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www.saskegg.ca

Manitoba Egg Farmers
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Eggs-POSÉ

Questions & answers about eggs.



INDEX

MAKING THE GRADE	1
- How are eggs sized?	
- Are Canadian eggs safe?	
BUYING EGGS	2
- Which type of egg should I buy?	
- What are omega-3 enhanced eggs?	
- Are organic eggs healthier than regular eggs?	
- Why do some eggs have light yellow yolks and others have dark yellow yolks?	
- What causes double-yolk eggs?	
EGG HANDLING AND FOOD SAFETY	4
- How can you tell if an egg is fresh?	
- Can eggs be eaten after the best before date?	
- How should eggs be stored?	
- Is it safe to eat raw or soft-cooked eggs?	
- Can I use an egg with a cracked shell?	
- How long can hard-cooked eggs be kept?	
- How long can pickled eggs be kept?	
- Can eggs be frozen?	
COOKING EGGS	7
- What causes the grey ring that sometimes appears around the yolk of hard-cooked eggs?	
- Can eggs be safely cooked in the microwave?	
- Why are hard-cooked eggs hard to peel sometimes?	
- What are the white ropey strands sometimes visible in an egg?	
- What is the dark red spot occasionally found in an egg?	
EGG PRODUCTION	9
- Why are hens kept indoors in cages?	
- Are hens fed animal by-products, steroids, hormones or antibiotics?	
- Do egg farmers care for their hens?	
EGG NUTRITION	10
- Which part of the egg is more nutritious—the yolk or the white?	
- Are brown eggs more nutritious than white eggs?	
- Will eating eggs increase my risk of heart disease?	
- What is the recommended number of eggs that can be eaten each week?	

THE EGG

It's one of nature's most perfect foods: simple and beautiful, nutritious and great tasting, convenient and versatile.



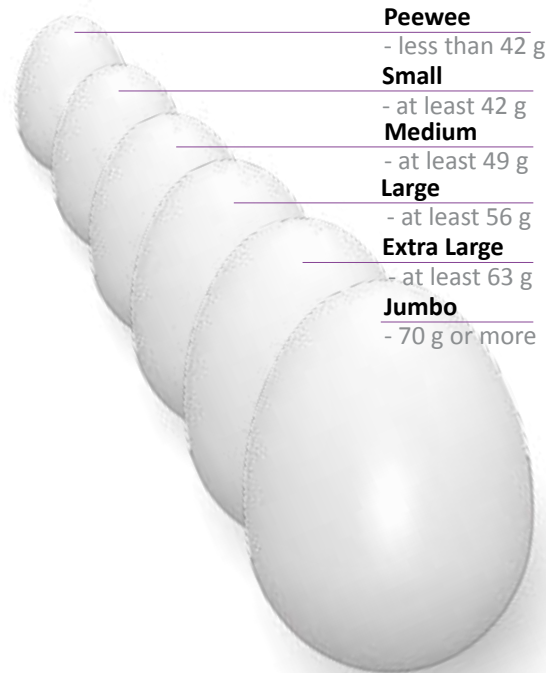
You just can't beat eggs.

But there's a lot to know about buying, storing and cooking with eggs. Read on to find answers to questions frequently asked about eggs.

MAKING THE GRADE

HOW ARE EGGS SIZED?

Eggs are sized by weight. Eggs in the same carton may appear to be different sizes, but their weight will be within a similar range. The following minimum weights are used to classify eggs into different sizes:



- Peewee**
- less than 42 g
- Small**
- at least 42 g
- Medium**
- at least 49 g
- Large**
- at least 56 g
- Extra Large**
- at least 63 g
- Jumbo**
- 70 g or more

ARE CANADIAN EGGS SAFE?

Egg farmers adhere to the national guidelines of the Start Clean-Stay Clean™ program, which is a national producer program to ensure that farmers are producing safe, clean, high-quality eggs. Egg farms are inspected regularly to ensure that farmers are following program requirements.

