds. One pound of skim milk powder yields 6 $\frac{2}{3}$  cups powder or 4 quarts reconstituted skim milk.

## Storage

Store instant skim milk powder in a cool, dry place. Although unopened packages keep for many months on the shelf, after opening use the powder within 1 to 2 months. Once mixed with water, treat the product like fresh milk; either use immediately or refrigerate. Refrigerate for several hours if it is to be used as a beverage.



# Eggs

should not be confused with size. Only Canada A1, and A are available in different sizes.

The new symbol does not guarantee that the eggs are of Canadian origin. It does guarantee that the products meet Canadian government grading standards.



Grade mark

Fresh eggs, a key food in the food service industry, are always available and offer a competitively priced source of protein for the main course. Liquid and dried egg products make an excellent alternative for fresh eggs in many recipes.

## Grading

Eggs in the shell are sold by grade in all provinces. All shell eggs that are imported, exported or shipped from one province to another for commercial sale must be graded. The grade name appears inside a maple leaf symbol on cartons. The three grades bearing the maple leaf symbol are Canada A1, Canada A and Canada B. These grades indicate the quality of the egg and

## Grades

All grades of eggs must be free from discolored yolks and blood spots.

Both Canada A1 and A eggs are ideal for all purposes, but are especially good for frying and poaching where appearance is important.

**CANADA A1** — Eggs are clean, normal in shape, with sound shells and finest interior quality. Yolks are round and compact, and surrounded by very thick dense albumen. Cold-storage eggs are not permitted in this grade.

**CANADA A** — Eggs are practically clean, practically normal in shape, with sound shells. Yolks are fairly well rounded and surrounded by thick albumen.

The following approximate equivalents may be used as a guide for amounts of frozen and dried egg products to use in recipes.

### FROZEN EGGS

<i>Weight</i>	<i>Amount of product to use</i>	<i>Measure (approx.)</i>	<i>Equivalent in shell eggs (Large)</i>
Whole			
1 lb		2 cups less 2 tbsp	9
1 lb 1¾ oz		2 cups	10
Yolks			
1 lb		2 cups less 2 tbsp	26
6¼ oz		¾ cup	10
Whites			
1 lb		2 cups less 2 tbsp	14
11½ oz		1¼ cups, 2 tbsp	10

### DRIED EGGS

<i>Weight</i>	<i>Measure (approx.)</i>	<i>Amount of water to add</i>	<i>Equivalent in shell eggs (Large)</i>
Whole			
1 lb	1 qt 1⅓ cups	1 qt 1⅓ cups	32
5 oz	1⅔ cups	1⅔ cups	10
Yolks			
1 lb	1 qt 2¾ cups	2¼ cups	54
3 oz	1¼ cups	6⅔ tbsp	10
Whites			
1 lb	1 qt ¼ cup	3 qt ½ cup	100
1½ oz	6⅔ tbsp	1¼ cups	10

## FRESH EGGS

### SIZES AND WEIGHTS FOR CANADA A1 and A

Size	Weight of each egg
Extra large	At least 2¼ ounces
Large	At least 2 ounces
Medium	At least 1¾ ounces but less than 2 ounces
Small	At least 1½ ounces but less than 1¾ ounces
Peewee (Canada A only)	Less than 1½ ounces

**CANADA B** — Eggs are reasonably clean, slightly abnormal in shape, with sound shells. Yolks are moderately oblong, slightly flattened and enlarged, and surrounded by albumen less firm than in Canada A. Each egg weighs at least 1¾ ounces. Canada B eggs are good for general cooking and baking where appearance is not so important.

**CANADA C** — Processing grade for commercial frozen, liquid and dried egg products. Sizes are not specified. May include cracked eggs.

**GRADE CRACKS** — Provincial grade in some provinces. Sizes are not specified. Shell is cracked but contents are not leaking.

## Storage

- Refrigerate fresh eggs, large end up, in cartons and away from highly flavored foods. Use within 3 weeks.
- Store leftover yolks or whites in tightly covered containers in the refrigerator. Add a little water to yolks. Use whites within a week, yolks within 2 or 3 days.
- Store dried eggs in unopened packages in a cool, dry place where the temperature is not more than 10°C (50°F) or, preferably, in the refrigerator. After opening, refrigerate any unused portion in a container with a close-fitting lid. Reconstitute only the amount needed. Use reconstituted eggs immediately or refrigerate promptly and use within 1 hour.
- Store frozen eggs in freezer at -18°C (0°F) or below. They will keep for long periods with minimum loss of quality. Thaw only the amount required at one time, either overnight in the refrigerator or under cold running water without submerging container. Use immediately; refrigerate any unused portion promptly in an airtight container to be used within 24 hours.

## Poultry

The variety of poultry products available to the food service industry is increasing steadily. Because of this changing market, buyers must know much more than they used to about selecting the right products for production needs, especially in purchasing cooked, prepared items. Per capita poultry consumption is about 19 kg (42 pounds) a year, which almost rivals the annual per capita consumption of pork.

## Health inspection

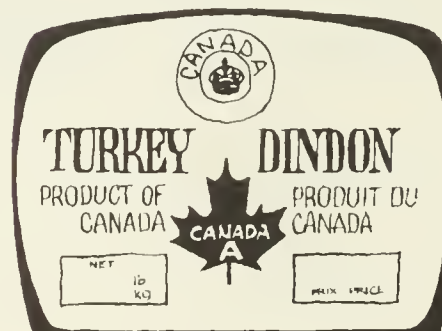
A "Canada" health inspection stamp appears only on poultry that is slaughtered and eviscerated in federally inspected plants. Inspection is compulsory only when poultry is moved interprovincially or is imported or exported.

## Grading

Grading of dressed and eviscerated poultry is compulsory for wholesale trade in most major cities, as well as for interprovincial and export trade. All imported dressed and eviscerated poultry must conform to Canadian grade standards although the word "Canada" does not appear in the grade mark.

## Grades

Grade names are the same for chickens, capons, fowl, turkeys, ducks and geese. The grade name appears inside a maple leaf symbol, which is prominently indicated on a metal breast tag on fresh poultry or printed on the bag for frozen poultry. A different color designates each grade. Turkeys, ducks and geese must also be marked as "young" or "mature."



**CANADA A (Red)** — Birds have normal conformation and are well fattened and fleshed. They may have a slightly crooked keel bone, minor discolorations, and a few pinfeathers and short tears in the skin. Chickens have fat showing over breast and thighs. Turkeys have breast and thighs reasonably well covered with fat and a moderate covering of fat over the back. Fowl, ducks and geese have breast, thighs and back reasonably well covered with fat.

**CANADA B (Blue)** — Birds have normal conformation but may have a slightly crooked keel bone and are not as well fleshed and fattened as Canada A birds. A few short skin tears, minor discolorations and pinfeathers that do not seriously detract from the appearance of the bird are allowed.

**CANADA UTILITY (Blue)** — These must at least qualify for Canada B, but one or more parts of a bird may be missing.

**CANADA C (Yellow)** — Fleshing is poorer than for Canada B. Birds may have large skin tears, pinfeathers and prominent discolorations.

Chicken parts offer real convenience as well as the added benefit of fairly uniform portion size. Chicken breasts, de-boned breasts, drumsticks, thighs, a half chicken, or a combination of these parts are available in bulk packs.

