All about eggs

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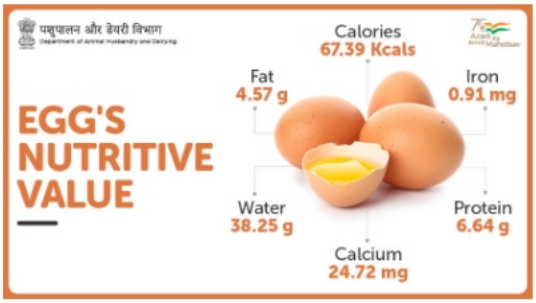
Eggs are a common food, which are also incredibly nutritious as well. There are a number of important nutrients in it including vitamins A, B2, B5, B6, B12, D, E and K as well as folate, phosphorous, selenium, calcium and zinc. All of these are contained within just one boiled egg, which also contains 6 grams of protein as well as 5 grams of healthy fats. Not only do you get all of these nutrients with just one boiled egg, it's calorie count is pretty healthy as well.

YouTube Video: https://www.youtube.com/watch?v=ZbTa6LLc6g4

Nutritive value of eggs

A large egg contains



- Calories : 67.4 Kcal
- Protein : 6.4 grams
- Carbohydrates : 0.6 grams
- Total Fat : 5.0 grams
    - Monounsaturated fat : 2.0 grams
    - Polyunsaturated fat : 0.7 grams
    - Saturated fat : 1.5 grams
- Cholesterol : 213 milligrams
- Sodium : 063 milligrams

Nutritive value of egg white and egg yolk

The nutritional value of an egg is divided between the egg white and the egg yolk.

The white contains more than half the egg's total protein, niacin, riboflavin, chlorine, magnesium, potassium, sodium, and sulfur and all the egg's zinc.

The yolk contains all of the fat in the egg and a little less than half of the protein. It also contains the fat-soluble vitamins A, D, and E. Egg yolks are one of the few foods naturally containing vitamin D. The yolk also provides vitamin B 12 and folic acid, and the minerals iron, calcium, copper and phosphorus.

The yolk contains approximately 190 mg of cholesterol and 5 grams of fat, less than a third of which is saturated fat. In the 1980's science focused on the amount of cholesterol in eggs, however recent nutrition information indicates that it is more important to focus on reducing the intake of total fat and saturated fat rather than cholesterol. This is good news for eggs. It is not necessary to limit egg or egg yolk consumption unless recommended by your physician.

While each egg white is fat and cholesterol free, yolks contain 213 milligrams of cholesterol (approximately 22% less cholesterol than previously thought) and 5 grams of total fat. Only 1.5 grams of the yolk's fat is saturated, the kind of fat that is most likely to increase blood cholesterol levels. In fact, compared with dietary cholesterol, saturated fat exerts a four times stronger influence on blood cholesterol levels. Just published research actually saw an increase in the HDL or the "good" cholesterol levels of subjects who added an egg each day to their diet [Farrel et al. 1998. Am J Clin Nutr. 68: 538-544.].

Biological Value of eggs

- Eggs have been considered the standard against which all other protein foods are measured because their protein composition is so ideal.
- Eggs are considered a complete protein because they contain all nine essential amino acids, or the building blocks of protein.
- One large egg contains 6.3 grams of protein. The protein is almost equally split between the egg white and the egg yolk. The white contains 3.5 grams of protein while the yolk contains 2.8 grams. The protein in an egg contains all the essential amino acids used for growth and development.
- Based on the essential amino acids it provides, egg protein is second only to mother's milk for human nutrition.
- Essential amino acids must be provided by the food we eat because our body cannot produce them. Nine amino acids cannot be made by the body. These nine are known as essential amino acids and you must get them from the foods you eat. Foods that contain all nine essential amino acids are called complete protein foods. The nine essential amino acids are : Valine, Leucine, Isoleucine, Threonine, Histidine, Tryptophan, Phenylalanine, Methionine and Lysine The remaining acids if not supplied in the diet is produced mostly

from the essential amino acids.

- Scientists frequently use eggs as a standard for measuring the protein quality of other foods. Protein quality is expressed as biological value, which measures the rate of efficiency that protein is used for growth. At 93.7%, eggs score higher than any other food. On a scale with 100 representing top efficiency, following are the biological values of proteins in several foods.
  - Fish : 76.0
  - Beef : 74.3
  - Soybeans : 72.8
  - Polished rice : 64.0
  - Wheat, whole : 64.0
  - Corn : 60.0
  - Beans, dry : 58.0

Source : National Egg Coordination Committee

Health benefits

The egg is a wholesome, nutritious food with high nutrient density because, in proportion to its calorie count, it provides 12% of the daily value of protein and a wide variety of other nutrients such as vitamins, essential amino acids and minerals.

While protein itself is an important constituent of healthy diet, the egg has been found to have two newly-recognized nutrients - lutein and zeaxanthin - that has put the egg in the "functional food" category. A functional food is one that provides health benefits beyond its basic nutrient content.

The health benefits you get by eating eggs are as follows.

- **Eggs do not raise blood cholesterol:** It is true that when you eat eggs, cholesterol enters your body. However, eggs also give a signal for the liver to stop producing the cholesterol it usually produces. The increase in the intake of cholesterol compensates for the decrease in the cholesterol produced by the liver and therefore keeps the blood cholesterol levels constant.
- **Eggs have choline:** Choline is an incredibly important nutrient for your body. This is because it helps build cell membranes and is also crucial when it comes to the production of certain signalling molecules in the brain. A single egg has about 100 milligrams of this nutrient and therefore is one of the best sources of it.
- **Eggs are good for your eyes:** Eggs have two very important nutrients for your eyes. These are Lutein and Zeaxanthin. These nutrients stop degenerative processes from occurring in the eye. Recent studies have shown that consuming lutein and zeaxanthin can significantly lower risk of age-related macular degeneration (AMD), a leading cause of blindness affecting people over the age of 65. In addition, these reduce the likelihood of cataracts.
- **Eggs have high levels of Omega-3 fatty acids:** Eggs that are boiled have a high level of

Omega-3 fatty acids in them. Omega-3 fatty acids are crucial for reducing the chances of you suffering from heart disease due to the fact that it reduces your triglyceride levels.
- **Eggs are an excellent source of protein:** This is the biggest reason to eat eggs. Eating eggs helps you to lose weight, optimizing bone health and lowering blood pressure.
- **Egg may reduce the risk of stroke:** Studies have shown that eggs are not only good for your heart, but they also reduce the likelihood of suffering from a stroke.

How to tell if an egg is fresh?

Lower the egg into a bowl of water. If the egg sinks and lies on its side, it is fresh, if the egg stands, it is less fresh and if the egg floats to the top, it is stale and should not be eaten.

How to store eggs?

- Store eggs in a cool place that is not too dry, away from strongly flavoured foods like cheese and onions.
- Always keep eggs standing with the broad end up.
- Eggs should always be at room temperature before cooking. If taken from a refrigerator, run a little warm water over them.

Tips on cooking eggs

- Cook eggs on a low flame or they will toughen and lose their flavour.
- Do not boil eggs in aluminium pans or the pan will blacken.
- Always use a wooden spoon to stir eggs while cooking in an aluminium pan or the eggs will turn grey-green.
- To separate the egg yolk from the white, knock the egg sharply against the rim of a bowl. Break the shell in half and slip the yolk from one half-shell to the other, until all the white has drained into a bowl. Finally, slide all the yolk into another bowl. If any yolk should get into the white, remove it with the edge of the egg shell, a teaspoon or the corner of a piece of absorbent kitchen paper. Even a tiny bit of yolk will prevent egg whites from whisking to their full volume.
- Whole eggs should be whisked vigorously, turning them over with upward movements using a fork, spoon or electric mixer. Whisking draws in air. This increases the volume of the eggs. It is important to use whisked eggs immediately before they lose air. When mixing egg yolks and sugar, whisk the yolks first, then add the sugar and continue whisking until the mixture drops from the whisk in broad ribbons. Egg whites, whisked to a stiff but not dry foam, are used for soufflés and meringues. Use a clean and dry bowl, of a shape that keeps the whisk in constant contact with the eggs.
- To fold in egg whites, pile the beaten egg whites on top of the mixture. With a metal spoon, draw part of the mixture from the bottom of the bowl over the whites. Incorporate all the whites carefully so that they do not lose their air content.
- Before adding eggs to hot mixtures, beat the eggs or egg yolks just enough to blend. Stir in

a small amount of the hot mixture and mix well. Gradually add this to the remaining hot mixture, stirring constantly away from the heat. The eggs will thicken or bind the mixture.

Source : The Gourmet Egg recipe book