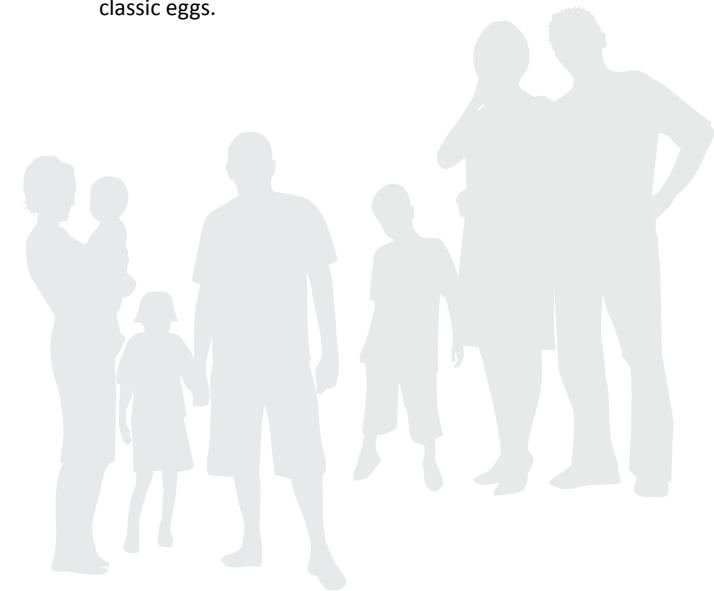
BUYING EGGS

WHICH TYPE OF EGG SHOULD I BUY?

You will find a variety of eggs at the grocery store such as classic, omega-3, free run, free range, organic, vegetarian, liquid eggs, etc. You will need to consider the merits of each type of egg and decide which is best for you and your family. Some eggs may be slightly different in nutrient value than classic eggs, or they may come from hens housed or fed in a different way. All eggs, no matter which type, are produced according to the same high standards of quality, freshness and cleanliness. For more information on the types of specialty eggs available, please visit: eggs.ca.

WHAT ARE OMEGA-3 ENHANCED EGGS?

These eggs are produced by hens fed a diet that contains a source of omega-3 polyunsaturated fatty acids, such as flaxseed or marine oils. Omega-3 has been shown to protect against cardiovascular disease and cancer. Omega-3 enhanced eggs contain 0.4 g of omega-3 fatty acids compared to 0.1 g found naturally in classic eggs. The amount of cholesterol and total fat in omega-3 eggs is about the same as in classic eggs.



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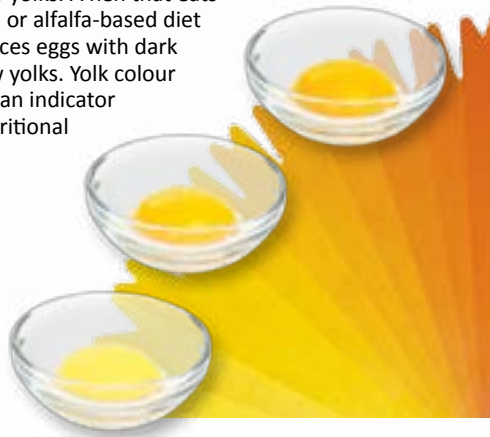
UYING EGGS

ARE ORGANIC EGGS HEALTHIER THAN REGULAR EGGS?

Organic eggs are produced by hens fed certified organic grains. There are no nutritional differences between these eggs and classic shell eggs.

WHY DO SOME EGGS HAVE LIGHT YELLOW YOLKS AND OTHERS HAVE DARK YELLOW YOLKS?

A hen's feed determines the colour of the egg yolk. A hen that eats a wheat-based diet (more common in the Western provinces) produces eggs with light yellow yolks. A hen that eats a corn or alfalfa-based diet produces eggs with dark yellow yolks. Yolk colour is not an indicator of nutritional value.



WHAT CAUSES DOUBLE-YOLK EGGS?

A hen will sometimes produce double-yolk eggs at the very beginning or near the end of her reproductive life due to hormonal changes. When this happens, the shell forms around two yolks instead of one, creating a double-yolk egg. If substituting them for large classic eggs in a recipe, their additional volume may affect the outcome of the recipe.

E

GG HANDLING & FOOD SAFETY

HOW CAN YOU TELL IF AN EGG IS FRESH?

As long as the eggs have been handled and stored properly, the Best Before date on the carton gives the best indication of freshness. A fresh egg, in its shell, will sink in water while an older egg will float. This happens because as the egg ages, it absorbs air through the pores in its shell. When an egg is cracked open, the yolk of a fresh egg will be round and will sit up high.

The white will be thick and will closely surround the yolk. In an older egg, the yolk will be flat and will break easily, and the white will be thin and watery. Did you know that eggs travel from the farm to the grocery store within a week of being laid?



CAN EGGS BE EATEN AFTER THE BEST BEFORE DATE?

If they have been kept refrigerated, eggs can be eaten for a short time after the Best Before date. However, keep in mind that the Best Before date indicates the length of time the eggs will maintain their Grade A quality. After the Best Before date, eggs should be cooked thoroughly (for example, used for baking or hard cooking).

HOW SHOULD EGGS BE STORED?

The best place to store eggs is in their carton on a shelf in the main body of the refrigerator. Keeping them in the egg compartment on the door will not provide a consistent and cool enough temperature for them. Leaving eggs in their carton will protect them from breakage and will keep them from absorbing strong odours from other foods. Also, you will be able to keep track of the Best Before date.

IS IT SAFE TO EAT RAW OR SOFT-COOKED EGGS?

Yes, as long as the eggs are handled properly:

- Always use fresh Canada Grade A eggs that have been kept refrigerated. The Best Before date on the carton will help determine freshness.
- Ensure that the egg is clean and the shell is not cracked.
- When preparing any perishable food, wash your hands, cooking surface and utensils immediately before and after preparation. Prepare only enough food for one meal or sitting.
- Raw egg products should not be served as leftovers.
- Serve all egg-rich products immediately after preparing or store them in the refrigerator.

The risk of bacterial contamination from a raw or under-cooked egg is very minimal. Very young children, the elderly, those with weakened immune systems and pregnant women should be extra cautious and avoid raw or soft-cooked eggs. For more information on food safety, please visit befoodsafe.ca

CAN I USE AN EGG WITH A CRACKED SHELL?

Because the eggshell protects the contents from contamination, it is recommended to buy clean, uncracked eggs. If you find an egg with a broken shell, you can still use it with care. Use the egg as soon as possible in a dish that is cooked thoroughly such as a cake, cookies or a casserole. Do not use cracked eggs in drinks, meringues, uncooked sauces or icings. Do not use a cracked egg if the egg's contents are leaking through the shell, the egg is stuck to the carton or the shell is dirty, prominently stained or has foreign material sticking to it.



HOW LONG CAN HARD-COOKED EGGS BE KEPT?

Hard-cooked eggs, in the shell or peeled, will keep for one week in a covered container in the refrigerator.

HOW LONG CAN PICKLED EGGS BE KEPT?



Homemade pickled eggs can be stored in the refrigerator for one month. Visit eggs.ca for a pickled egg recipe.

CAN EGGS BE FROZEN?

Yes, but they should not be frozen in the shell. The cold temperature may cause the contents of the egg to expand and crack the shell when it's thawing.

To freeze eggs:

- Lightly beat whole eggs just until blended. Pour into a freezer container. Cover with a tight-fitting lid. Label the container with the number of eggs and the date. Three tablespoons (45 mL) of thawed whole eggs are equal to one large fresh egg.
- Egg whites can be frozen separately. Pour into a freezer container. Cover with a tight-fitting lid. Label the container with the number of egg whites and the date. Two tablespoons (30 mL) of thawed egg white is equal to one large fresh egg white.
- Egg yolks will thicken or gel when frozen and therefore need special treatment. Beat the yolks with either 1/8 tsp (0.5 mL) of salt for main dishes or 1/2 to 1 tsp (2 to 5 mL) sugar or corn syrup for baking or desserts for each 1/4 cup (50 mL) yolks (about 4 yolks). Pour into a freezer container. Cover with a tight-fitting lid. Label the container with the number of egg yolks, the date and whether you added salt or sugar. One tablespoon (15 mL) thawed yolk equals one large fresh yolk.

C OOKING EGGS

WHAT CAUSES THE GREY RING THAT SOMETIMES APPEARS AROUND THE YOLK OF HARD-COOKED EGGS?

This discoloration is the result of a reaction between the sulfur and iron naturally found in eggs. It occurs when eggs are overcooked or when there is a high level of iron in the cooking water. Although the colour isn't very attractive, the eggs are safe to eat and will still be nutritious and flavourful. An appropriate cooking time and rapid cooling of the eggs after they are cooked will prevent the formation of this grey ring.

CAN EGGS BE SAFELY COOKED IN THE MICROWAVE?

Using the microwave is a quick and easy way to cook eggs:

- Spray a small dish or mug with cooking spray or place 1/2 tsp (2 mL) butter or margarine in the dish and heat in the microwave for a few seconds. Rotate the dish so the melted butter coats all sides.
- Crack an egg into the dish. Pierce the yolk with a fork or toothpick. Cover the dish with microwave-safe plastic wrap, pulling back one corner to vent excess steam.
- Microwave on Medium-High (70% power) for 40 seconds. (Cooking time and power level will vary depending on the power of the microwave.) The egg should be undercooked slightly as it will continue to cook as it stands. Let stand for 30 seconds before removing plastic wrap. Eggs should never be microwaved in the shell unless a container specifically designed for this purpose is used. Cooking or reheating eggs in the shell may cause them to burst open, creating a mess and possibly damaging your microwave or injuring you.



C OOKING EGGS

WHY ARE HARD-COOKED EGGS HARD TO PEEL SOMETIMES?

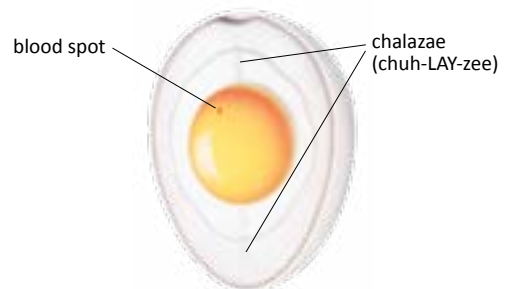
Eggs that have been in the refrigerator the longest are easiest to peel. This is because as the egg ages, air seeps in through the thousands of tiny pores in the shell. This causes the air cell (at the wide end) to become larger which helps to separate the shell from the egg. To peel hard-cooked eggs, crackle shell then roll egg between your hands to loosen. Begin peeling at the large end. Hold under cold running water or dip in a bowl of water to help ease off the shell.

WHAT ARE THE WHITE ROPEY STRANDS SOMETIMES VISIBLE IN AN EGG?

These strands are called chalazae (chuh-LAY-zee) and are a natural part of the egg. They anchor the yolk in the centre of the egg white. The fresher the egg, the more prominent the chalazae will be. The chalazae do not need to be removed unless you are making a smooth custard or sauce. They can be removed with the tip of a knife or strained from a beaten egg mixture.

WHAT IS THE DARK RED SPOT OCCASIONALLY FOUND IN AN EGG?

It is a blood spot that is caused by the rupture of a blood vessel when the egg is being formed. Though eggs with blood spots are normally removed during the inspection and grading process, occasionally they may slip by undetected and end up in a carton. An egg with a blood spot is safe to eat, and you can cook and bake with it in the usual ways.



WHY ARE HENS KEPT INDOORS IN CAGES?

Indoor housing in cages provides a healthy and humane environment for the hens. It supports their natural instinct to cluster together in a comfortable group size which makes for a calm, less aggressive environment. It also protects hens from predators and shelters them from the variable and frequently harsh Canadian climate. Cages are designed to keep manure separate from the hens and the eggs. This is important for food safety because bacteria can pass through the pores of the shell into the egg. Cages ensure a high standard of food safety and egg quality.



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ARE HENS FED ANIMAL BY-PRODUCTS, STEROIDS, HORMONES OR ANTIBIOTICS?

Layer feed contains grains, proteins, vitamins and minerals — all the things hens need to stay healthy and thrive. The use of hormones in poultry in Canada is illegal. Feed may contain animal by-products because chickens require high-quality protein and are natural meat eaters. Because of the daily care provided to them, hens rarely require medication of any sort.

DO EGG FARMERS CARE FOR THEIR HENS?

Canadian egg farmers treat their hens with care because humane treatment is the right thing to do. Farmers work with their animals' day in and day out, sometimes at night too. They make sure their hens

have light, fresh air and a well-balanced nutritious diet with plenty of grains, proteins, vitamins and minerals. Food and fresh water are always available.



WHICH PART OF THE EGG IS MORE NUTRITIOUS — THE YOLK OR THE WHITE?

Together, the yolk and the white make a nutrient-rich food.

- The yolk has many essential nutrients including phosphorous, iron, zinc, vitamins A, B₆ and B₁₂, folic acid, pantothenic acid, choline, and thiamin, as well as almost half of the protein and riboflavin in the whole egg. In addition, egg yolks are among the few foods that naturally contain vitamin D. Finally, the egg yolk contains 195 mg of cholesterol and 5 g of fat, less than a third of which is saturated fat, and no trans fat.
- The white contains more than half of the egg's total protein and riboflavin.

ARE BROWN EGGS MORE NUTRITIOUS THAN WHITE EGGS?

Brown and white eggs have the same nutritional value. Shell colour depends on the breed of hen. Usually white-feathered hens lay white eggs and brown-feathered hens lay brown eggs.

WILL EATING EGGS INCREASE MY RISK OF HEART DISEASE?

Studies conducted in the last decade found no link between eating an egg per day and developing cardiovascular disease.^{1,2} In fact, limiting foods that contain dietary cholesterol can lead to an unbalanced intake of important nutrients, which increases the risk for other health problems. Eating foods containing high amounts of saturated and trans fats will more likely affect blood cholesterol levels. Eggs contain very little saturated fats and no trans fats.

1. Hu et al. JAMA 1999

2. Qureshi et al. Med Sci Monit 2007

WHAT IS THE RECOMMENDED NUMBER OF EGGS THAT CAN BE EATEN EACH WEEK?

Research has shown that eating an egg a day does not increase the risk for heart disease. In fact, *Canada's Food Guide* includes 2 eggs as a serving from the Meat and Alternatives food group, so they can be a part of your every day balanced diet.