### Whole Turkey

Loss in thawing and cooking reduces the yield of roasted, edible meat obtained from a whole turkey to about 40% of the purchased weight. For each pound of uncooked turkey you can generally count on 6 ounces of cooked meat, 4½ ounces

of which can be sliced and the remainder used in casseroles or soup.

### TURKEY YIELDS

Weight of turkey (pounds)	No. 3-ounce servings cooked meat			Total
	Breast	Leg	Other <sup>1</sup>	
8	8	5	3	16
12	12	8	5	25
16	16	11	7	34
20	20	14	8	42
24	24	17	9	50

<sup>1</sup>Refers to both white and dark meat not suitable for slicing, which may be diced for use in salads, sandwiches, etc. Nine ounces of cooked turkey yield 2 cups diced meat

Turkeys weighing 9 kg (20 pounds) or more often offer greatest profit potential. Canada Grade Utility birds usually sell for less per pound than Grade A birds. They are a good buy when appearance is not important.

### Turkey Parts

Turkey parts, such as breasts and legs, are gaining in popularity because they cook in less time than whole turkeys and are easier to serve. For 3 ounces of cooked meat per portion, allow 5 ounces of bone-in breast or 6 ounces of whole leg, thigh and drumstick. Turkey parts may be roasted or braised and then be sliced or diced.

### Turkey Roll

An even more convenient product is the turkey roll or roast. Boneless turkey meat is available

## Buying

### POULTRY BUYING GUIDE

Classification	Eviscerated weight (pounds)	Amount to buy 3-ounce serving
Chicken broilers <sup>1</sup> and fryers — young birds, 6 to 10 weeks old	up to 4	¾–1 pound
Chicken roasters—10 to 18 weeks old	over 4	¾–1 pound
Chicken capons—unsexed male birds, 4 to 6 months old, excellent flavor, very tender with a high proportion of white meat	5–8	¾ pound
Fowl—mature hens, over 7 months old; meat less tender than roasters or broilers	3 and over	¾ pound
Turkey broilers <sup>1</sup> —young birds, under 15 weeks old	10 and under	½–¾ pound
Young turkeys—4 to 8 months old	10 and over	½–¾ pound
Mature turkeys—over 8 months old	10 and over	½–¾ pound
Young ducks <sup>2</sup> —less than 1 year old	4–6	1–1¼ pounds
Young geese <sup>2</sup> —less than 1 year old	9–12	¾–1 pound
Cornish chickens—5 to 6 weeks old	1–1½	¾–1 pound (½ to 1 chicken)

<sup>1</sup>The term "broiler" (or "fryer") is not compulsory, and chicken and turkey are marked as "chicken" or "young turkey," respectively

<sup>2</sup>Ducks and geese over 1 year old are marked "mature" on the grade panel or tag.

cooked or uncooked and frozen. Turkey rolls may be of light or dark meat or both, with or without skin. The label specifies the type of meat and whether or not it is seasoned.

The most common sizes of turkey rolls available are from 7 to 10 pounds, packaged four to a case. Cooked turkey rolls yield their indicated weight, but allowances for cooking losses must be made for uncooked rolls. The following chart compares the yields of sliced meat from cooked and uncooked turkey rolls with those of breast and leg meat from whole turkey. Of course, whole turkeys also yield some meat not suitable for slicing but which can be used in sandwiches, creamed dishes or casseroles.

#### YIELDS OF SLICED MEAT FROM TURKEY ROLLS AND WHOLE TURKEY

<i>Turkey product</i>	<i>Approx. no. 3-oz servings from 8 pounds</i>	<i>Amount to yield 50 3-oz. cooked servings</i>
Uncooked roll	27	2 8-lb rolls
Cooked roll	42	1 10-lb roll
Whole turkey (breast and leg)	13	2 16-lb turkeys

## Storage

Store fresh poultry, loosely covered with waxed paper or aluminum foil, in the refrigerator.

For freezer storage, if poultry is purchased frozen, no additional packaging is required. Otherwise, package in freezer bags or wrappings such as laminated paper, plastic film or aluminum foil. Wrap giblets separately. Do not stuff poultry before freezing. Commercially stuffed frozen poultry is prepared under strict sanitary conditions that cannot be duplicated in the institutional kitchen.

#### MAXIMUM RECOMMENDED POULTRY STORAGE TIMES

	<i>Refrigerator 4°C (40°F)</i>	<i>Freezer -18°C (0°F)</i>
Whole chickens and turkeys	2-3 days	12 months
Cut-up poultry	2-3 days	6 months
Geese and ducks	2-3 days	3 months
Giblets	1-2 days	3 months
Cooked poultry	3-4 days	1-3 months

## Thawing

Poultry can be cooked while still frozen, but usually thawing is preferred to allow for removal of giblets and to ensure even cooking. The refrigerator is the ideal place for thawing as it keeps poultry cold until it is completely thawed. Thaw frozen poultry just before cooking.

To thaw in the refrigerator, leave the original wrapper intact. Allow about 10 hours per kg (5 hours per pound). Cook within 24 hours.

To thaw in cold water, immerse the bird, in the original wrapping, in water changed several

times during thawing. Allow about 2 hours per kg (1 hour per pound). Cook within 24 hours.

To thaw at room temperature, slit the wrapping along the back, place bird on a rack or tray to drain as it thaws. Allow 3 hours per kg (1½ hours per pound). Cook immediately or refrigerate.



In the food service industry, about a third to a half of the total food budget is spent for meat, fish and poultry, and most of this goes for meat. Canadian per capita consumption of meat per year is about 73.5 kg (162 pounds), of which 63% is beef, 31% pork, 3% veal, 1% lamb and 2% variety meats.

## Health inspection

Health inspection by a federal meat inspector is necessary before meat can be moved in inter-provincial or international trade. Inspection of meat bought or sold within the province in which it is slaughtered is the responsibility of the province.

Any meat plant in Canada that applies and meets the requirements may receive inspection service provided by the Food Production and Inspection Branch, Agriculture Canada. In inspected plants, federal veterinarians are responsible for the examination of meat animals before and after slaughter to ensure that all diseased or otherwise unwholesome meat is condemned as unfit for human consumption.

Approved meat and meat products are stamped, tagged or labeled with the official inspection legend—a round stamp bearing a crown in the center and, around the crown, the word "Canada" and the registered number of the plant. This stamp does not indicate quality or grade but means that the food is fit for human consumption.

Most meat products packed in federally inspected plants have composition standards set and monitored by the Food Production and Inspection Branch. These include minimum protein content, maximum fat, maximum dextrose and maximum moisture.

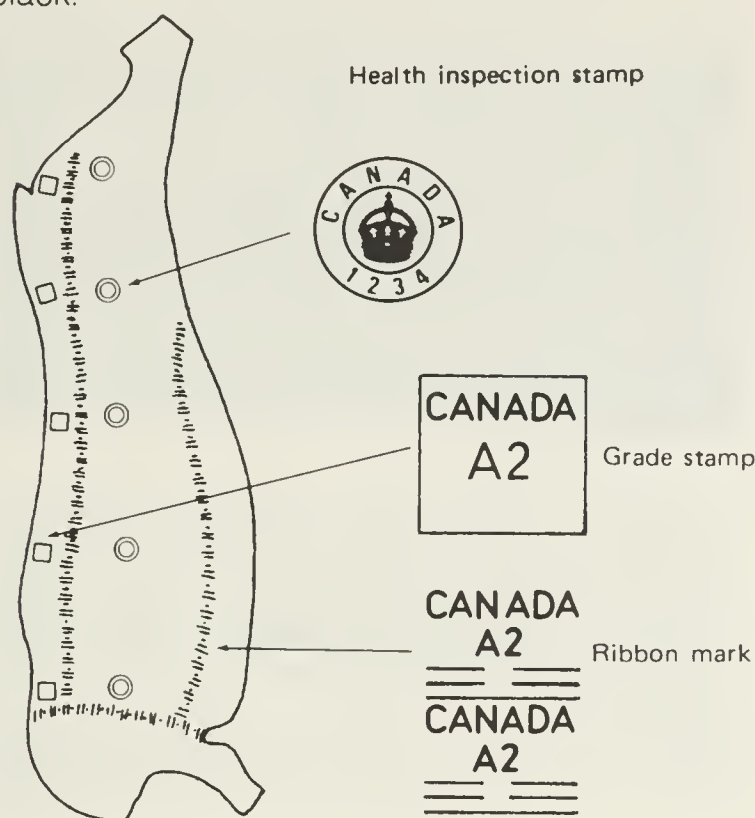
Some small plants not registered for federal inspection operate under provincial health inspection regulations; and in some areas medical health officers inspect meat at local or municipal levels. However, only meat inspected by federal inspectors in registered plants is stamped with the official inspection legend.

# Grading

Meat either passes or fails inspection for wholesomeness but grading is entirely another matter. Although beef cuts from carcasses graded Canada A may not have the same 'eating quality' as those graded Canada B, both are acceptable. Although all kinds of meat may be graded, beef concerns the food service buyer most.

## Beef

Most federally health-inspected beef carcasses are graded by inspectors of the Food Production and Inspection Branch, Agriculture Canada. The inspector stamps a brown square mark on the main wholesale cuts of the carcass. Under his supervision, a ribbon-like mark is applied so that the ribbon brand appears on each wholesale cut. The color indicates the grade: Canada A, red; Canada B, blue; Canada C, brown; Canada D, black.



**CANADA A** — Highest quality young beef. It has bright-red, fine-textured lean, with at least slight marbling. About 70% of the graded beef marketed qualifies for this grade.

Canada A is classified into four fat levels according to carcass weight by government grading inspectors in packing plants. These are determined by actual measurement of external fat at the rib eye between the 11th and 12th ribs. Canada A1 has the minimum level of fat to meet Grade A and A4 has the highest level.

**CANADA B** — From young animals. Color of lean ranges from bright red to medium-dark red. Texture may be somewhat coarse and marbling is not necessary. As with Canada A, there are four fat levels but Canada B1 has a minimum slightly lower than Canada A1. Canada B grade accounts for about 3% of all beef graded and is used by the institutional trade.

**CANADA C, CLASS 1** — From animals of youthful to intermediate age. The lean ranges in color from bright red to medium-dark red. The fat ranges from white to pale yellow. Carcass may have less fat than Canada B.

**CANADA C, CLASS 2** — From animals of youthful to intermediate age. The texture of the flesh may be coarse, the color from bright red to dark red. The fat ranges from white to lemon yellow, and from firm to soft. Canada C grade beef makes up about 5% of graded beef marketed.

**CANADA D** — From mature cows and steers. Classes 1 to 4 are divided according to muscle development and quality, with D4 having the lowest proportion of lean meat to bone. D4 also includes excessively fat carcasses. Grade D beef represents about 20% of the market, most being used for ground beef and processed meat.

## Veal, Lamb and Pork

Grade standards are established for veal and lamb, and the carcasses can be grade-stamped for consumer acceptance. Pork carcasses are graded for producer payment only. However, the grading system provides incentive for producers to improve hog quality, which benefits the food buyer.

## Buying

To purchase meat wisely, the needs of the user must be precisely defined. Specific menu items require special cuts and kinds of meat of a certain quality. A good knowledge of meat and its preparation can do much to lower meat costs. The meat industry is beginning to adopt standardized names for fresh meat cuts. This will enable buyers to have a better understanding of the nature of meat for sale.

The price of meat fluctuates in response to supply and demand factors. Constant changes in livestock and meat prices help balance the current supply of meat with demand, and also signal to producers whether they should increase or decrease production.

Time available for preparation often determines whether to select a larger cut suitable for roasting, braising or cooking in liquid, or whether smaller, more tender cuts which can be cooked more quickly are preferable. Whenever possible, take advantage of the less tender cuts, which are less expensive. These can be flavorful and tender when cooked slowly in a small amount of liquid.

Ground beef must now be labeled according to fat content. Regular ground beef contains 30% fat or less. Medium ground beef contains 23% fat or less. Lean ground beef contains 17% fat or less. Select the type according to your needs. Regular ground beef is often used for patties and meatballs since the lean and fat combination makes them juicy and not too compact. Leaner ground beef may be more suitable for meat loaves and casseroles.

The often-neglected variety meats such as liver, heart, kidney and tongue can be less expen-

sive than other meats. Liver and kidney are often the lowest in price and combine well with other meats. Beef and pork liver sell for less than calf liver and are about the same nutritionally.

The real price of meat is not its 'as purchased' price but what it costs 'as served.' To calculate true costs, yields must be known. Divide the price per pound by the number of servings per pound, as given in the following table, to obtain an approximate cost per serving.

**SERVINGS PER POUND AS PURCHASED**  
(yield 3 ounces boneless cooked meat)

Roasts (including beef, pork, veal, lamb)	
—boneless	3-4
—bone-in	2-3
Steaks and chops	2-3
Stew meat—boneless	3-4
—bone-in	2
Ground meat	3-4
Cold cuts	5
Liver, kidney, heart	3-4
Tongue, whole, fresh or pickled	2-3

Buying of boxed beef is becoming more popular. Under this system, beef carcasses are cut into primal cuts (chuck, rib, loin, and hip) and several subprimals (brisket, plate, flank, and sirloin tip) and shipped in boxes rather than as hanging beef. Boxed beef has several advantages: it assures the buyer of an adequate supply of specified cuts; allows more economical use of fat, trim and bone; reduces transportation costs; and reduces the possibility of improper handling.

## Storage

The lower the temperature, the slower changes take place in the cells of fat and muscle tissue, and the longer meat can be kept. For successful storage:

- Refrigerate fresh meat quickly after receiving and, if possible, store only with other meat products.
- Keep the temperature between  $-2^{\circ}\text{C}$  and  $4^{\circ}\text{C}$  ( $28^{\circ}\text{F}$  and  $40^{\circ}\text{F}$ ). Meat begins to freeze at about  $-2^{\circ}\text{C}$  ( $28^{\circ}\text{F}$ ) and is not considered safely chilled above  $4^{\circ}\text{C}$  ( $40^{\circ}\text{F}$ ). If the meat is to be kept with other foods, the optimum temperature is  $1-2^{\circ}\text{C}$  ( $34-36^{\circ}\text{F}$ ). If stored separately, a temperature range of  $-2-0^{\circ}\text{C}$  ( $28-32^{\circ}\text{F}$ ) would be ideal.
- You can leave fresh meat unwrapped if it is stored in a clean refrigerated area. If meat is wrapped, loosen the covering to allow air movement.
- Store vacuum-packaged meat as indicated in instructions on the bag.
- Cover cooked meat tightly to prevent drying out and refrigerate it as soon as possible. If it is not scheduled for use within the maximum refrigerator storage times, wrap properly and freeze.
- For freezing, select proper wrapping materials, such as aluminum foil or freezer paper. Label all packages with date, contents and weight or number of servings. Poorly wrapped meat may develop freezer burn; this does not mean that the meat is spoiled, but it is not as juicy, flavorful and uniformly tender as when purchased.
- Keep freezer temperature at or below  $-18^{\circ}\text{C}$  ( $0^{\circ}\text{F}$ ), because quality deteriorates above that temperature.

## Thawing

Frozen meats may be thawed before cooking or cooked without thawing. If roasts are thawed before cooking, a shorter and more even cooking is assured, particularly with larger cuts. Steaks and chops that have been thawed brown more readily than those cooked from the frozen state. When meats such as liver or cutlets are to be breaded or floured, the coating adheres more evenly if the meat is at least partly thawed. Cured

**MAXIMUM RECOMMENDED MEAT STORAGE TIMES**

	<i>Refrigerator</i> $4^{\circ}\text{C}$ ( $40^{\circ}\text{F}$ )	<i>Freezer</i> $-18^{\circ}\text{C}$ ( $0^{\circ}\text{F}$ )
Roasts—beef	3-4 days	10-12 months
—lamb and pork	3-4 days	8-10 months
—veal	3-4 days	4-5 months
Steaks, beef	2-3 days	10-12 months
Chops, pork and lamb	2-3 days	8-10 months
Chops, veal	2-3 days	4-5 months
Ground meat	1-2 days	3-4 months
Variety meats	1-2 days	3-4 months
Sausages	1-2 days	2-3 months
Wieners	3-4 days	2-3 months
Cured, smoked meat <sup>1</sup>	6-7 days	1-2 months
Cooked meats <sup>1</sup>	3-4 days	2-3 months
Leftover casseroles	2-3 days	1-2 months

<sup>1</sup>Freezing is not generally recommended for processed meats, as unfavorable flavor changes often occur due to the salt and spices they contain. Although such items as bacon, ham, bologna, frankfurters and salami can be frozen, it should be only for short periods.

and smoked pork, sausages and bacon may be partly or completely thawed before cooking.

Thaw meat in its wrapping to prevent evaporation of juices and absorption of off-flavors. The refrigerator is the ideal place for thawing as it keeps meat cold until it is completely thawed. If thawing is done at room temperature, cook meat as soon as it is thawed or place in refrigerator and cook within a few hours. Thawing times vary with size, thickness and shape of meat and temperature of refrigerator. Allow about 16 hours per kg (8 hours per pound) in the refrigerator or 4 to 6 hours per kg (2 to 3 hours per pound) at room temperature.

Do not refreeze meat that has completely thawed. Cook it promptly to prevent spoilage. After cooking fresh or frozen meat, you can freeze and store it for a short period in the same way as other leftover cooked meats. If meat has only partly thawed, it can be refrozen without risk but with possible loss of quality.



Wholesale and farmers' markets offer an abundance of garden-fresh produce the year round. Although peak production seasons for both locally grown and shipped-in produce still influence selection and prices of many items, the use of out-of-season fruits and vegetables is no longer

limited. Canadian farmers produce 60% of all fresh vegetables and 40% of all fresh fruits consumed in Canada.

## Grading and inspection

Most fresh fruits and vegetables grown in commercial quantities in Canada are sold by grade and are marked with a "Canada" grade name. Those fruits and vegetables for which grades are established must meet Canadian import requirements before being imported into Canada. Certain fruits and vegetables intended for interprovincial or export trade must be inspected. Not all provinces require grading of the same fruits and vegetables sold within a province, though all have regulations covering some. Provincial grades are similar to federal grades.

The following labeling requirements apply to all fruits and vegetables packaged for institutional use only. All of these markings must appear in English, in French or in both languages.

- Common name of the product
- Net quantity—volume, weight or count; metric or Canadian units or both
- Grade name (if applicable)
- Identity and principal place of business of the person by or for whom the produce was produced or packaged for resale
- The words "Product of" followed by the name of the country in which the produce was produced or other words indicating that it was produced in that country
- The variety of apples or pears

In general, fresh fruits and vegetables are graded according to uniformity of size and shape, color, maturity, cleanliness and freedom from disease and other injury.

### Grades

#### FRUITS

Apples	Canada Extra Fancy	Canada Fancy	Canada Commercial or Canada Cee or Canada "C"
Pears	Canada Extra Fancy	Canada Fancy or Canada No. 1	Canada Commercial or Canada Cee or Canada "C" or Canada Domestic
Cherries	Canada No. 1	Canada Domestic	Canada Orchard Run
Apricots	Canada No. 1	Canada Domestic	
Crabapples	Canada No. 1	Canada Domestic	
Cranberries	Canada No. 1	Canada Domestic	
Grapes	Canada No. 1	Canada Domestic	
Peaches	Canada No. 1	Canada Domestic	
Plums	Canada No. 1	Canada Domestic	
Prunes	Canada No. 1	Canada Domestic	
Rhubarb, field	Canada No. 1	Canada Domestic	
Blueberries	Canada No. 1		
Cantaloupes	Canada No. 1		
Strawberries	Canada No. 1		

## VEGETABLES

Carrots	Canada No. 1 and Canada No. 1 Cut Crowns	Canada No. 2
Parsnips	Canada No. 1	Canada No. 2
Onions	Canada No. 1 and Canada No. 1 Pickling	Canada No. 2
Potatoes	Canada No. 1 and Canada No. 1 Large Canada No. 1 Small	Canada No. 2
Celery	Canada No. 1 and Canada No. 1 Heart	Canada No. 2
Asparagus	Canada No. 1	Canada No. 2
Beets	Canada No. 1	Canada No. 2
Brussels sprouts	Canada No. 1	Canada No. 2
Cabbages	Canada No. 1	Canada No. 2
Cauliflowers	Canada No. 1	Canada No. 2
Cucumbers, field or greenhouse	Canada No. 1	Canada No. 2
Head lettuce	Canada No. 1	Canada No. 2
Tomatoes	Canada No. 1	Canada No. 2
Rutabagas	Canada No. 1	
Sweet corn	Canada No. 1	

**APPLES** — Apples must have a minimum diameter of 2¼ inches, to meet federal standards. However, in certain years a 2-inch minimum is permitted for Canada Extra Fancy and Canada Fancy grades with 20% more color than normal color standards for red and red-striped varieties.

**POTATOES** — Sizes for potatoes are as follows:

<i>Grade</i>	<i>Size</i>
Canada No. 1	2¼–3½ inches in diameter for round varieties; 2–3½ inches in diameter for long varieties
Canada No. 1 Large	3–4½ inches in diameter
Canada No. 1 Small	1½–2¼ inches in diameter
Canada No. 1 New Potatoes	On or before September 15 each year (June 30 for long varieties) new potatoes with a minimum diameter of 1⅞ inches may be graded Canada No. 1.
Canada No. 2	1¾–4½ inches in diameter, with at least 75% of the lot having a diameter of 2 inches or larger

## Buying and storing

Because of the high perishability of fresh fruits and vegetables, buyers must know and recognize quality better than buyers in any other market. In addition to specifying the grade, personal checking on delivery is needed.



