

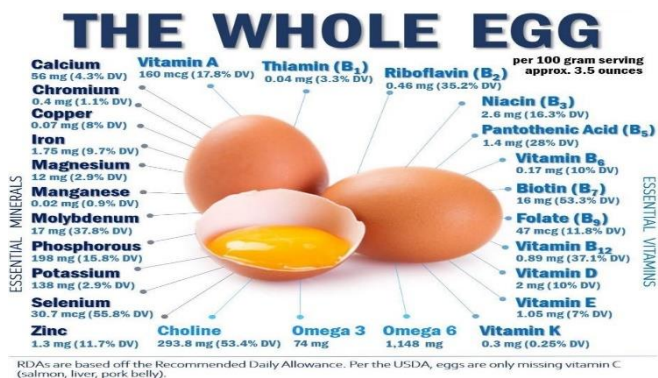
Egg: The Superfood

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'Superfoods' are the food items having exceptionally high nutrient density that provides nutritional as well as protective health benefits. Vegetables such as beans, spinach, kale, cauliflower, broccoli, parsley, lettuce leaves etc., oats, berries, salmon, egg are the most commonly known superfoods available in the market nowadays. Present day dietary pattern of people focuses on consumption of food from both vegetarian and non-vegetarian sources to lead a life with strong immunity protecting against the communicable diseases and certain life style disorders. Also prevalence of COVID like pandemic has made people more conscious regarding their food choices. Hence, the focus is more on the intake of easily available and affordable superfoods.



Egg is one of the mostly preferred superfoods from animal origin consumable by all age groups of the society. An average egg weighs 45-50 g composed of 8-11 per cent calcareous shell made up of calcium carbonate, 56-61 per cent white part constituting the embryo and 27-32 per cent yellow yolk contributing towards the nourishment of the embryo.

Nutritional benefits

All nutrients such as proteins, carbohydrates, vitamins (except ascorbic acid), minerals, fat, trace minerals are present in adequate quantity in white and yolk part of egg.

Nutritive value of egg/100 g

- The egg whites consist of over 60% protein. Protein is the most vital nutrient your body and brain require – it's the building block of life, essential for the repair of muscle, hair, tissue, joints, and bones.

Nutrient	Amount	Nutrient	Amount
Energy	173.0 Kcal	Retinol	420 µg
Protein	13.3 g	Thiamine	0.1 mg
Fat	13.3 g	Riboflavin	0.4 mg
Calcium	60.0 mg	Niacin	0.1 mg
Phosphorous	220.0 mg	Folic acid	78.3 µg
Iron	2.1 mg	Vit- B 12	0.2 µg

- Egg protein also contains all 9 essential amino acids in amounts to support effective muscle growth, recovery, and maintenance.
- The yolk contains protein, minerals, vitamins, vital Omega-3 fatty acids, and powerful antioxidants. Antioxidants are essential to fight off free radicals in your bloodstream to reduce potential illnesses and diseases.
- Calcium and phosphorous are the most abundant minerals present in egg. Egg is a rich source of biologically available zinc that acts as an immunity enhancer as well as a reproductive growth promoter. Trace minerals like selenium is present in egg that helps in free radical scavenging action being a potent antioxidant.
- Egg contains all the fat-soluble vitamins such as vitamin A, D and E along with water soluble fractions of thiamine, riboflavin, niacin, folate and vit- B₁₂. Biotin present in yolk helps in hair growth. Egg protein contains choline that constitutes cell membrane and neurotransmitter acetyl choline.
- Eggs contain vitamin B₂, B₁₂, choline, iron and tryptophan are all associated with helping reduce the risk of anxiety, symptoms of depression and naturally aiding sleep.
- They also contain a significant amount of leucine, an amino acid that is important for ongoing muscle support, as well as other key nutrients including vitamin D and Omega-3 fatty acids, plus a little-known nutrient, choline, which is important for brain function.

Myths regarding egg consumption

1. **High cholesterol levels of eggs** –The myth prevails like that it's not good for health to consume eggs daily as it will rise blood

cholesterol level. In contrary, as egg contains proper proportion of essential fatty acids like linoleic acid and arachidonic acid, it will help in lowering LDL and total serum cholesterol level. Eggs help increase high-density lipoprotein (HDL) levels – or “good” cholesterol. Three to four eggs per week can be consumed safely by anyone without having any adverse health effects.

2. **Brown and white eggs are nutritionally different** – Studies have proved the brown and white eggs to be nutritionally same; not different. Brown eggs cost more only because of the larger size of the egg laying hens, not because of more nutrient contents in it.
3. **Brown eggs are laid by brown hens** – The hen’s feathers are not at all contributing factors for the colour of the eggs. Rather the egg colour is determined by the colour of the earlobes of the hens. Brown eggs are laid by hens possessing red earlobes and white eggs come from hens having white earlobes.
4. **Every egg is a baby chicken**- