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# EGGS

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# EGGS

## what's in them for you

Eggs are an excellent source of high-quality protein.

Two eggs provide a good source of iron, phosphorus and vitamin A and may replace a small serving of meat. Because they are nutritious and easily digested, eggs belong in the diet of every age-group.

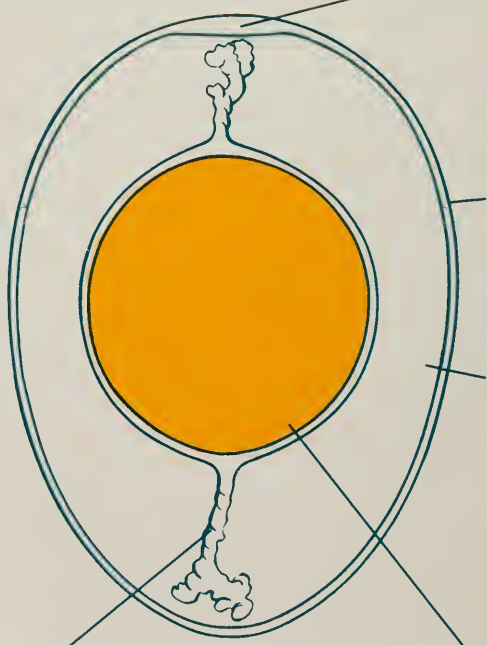
*For infants* — Eggs supply the iron, not found in milk, to build blood. Sieved hard-cooked egg yolk may be introduced at 4 to 6 months. By 8 or 9 months, babies may begin eating soft-cooked or scrambled eggs.

*For children and teenagers* — Eggs are satisfying during periods of rapid growth, when food rich in body-building protein is needed.

*For adults* — Eggs provide an economical source of protein. Combine them with other foods or serve alone for quick, no fuss, main dishes.



## how they shape up



### AIR CELL

The space formed between the inner and outer shell membranes after the egg is laid and cools. The size increases with time, depending on holding conditions.

### SHELL

Allows for an exchange of moisture and gas through the pores. Loss of moisture decreases the keeping quality of eggs.

### ALBUMEN (WHITE)

Made up of two layers — thick and thin — is encased in membranes between the shell and yolk. The white is an indicator of quality. Fresh, high-quality eggs have a thick white which stands high and firm around the yolk. On storage, the egg white becomes thinner and spreads further when broken out.

### CHALAZAE

Dense cordlike layers of white, which hold the yolk in place near the middle of the egg.

### YOLK

Contained in the vitelline membrane. The color is determined by pigments in the hen's diet and has no effect on flavor or nutritional value of the egg.



## how they are graded

Eggs are sold by grade in all provinces. The grade depends on shell quality, interior quality and weight.

*Shell quality* — Includes cleanliness, shape and soundness of shell.

*Interior quality* — Determined by candling, which is a process of examining the interior of the egg without breaking the shell. Eggs are rotated in front of a light to observe the condition and position of the yolk and white, size of the air cell, and the presence of any defects such as blood or meat spots.

*Weight* — Eggs are sized according to their individual weights.

### SIZES FOR CANADA A AND A1 GRADES

### WEIGHT OF EACH EGG

|                            |  |
|----------------------------|--|
| Extra large                | at least 2¼ oz (63.8 g)  |
| Large                      | at least 2 oz (56.7 g)   |
| Medium                     | at least 1¾ oz but less than 2 oz (49.6 g but less than 56.7 g)  |
| Small                      | at least 1½ oz but less than 1¾ oz (42.5 g but less than 49.6 g) |
| Peewee (Grade A only)      | less than 1½ oz (42.5 g)   |
| SIZE FOR CANADA<br>B GRADE | at least 1¾ oz (49.6 g)  |

The size does not in any way affect the quality of the egg.

### DESCRIPTION OF GRADES

*Canada A1 eggs* — Clean, normal in shape, with sound shells and finest interior quality. Yolks are round and compact, and surrounded by very thick, dense albumen.

*Canada A eggs* — Practically clean and normal in shape, with sound shells. Yolks are fairly well rounded and surrounded by thick albumen.

*Canada B eggs* — Reasonably clean and have sound shells. Whites are less firm than in Canada A eggs.

*Canada C eggs* — Used mainly for the production of commercial processed egg products.

The grade must be shown within the maple leaf symbol on cartons and bulk displays in retail stores. Canada A is the grade most commonly available to consumers. Both Canada A1 and A eggs are ideal for all purposes, but are especially good for frying and poaching where appearance is important. Canada B eggs are good for general cooking and baking where appearance is not so important.

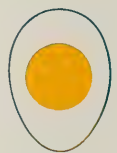


Grade mark



## how to care for them

Eggs lose quality rapidly at room temperature, therefore refrigerate them as soon as possible after purchase. Store away from strong-smelling foods and with large end up to keep air cell on top and yolk in center. Plan to use eggs within 3 weeks. Leftover whites may be refrigerated in a covered container up to 1 week; yolks covered with water may be kept 2 or 3 days. Use yolks in custards, salad dressings, sauces, eggnogs and meat loaves. Use whites in frosting, fruit whips, meringues, gelatin desserts and angel cakes.



## how to cook

High temperature and long cooking cause protein to shrink, lose moisture and become rubbery or tough. Moderate to low temperatures and proper timing are the general rule to assure uniformly tender, attractive egg dishes.

### eggs in the shell

Use enough water to cover eggs to a depth of at least  $\frac{1}{2}$  inch. To keep shells from cracking, remove from refrigerator  $\frac{1}{2}$  hour before cooking or let them stand in warm water for a few minutes.

*Cold-water method* — Place eggs in saucepan, add water, cover and bring rapidly to a boil. Set pan off heat. Let stand according to firmness desired: soft-cooked eggs, 3 to 4 minutes; hard-cooked eggs, 20 to 25 minutes. Chill hard-cooked eggs immediately in cold water, to keep yolks from darkening; and crack shells during quick cooling so that eggs will peel more easily.

*Hot-water method* — Slip each egg from a spoon into boiling water. Cover. Reduce heat so that water barely simmers (bubbles remain on bottom of pan). Cook according to firmness desired: soft-cooked eggs, 6 to 7 minutes; hard-cooked eggs, 25 to 30 minutes. Chill hard-cooked eggs, as above.

### poached eggs

Pour water into shallow pan to a depth of about  $1\frac{1}{2}$  inches and bring to boil. Reduce heat to keep water simmering. Break each egg into a saucer and slip into water. Cook 3 to 5 minutes. Lift from water with a slotted spoon or pancake turner, draining well.

### scrambled eggs

Combine with salt, pepper and 1 tablespoon milk or water for each egg. Pour into well-greased frypan or double boiler. Cook slowly, stirring gently, until set but still moist.



## **fried eggs**

Break eggs into well-greased hot frypan. Reduce heat and cook until whites are set. To cook tops, baste with fat, cover pan or turn eggs over.

## **deviled eggs**

|                                |                 |
|--------------------------------|-----------------|
| 6 hard-cooked eggs, peeled     | Salt and pepper |
| 2 tablespoons butter, softened | Dash paprika    |
| 3 tablespoons mayonnaise       |                 |

Cut eggs in halves lengthwise and remove egg yolks. Mash and combine with butter and mayonnaise. Season with salt and pepper. Stuff egg whites and sprinkle with paprika.

*Cheese-deviled eggs* — Make as Deviled Eggs but add ¼ cup grated old cheddar cheese and dash cayenne to egg yolk mixture.

*Olive-deviled eggs* — Make as Deviled Eggs but omit salt and add 2 tablespoons chopped stuffed olives and ¼ teaspoon dry mustard to egg yolk mixture.

## **pickled eggs**

|                             |                      |
|-----------------------------|----------------------|
| 12 hard-cooked eggs, peeled | 2 cups white vinegar |
| 2 teaspoons salt            |                      |

Place eggs in a jar. Dissolve salt in vinegar and pour over eggs. Cover jar and let stand 2 days before eating. Eggs may be stored 1 month at room temperature.

## **quick egg burgers**

|                                    |                 |
|------------------------------------|-----------------|
| 6 eggs                             | Salt and pepper |
| 6 toasted hamburger buns, buttered |                 |

Fry eggs, breaking yolks; cook eggs in fried-egg ring or fold over to fit bun. Place on bun and season with salt and pepper. Garnish as desired with cheese slices, sliced green onion, fried bacon or sautéed mushrooms. 6 servings.

## **french omelet**

For each serving combine 2 eggs, salt and pepper to taste, and 2 tablespoons milk or water. Pour egg mixture into well-greased hot frypan, reduce heat and cook slowly. Tilt pan occasionally and lift cooked edge of omelet to let uncooked part run underneath. When omelet is set but surface is still moist, increase heat to brown bottom quickly. Fold in half and serve immediately.

*Meat, vegetable or cheese omelet* — Make as French Omelet but add cooked meat, vegetables or grated cheese either to the egg mixture before cooking or on the omelet before folding.

## egg foo yong

- |   |  |
|---|--|
| 1 cup sliced onion                            | 1 cup fresh or canned<br>bean sprouts, drained |
| ½ cup diced celery                            | 6 slightly beaten eggs                         |
| 2 cups sliced mushrooms (about<br>8 ounces)   | 1 teaspoon salt                                |
| 3 tablespoons fat                             | Dash pepper                                    |
| 1 cup thin strips cooked chicken<br>or turkey |  |

Sauté onion, celery and mushrooms in fat until onion is transparent (about 5 minutes). Remove from pan and combine with chicken or turkey and bean sprouts. Combine eggs, salt and pepper and stir in vegetable mixture. Pour 2 tablespoons egg mixture per omelet into well-greased hot frypan, reduce heat and cook 1 minute per side. Makes 18 omelets. 6 servings.

## crêpes

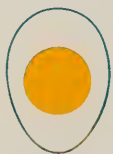
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| ⅔ cup all-purpose flour | 4 beaten eggs            |
| ¼ teaspoon salt         | 1 ½ cups milk            |
| 1 tablespoon sugar      | 2 tablespoons melted fat |

Mix dry ingredients, add eggs and milk and beat until smooth. Stir in melted fat. Refrigerate 1 hour or longer. Pour 2 to 3 tablespoons batter into well-greased hot small frypan and tilt to spread evenly in a thin layer. Reduce heat and cook until underside is lightly browned (about 1 minute). Turn and brown other side. Fold in quarters or roll up and keep warm while cooking remaining crêpes. Makes 18 crêpes.

## baked custard

- |                       |                    |
|-----------------------|--------------------|
| 4 eggs or 8 egg yolks | 3 cups hot milk    |
| ⅓ cup sugar           | ½ teaspoon vanilla |
| ¼ teaspoon salt       |                    |

Beat eggs, sugar and salt together. Gradually add hot milk and vanilla. Strain, pour into 6 custard cups or a baking dish and set in pan of hot water. Bake at 350°F (180°C) until a knife inserted in center comes out clean (40 to 50 minutes). 6 servings.



## equivalents

### INGREDIENTS

- 1 cup whole eggs
- 1 cup egg whites
- 1 cup egg yolks
- 1 tablespoon flour  
or ½ tablespoon  
cornstarch

### EQUIVALENT TO

- 4 large, 5 medium or 6 small
- 8 or 9 egg whites from large  
eggs
- 12 egg yolks from large eggs
- thickening power of 1 whole  
egg or 2 yolks (combine beaten  
egg with a little of the hot  
mixture and stir into sauce or  
pudding to prevent egg from  
lumping)

## egg quiz

Q. Are brown- and white-shelled eggs equally good?

A. Yes. Shell color is caused by the breed of the bird and is not related to food value, flavor or quality.

Q. Should eggs be discarded if they contain blood spots?

A. No. Just remove the spots with a clean piece of egg shell or tip of a spoon.

Q. Is it safe to use cracked eggs?

A. A crack in the shell provides access for microorganisms which contaminate the contents. Therefore use cracked eggs only in dishes that will be thoroughly cooked.

Q. Should consumption of eggs be limited because of the cholesterol they contain?

A. The role of cholesterol in heart disease has not been clarified. Normal healthy individuals should consume a well-balanced diet which consists of foods from all groups, including eggs.

Q. What causes a dark ring around the yolk of hard-cooked egg?

A. This color results from a chemical reaction between the iron of the yolk and the sulfur of the white or yolk. It is usually prevented by cooking the eggs for the minimum length of time required to make them firm and cooling the eggs as rapidly as possible immediately after cooking.

Q. Are fertilized eggs higher in nutritive value than ordinary eggs?

A. Scientific research has indicated that there is no difference in the nutritive value of fertilized and ordinary unfertilized eggs.

Q. What size eggs should be used in recipes?

A. Unless otherwise specified, recipes assume eggs are large size. Except for cakes, soufflés and other dishes where eggs contribute lightness and volume, using a smaller size shouldn't make much difference.

Q. Should eggs be warmed to room temperature before using?

A. This is only necessary when blending together fat, sugar, and eggs in a recipe, so that cold eggs won't cause the fat to harden.



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## 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

500 mL

250 mL



250 mL

125 mL

50 mL



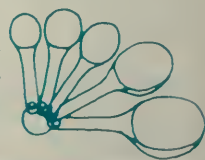
25 mL

15 mL

5 mL

2 mL

1 mL



### TEMPERATURES

Most commonly used oven temperatures

°C replaces °F

100 200

150 300

160 325

180 350

°C replaces °F

190 375

200 400

220 425

230 450

Refrigerator temperature: 4°C replaces 40°F

Freezer temperature: -18°C replaces 0°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 1/2 inch

5 cm is about 2 inches

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