FRUIT BUYING AND STORAGE GUIDE

<i>Fruit</i>	<i>Availability</i>	<i>Buying tips</i>	<i>Storage</i>	<i>Storage time</i>
Apples	July–June	Good color, mature, well shaped	Refrigerate	2 months; 1 week for CA <sup>1</sup> apples
Apricots	Mid July–Aug	Plump, firm, uniform golden yellow or orange color	Refrigerate	1 week
Blueberries	Aug–Sept	Plump, dry, deep blue color	Refrigerate	2 days
Cherries	July–Aug	Firm, plump, shiny, well colored, without bruises	Refrigerate	3 days
Cranberries	—	Firm, plump, brightly colored	Refrigerate	1 week
Grapes	Sept–Oct	Plump, firm, good color	Refrigerate	5 days
Peaches	Aug–Sept	Firm, ripe, clear skinned, good color	Refrigerate	1 week
Pears	Sept–Apr	Smooth, good color, firm	Refrigerate	2 days
Plums	Aug–Sept	Plump, clean, full colored, yields to slight pressure	Refrigerate	5 days
Raspberries	July–Aug	Bright colored, clean	Refrigerate	2 days
Rhubarb	May–June	Firm, crisp, straight stalks	Refrigerate	3 days
Strawberries	Late June–July	Bright red color, with no dirt or soft spots	Refrigerate	2 days

<sup>1</sup>Controlled atmosphere.

FRESH VEGETABLE BUYING AND STORAGE GUIDE

<i>Vegetable</i>	<i>Availability of Canadian grown</i>	<i>Buying tips</i>	<i>Amount to purchase for 1 pound edible portion<sup>1</sup></i>	<i>Portion size</i>	<i>Storage</i>	<i>Storage time</i>
Asparagus	May–early July	Firm, straight stalks with tightly closed tips	1.79	3–4 stalks (2½ oz)	Refrigerate	2 days
Beans, wax and green	July–Sept	Crisp pods free from blemishes	1.25	½ cup (2½ oz)	Refrigerate	5 days
Beets	June–Mar	Firm, smooth beets free from cracks or blemishes	1.32	½ cup (2½ oz)	Refrigerate or store in cool moist place	3½ weeks
Broccoli	Aug–Oct	Tender firm stalks with compact green heads	1.64	½ cup (2½ oz)	Refrigerate	3 days
Brussels sprouts	July–Nov	Firm compact heads with fresh green leaves	1.41	4–5 sprouts (2½ oz)	Refrigerate	5 days
Cabbage	Mid-June–Apr	Firm heads with crisp leaves	1.26	Cooked—¾ cup (4 oz) Raw—1 cup (2 oz)	Refrigerate	2 weeks
Carrots	Late June–June	Firm, well shaped, smooth, free from blemishes and green color	1.22	½ cup (2½ oz)	Refrigerate or store in cool moist place	Young carrots—2 weeks, others—several weeks
Cauliflower	June–Nov	Firm, creamy-white, smooth head that is compact and heavy	1.50	⅔ cup (3 oz)	Refrigerate	10 days
Celery	July–Nov	Crisp, fresh, green bunches with straight stalks free from blemishes	1.33		Refrigerate	2 weeks

<i>Vegetable</i>	<i>Availability of Canadian grown</i>	<i>Buying tips</i>	<i>Amount to purchase for 1 pound edible portion<sup>1</sup></i>	<i>Portion size</i>	<i>Storage</i>	<i>Storage time</i>
Corn —on cob —whole kernels	Aug–Sept	Creamy-yellow, plump kernels	– 1.85	1 ear $\frac{3}{8}$ cup (2½ oz)	Refrigerate	Same day
Cucumber	Mar–Nov	Even shape, solid green color, heavy	1.05	–	Refrigerate	10 days
Eggplant	Aug–Oct	Well shaped, firm, heavy, smooth, satiny purple skin, free from blemishes	1.23	$\frac{1}{2}$ cup (3 oz)	Refrigerate	5 days
Green peppers	July–Oct	Crisp, bright-green peppers with smooth skin	1.21	–	Refrigerate	1 week
Lettuce	Apr–Oct	Heavy, firm, crisp textured	1.35	1 cup (2½ oz)	Refrigerate	1 week
Mushrooms		Fairly clean, white, firm	1.15	$\frac{1}{4}$ cup (2½ oz)	Refrigerate	5 days
Onions	Aug–June	Firm with dry brownish yellow skins, no sprouting	1.12		Store in dry, airy place	4 weeks
Parsnips	Sept–late June	Firm, straight, smooth parsnips free of blemishes	1.34	$\frac{1}{2}$ cup (4 oz mashed)	Refrigerate or store in cool place	4 weeks
Peas	June–July	Crisp, bright-green pods	2.63	$\frac{1}{3}$ cup (2 oz)	Refrigerate	same day
Potatoes		Fairly clean, well shaped, relatively free from blemishes and green color	1.23	$\frac{1}{2}$ cup (3½ oz)	New—refrigerate; other—store in cool (7–10°C or 45–50°F) dark airy place	New—1 week; other—4–9 months, or 1 week at room temp
Spinach	May–Oct	Fresh, clean, crisp, green leaves	1.35	Cooked— $\frac{1}{2}$ cup (3 oz) Raw—1½ cups (1½ oz)	Refrigerate	4 days
Squash —summer	Aug–Dec	Summer varieties—tender skin, free from soft spots; winter—hard shell, free from soft spots	1.17	$\frac{1}{2}$ cup (4 oz)	Summer—refrigerate; winter—store in cool, dry place or at room temp	Summer—1 week; winter—several months, or 1 week at room temp
—winter	Sept–Feb		1.28	6 oz, with shell		
Tomatoes	Apr–Sept	Plump, firm	1.10		Refrigerate	1 week
Rutabaga	July–June	Firm, heavy with few scars	1.18	$\frac{1}{2}$ cup (4 oz)	Store in cool, moist place or at room temp	Several weeks if cool, or 1 week at room temp

<sup>1</sup>Average preparation losses are indicated, but in practice they vary widely. To determine the amount of vegetable required to yield the amount stated in a recipe as edible portion (EP), multiply the weight of the EP desired by the figure given in the table. For example, if a recipe calls for 15 lb EP carrots multiply 15 lb by 1.22 lb = 18.3 or 18 lb to purchase.

## Yields

### FRUITS

<i>Containers</i>	<i>Net weight (pounds)</i>
<b>Apples</b>	
Box, cell pack	40
Tray pack	42
Bushel	45
Crate	45
Economy carton	15
Handi-pack, junior box, B.C.	20
11 qt open	14
6 qt open	7
4 qt open	5
<b>Apricots</b>	
Bushel	50
Vu-pack	15
Lug	14.6
<b>Cantaloupe</b>	
Standard	70
20 qt open basket	24
Flat	23
<b>Cherries</b>	
Bushel	50
Lug	25
4 basket crate	20
11 qt flat	16
6 qt heaped	10
6 qt flat	8
<b>Crabapples</b>	
Pear box	38
11 qt basket	14
<b>Peaches</b>	
Bushel	50
4 basket crate	20
Vu-pack, cell pack	17
Handi-pack, box	18
11 qt flat	14
6 qt (2 layers)	6
<b>Pears</b>	
Bushel	50
Box	42
Junior box	22
Handi-pack carton	20
11 qt heaped	18
11 qt flat	15
6 qt heaped	11
6 qt flat	8
<b>Plums</b>	
Bushel	50
Lug	16
Vu-pack, handi-pack	17
4 basket crate	20
11 qt flat	16
6 qt flat	8
<b>Rhubarb</b>	
Box crate	42
Carton	10, 15, 20, 40 and 50
Dozen bunches	12

### VEGETABLES

<i>Containers</i>	<i>Net weight (pounds)</i>
<b>Artichokes</b>	
Bushel	56
<b>Asparagus</b>	
Eastern crate	12
Western crate	19
11 qt	12
6 qt	7
<b>Beans, Snap</b>	
Bushel	32
11 qt	11
6 qt	8
<b>Beets</b>	
Bushel, bag	50
Dozen bunches	9
<b>Cabbage</b>	
Bushel 8-10 heads	34
Bag or carton	40 and 50
Head	3½
<b>Carrots</b>	
Bushel	50
Bag	25, 50 and 75
Dozen bunches	12
<b>Cauliflower</b>	
Bushel or crate (9-12 heads)	27
Head	2½
<b>Celery</b>	
Crate 2½-5 dozen	65
<b>Corn on the Cob</b>	
Bushel	35
Crate, wirebound, 5 dozen	38
Dozen	6
<b>Cucumbers</b>	
Bushel	50
Lug	25
Peach box	20
Carton, 2 dozen	16
11 qt, 2 dozen	16
<b>Eggplant</b>	
Bushel	33
Peach box	15
20 qt open	14
<b>Lettuce</b>	
Bushel	18
Vacuum pack, 2 dozen carton	43
Dozen	6
<b>Onions</b>	
Bushel	50
Bag	25 and 50
Dozen bunches	4
11 qt pickling	17
<b>Parsley</b>	
6 qt 2 dozen bunches	3

	<i>Net weight (pounds)</i>
<b>Parsnips</b>	
Bushel	45
Bag	25 and 50
<b>Peas, Green</b>	
Bushel, in the pod	30
Bushel, shelled	50
11 qt in the pod	10
6 qt in the pod	6
<b>Peppers</b>	
Bushel	25
Peach box	8
11 qt	9
6 qt	5
<b>Potatoes</b>	
Barrel	165
Bushel	60
Bag	50, 75, 100 and 110
<b>Radishes</b>	
Dozen bunches	3
<b>Spinach</b>	
Bushel	18
<b>Tomatoes</b>	
Bushel	60
Lug	30
11 qt	17
6 qt	10
Carton, box or crate	8, 10 and 15, plus multiples of 5 pounds
<b>Rutabagas</b>	
Bushel	50
Bag or carton	25 and 50

## Processed fruits and vegetables

Processed fruits and vegetables are widely used by the food service industry because they are nonseasonal, easy to store for long periods, laborsaving, helpful in portion and cost control, and available in wide variety. In short, these products are among the most popular of convenience foods.

Canadian farmers produce 90% of all canned vegetables, 66% of canned fruit, 95% of frozen vegetables and 71% of frozen fruit consumed in Canada. Most processed fruits and vegetables are sold by grade in Canada.

About 95% of the production in every province is from plants registered for federal inspection and grading. Only federally registered plants may ship their products from one province to another or for export outside of Canada. Nonregistered plants are not permitted to use a Canada grade name on their products. Sale of such products must be confined to the province in which they were produced.

Imported fruit and vegetable products for which grades are established must carry a grade mark, and they must meet the federal grade standard set out in the regulations for those products. Imported fruit and vegetable products cannot have Canada as part of their grade name when sold in original containers. The name of the country of origin must appear on labels.

## Labeling

The label of processed fruits and vegetables is your guide to the contents. It gives the common name of the product, the brand name of the processing company, the full name and address of packer or distributor and the following information:

- Grade name—indication of quality
- Net quantity—usually indicated in volume for canned goods and in weight for frozen foods and dehydrated foods
- Style—size, shape or style of fruit or vegetable, e.g., peach slices, assorted sizes of peas
- Additives—seasonings, coloring, preservatives and others

The strength of the syrup, fruit juice or fruit juice syrup in which canned or frozen fruits are packed must be declared on the label in the prescribed manner, e.g., "Heavy Syrup," "Heavy Fruit Juice Syrup," "Light Syrup," "Light Fruit Juice Syrup." If the product is packed in water, the words "In Water" must be shown close to the common name. When fruits or juices are packed without sugar, the words "No Sugar Added" must appear on labels. Before provision was made for packing canned fruit in a wide range of liquids (p. 20) they were usually packed in a heavy syrup.

## Grading and inspection

Processors grade their own products. Federal fruit and vegetable inspectors check the accuracy of the grading before labeling and shipping, and again in wholesale warehouses. Certificates of grade are issued on request.

In Quebec and the Maritimes, provincial inspectors see that provincial regulations are carried out in processing plants not registered for federal inspection and grading service.

### Basis for Grades

Processed fruits and vegetables are graded on:

- Flavor and aroma
- Color

- Tenderness and maturity
- Uniformity of size and shape
- Consistency
- Appearance of liquid
- Freedom from defects and foreign material

## Frozen fruits and vegetables

### Grades

**CANADA FANCY** — Highest grade, optimum quality, as nearly perfect as possible.

**CANADA CHOICE** — Good flavor. Not as perfect in appearance as Canada Fancy product; color, size and maturity are less uniform.

### Storage

Frozen fruits and vegetables must be stored at  $-18^{\circ}\text{C}$  ( $0^{\circ}\text{F}$ ) or lower, with as little fluctuation in temperature as possible to prevent deterioration. At this temperature, these products should retain their quality up to 1 year. As a general rule, for each  $3^{\circ}\text{C}$  ( $5^{\circ}\text{F}$ ) increase in temperature, the life of a frozen food is decreased by 50%.

### Thawing

Frozen fruits used as fresh fruits are better if not thawed completely, but rather served with a few ice crystals remaining. It is not necessary to completely thaw fruit that is to be used for pies, baked puddings or stewed fruit. For pies and puddings, thaw fruit only enough to separate pieces, or to spread, and then proceed as with fresh fruit. For stewed fruit, cook unsweetened fruit until tender in a hot syrup made from sugar and water, or cook in the syrup in which it was packed. Do not allow fruit to stand at room temperature after thawing, as flavor, appearance and texture deteriorate.

Most frozen vegetables do not require thawing before cooking. However, some solid-pack frozen vegetables require partial or complete thawing to allow for even cooking; thaw in the sealed package at room temperature.

If frozen foods should accidentally defrost, you can refreeze them if there are still ice crystals in the food and no off-odors or visible signs of spoilage. However, the quality may have begun to diminish.

## Canned fruits and vegetables

Canned fruits and vegetables are packed in containers standardized to contain 10, 14, 19, 28, 48 and 100 fluid ounces. Special sizes are allowed for asparagus, whole-kernel and vacuum-packed corn, corn on the cob, fruit and vegetable juices, baby foods, tomato paste and sweet potatoes.

### Grades

**CANADA FANCY** — Highest grade, as nearly perfect as possible. Packed from sound, clean fruits or vegetables at perfect maturity. Free from blemishes, of good color and uniform in size. Clear liquid. Suitable for use where uniformity of size and color is important.

**CANADA CHOICE** — Slight variation in size, color and maturity allowed, but must be packed from fruits or vegetables that are sound, clean and almost free from blemishes and other defects. Fairly clear liquid. Suitable for use where flavor and tenderness are desired but perfect uniformity in size and color is not important.

**CANADA STANDARD** — Prepared from good, flavorful products not necessarily of uniform size, for use where appearance is not the most important consideration. Fruit of this grade is good for puddings, gelatin desserts or frozen dishes; vegetables are good for soups or scalloped dishes.

If a product fails to meet the lowest prescribed grade for it, yet is sound, wholesome and fit to eat, it must be marked "Sub Standard."

### Storage

Store canned fruits and vegetables in a cool, dry place where the temperature remains fairly constant. They may be kept indefinitely as long as there is no sign of leakage or bulging, which indicates that spoilage has taken place. However, a yearly turnover is advised for best quality and retention of nutrients. Canned foods that have been frozen are safe to use, although freezing may change the texture somewhat.

## Yields

### FRUITS

	<i>Minimum drained weight (ounces)</i>					<i>Portion size</i>
	<i>10 fl oz (284 ml)</i>	<i>14 fl oz (398 ml)</i>	<i>19 fl oz (540 ml)</i>	<i>28 fl oz (796 ml)</i>	<i>100 fl oz (2.84 litres)</i>	
Apples, syrup pack <sup>1</sup>	–	9	12	17	63	–
Apricots						
– syrup pack <sup>1</sup> , water pack	6	8	11	15	58	½ cup
– heavy pack <sup>3</sup> , pie fruit	–	10	14	20	80	(4 fl oz)
Blackberries, boysenberries						
– syrup pack <sup>1</sup> , water pack	5½	9	12	17	63	–
Blueberries						
– syrup pack <sup>1</sup> , water pack	6	7½	10	15	55	½ cup
– heavy pack <sup>3</sup> , pie fruit	–	9	12	17	63	(4 fl oz)
Cherries—red sour pitted						
– syrup pack <sup>1</sup> , water pack	6½	9	12	17	63	½ cup
– heavy pack <sup>3</sup> , pie fruit	–	11	15	20	72	(4 fl oz)
Cherries—sweet unpitted						
– syrup pack <sup>1</sup> , water pack	6	8	12	17	60	½ cup
						(4 fl oz)
Fruit cocktail						
– syrup pack <sup>2</sup> , water pack	6½	8½	12	17	63	½ cup
						(4 fl oz)
Fruit for salad, fruit salad						same as fruit cocktail
Gooseberries						
– syrup pack <sup>1</sup> , water pack	6	8	12	17	63	½ cup
						(4 fl oz)
Loganberries						
– syrup pack <sup>1</sup> , water pack	5½	7½	11	16	60	–
Peaches						
– syrup pack <sup>2</sup> , water pack, halves, quarters, slices	6	8½	12	17	63	½ cup
– heavy pack <sup>3</sup> , pie fruit	–	10	15	20	80	(4 fl oz)
Pears—syrup pack <sup>2</sup> , water pack						
– halves, quarters, slices	6	8½	12	17	63	½ cup
– whole	–	–	–	16	60	(4 fl oz)
Plums, prune plums						
– syrup pack <sup>1</sup> , water pack	6	8	11	16	63	½ cup
– heavy pack <sup>3</sup> , pie fruit	–	10	14	20	85	(4 fl oz)
Raspberries						
– syrup pack <sup>1</sup> , water pack	5	7	10	16	–	½ cup
						(4 fl oz)
Rhubarb						
– syrup pack <sup>1</sup> , water pack	7	9	12	16	63	
– heavy pack <sup>3</sup> , pie fruit	–	12	15	20	80	
Strawberries						
– syrup pack <sup>1</sup> , water pack	4½	6	8½	15	–	½ cup
						(4 fl oz)

STRENGTH OF SYRUP OR JUICE IN CANNED OR FROZEN FRUIT

*Name of Syrup*

Extra Heavy Syrup or Extra Heavy Fruit Juice Syrup	Heavy Syrup or Heavy Fruit Juice Syrup	Light Syrup or Light Fruit Juice Syrup	Slightly Sweetened Water or Slightly Sweetened Fruit Juice	Packed in (Name of Fruit(s)) Juice or Packed in (Name of Fruit(s)) Juice from Concentrate
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*% Soluble Solids*

<sup>1</sup>35 to 25% <25% to 19% <19% to 15% <15% to 11% not less than 5%

<sup>2</sup>35 to 23% <23% to 18% <18% to 14% <14% to 10% not less than 5%

<sup>3</sup>heavy pack—packed to contain the maximum solids that processing will permit

VEGETABLES

	<i>Minimum drained weight (ounces)</i>					<i>Portion size</i>
	<i>10 fl oz (284 ml)</i>	<i>14 fl oz (398 ml)</i>	<i>19 fl oz (540 ml)</i>	<i>28 fl oz (796 ml)</i>	<i>100 fl oz (2.84 litres)</i>	
Asparagus						
— tips or spears	—	7	—	12	63	½ cup (2½ oz)
— cuts or cuttings	—	6½	—	11½	60	
Beans, green and wax						
— regular cut, short style	6	8	12	17	60	½ cup (2½ oz)
— french cut, french style						
— whole, whole vertical pack	6	7½	11	16	58	
Beans, lima	7	9	13	17	68	⅓ cup (2 oz)
Beets						
— diced	7	9	13	18	68	½ cup (2½ oz)
— sliced, cut or quartered	6½	8½	12	17	63	
— whole, crinkle cut strips	6	7½	10	15	58	
— crinkle cut, julienne	6	8	11	16	60	
Carrots						
— diced, julienne	6½	9	12½	17	63	½ cup (2½ oz)
— sliced	6	8½	12	16	60	
— whole	—	8	12	16	60	
Corn, whole kernel in brine, hominy	7	10	13	18	68	⅔ cup (2½ oz)
Mixed vegetables	6	9	12	16	63	
Mushrooms						
— whole, sliced	5½	8	12	15	58	⅓ cup (2 oz)
— stems and pieces	5½	7½	11½	14½	58	¼ cup (1½ oz)
Onions, whole	—	—	12	16	60	
Peas	6½	9½	12½	17	63	⅓ cup (2 oz)
Peas and carrots	6	9	12	16	63	
Potatoes, white						
— diced, julienne	7	9	13	17	68	½ cup (3 oz)
— sliced	6½	8½	12	16	60	
— whole	6	8	12	16	60	
Sauerkraut	7½	10	14	20	70	
Spinach and other leafy greens	7	10	13	18	63	½ cup (2½ oz)
Tomatoes						
— Canada Fancy 65% drained solids	—	9¾	13	18½	68	
— Canada Choice 60% drained solids	—	9	12	17	63	
— Canada Standard 50% drained solids	—	7½	10	14½	52½	

## Honey

Honey is graded and inspected for use in the food service industry and retail market.

### Grading and inspection

Honey produced for sale in Alberta, British Columbia, Manitoba, Ontario and Saskatchewan must be graded and classified for color, except when sold directly to a consumer by a beekeeper on his own premises. All honey for export, and extracted honey in consumer containers of 8 pounds or less for interprovincial trade, must be graded and color classified. Packers do their own grading and color classification, which is checked by federal fruit and vegetable inspectors, except in Ontario where provincial inspectors share this responsibility.

#### Grades

Color of honey does not affect grade but is an indication of flavor; usually, the darker the honey the stronger the flavor. Clover honey is white and mild, whereas buckwheat honey is dark and strong. The color classes are: White, Golden, Amber and Dark. The color is stated on the label.

Honey is graded on the basis of flavor, freedom from foreign material and keeping quality. Canada No. 1 is the grade most generally available, but Canada No. 2 and Canada No. 3 grades exist. Honey that is wholesome but fails to meet Canada No. 3 requirements is marked "Sub Standard."

### Buying

Honey is available in the following container sizes: 5 oz and under, 8 oz, 12 oz, 1 lb, 1½ lb, 2 lb, 3 lb, 4 lb, 8 lb, 14 lb, 16 lb, 30 lb, 40 lb, 60 lb, 65 lb, 70 lb and over.

### Storage

Honey is best stored at room temperature in a dry place. High temperatures may cause honey to darken or to change in texture. Pasteurized honey keeps up to 18 months without appreciable loss in quality. If well sealed, honey may be stored almost indefinitely in the freezer without changes occurring in flavor or texture.

## Maple syrup

Maple Syrup is prized for its natural sweetness and uniqueness in the food service industry.

### Grading

Maple products must meet national standards if they are to be sold in interprovincial or export trade. Maple syrup must be graded and classified as to color if it is to be sold outside the province in which it was produced.

#### Grades

**CANADA No. 1** — uniform in color, free from cloudiness, color class "Extra Light", "Light" or "Medium", characteristic maple flavor increasing with depth of color, free from fermentation or objectionable taste.

**CANADA No. 2** — uniform in color, free from cloudiness, color class "Amber", stronger maple flavor than Canada No. 1, free from fermentation or objectionable taste.

**CANADA No. 3** — characteristic maple flavor, any color class including "Dark", free from any objectionable odor or taste other than a trace of caramel or bitter taste.

### Buying

Check the label for the word "Maple." Under federal government legislation, a product may be represented as pure maple only if it is obtained exclusively from maple sap. If it is not a pure maple product, a complete list of the ingredients in descending order of their proportions is required on the label. If artificial flavoring is used, this must be declared.

Maple syrup is available in the following container sizes: any size up to 60 mL, 125 mL, 250 mL, 375 mL, 500 mL, 750 mL, 1 L, 1.5 L, or any multiple of 1 litre.

Until January 1, 1981, maple syrup will also be available in the following container sizes: 341 mL (12 fl oz), 455 mL (16 fl oz), 540 mL (19 fl oz), 682 mL (24 fl oz), 1.14 L (40 fl oz) and 4.55 L (160 fl oz).

Maple syrup is available in the following sizes: any sizes up to 60 g, 125 g, 250 g, 375 g, 500 g, 750 g, 1 kg or any multiple of 1 kg. Until January 1, 1981, maple sugar will also be available in the following sizes: 113 g, (4 oz), 227 g (8 oz), 340 g (12 oz), and 454 g (16 oz).



## Storage

Keep unopened containers of maple syrup in a cool, dry place. Once opened, store tightly closed in the refrigerator. Maple syrup may be frozen up to 1 year at  $-18^{\circ}\text{C}$  ( $0^{\circ}\text{F}$ ). It does not freeze solid but becomes too thick to pour easily. Therefore, thaw frozen syrup to pouring consistency and store unused portion in refrigerator.

### Guide to storage of staple goods

Canned goods	1 year
Dry foods	
—fruit, dried	1 year
—peas and beans	1 year
—soup, dehydrated	18 months
—potatoes, instant	2 years
—skim milk powder	1 year
	1 month, opened
Leavening agents	
—baking powder	1 year
—baking soda	1 year
—yeast, dry	1 year
Cereals and grains	
—rolled oats	6–10 months
—rice	Several years
—ready-to-eat cereals	8 months
—pastas	Several years
—flour—white	2 years
—whole wheat	6 weeks
—cake mix	1 year
Vegetable oil	1 year
Sugar (all types)	Several years

Unless specified otherwise, times apply to unopened packages.

## Sources of information

*BEEF CUTS* (Folder) 1975 — A chart of beef cuts with cooking methods; yield of retail cuts from a side; inspection and grading. Available from Information Division, Agriculture Canada, Ottawa K1A 0C7.

*BEEF CUTS* and *PORK CUTS* — Bilingual posters. Small size \$0.50, wall size \$2.50. Available from Publication Centre, Mail Order Services, Supply and Services Canada, Ottawa K1A 0S9

*FOOD SAFETY — IT'S ALL IN YOUR HANDS* — A booklet outlining case histories of food poisoning, giving details of where dangers lie and how to overcome them. Available from Educational Services, Field Operations, Health Protection Branch, Health and Welfare Canada, Ottawa K1A 1B7.


*DANGER ZONE IN THE KITCHEN* — An illustrated programmed learning booklet to teach food handlers about food safety. Also available from Educational Services.

### KITCHEN METRICS

#### MEASURES

Use metric measures for metric recipes. Measures are marked in millilitres (mL) and are available in the following sizes:

1000 mL = 1L	250 mL	25 mL
500 mL	125 mL	15 mL
250 mL	50 mL	5 mL
		2 mL
		1 mL



#### TEMPERATURES

Most commonly used oven temperatures

$^{\circ}\text{C}$ replaces $^{\circ}\text{F}$	$^{\circ}\text{C}$ replaces $^{\circ}\text{F}$
100      200	190      375
150      300	200      400
160      325	220      425
180      350	230      450

Refrigerator temperature:  $4^{\circ}\text{C}$  replaces  $40^{\circ}\text{F}$   
Freezer temperature:  $-18^{\circ}\text{C}$  replaces  $0^{\circ}\text{F}$

#### MASS

1 kg (1000 g) is slightly more than 2 pounds  
30 g is about 1 ounce

#### LENGTH

1 cm (10 mm) is slightly less than  $\frac{1}{2}$  inch  
5 cm is about 2 inches

#### PRESSURE

Pressure for pressure cookers and canners is measured in kilopascals (kPa) instead of pounds per square inch (PSI).

kPa replaces PSI	
35	5
70	10
100	15

# Commodity Marketing Information

The following reports are available free of charge from

Marketing Services,  
Agriculture Canada,  
Sir John Carling Building  
Ottawa, K1A 0C5  
(613) 995-5880

## **POULTRY**

Poultry Marketing Report (Weekly)  
Poultry Market Review (Annual)

## **DAIRY**

Dairy Produce Market Report (Weekly)  
Dairy Market Review (Annual)

## **LIVESTOCK**

Canada Livestock and Meat Trade Report  
(Weekly)  
Livestock Market Review (Annual)

## **FRUIT AND VEGETABLE**

Dairy Potato Market Report (Daily, October to  
June)  
Fruit, Vegetable and Honey Crop and Market  
Report (Weekly)  
Wholesale-to-Retail Quotations on Imported Fruit  
and Vegetables (Weekly: available separately  
for Montreal and Toronto)  
Annual Unload Report (Annual)  
Crop Seasonal Price Summaries Part I-II  
(Annual)

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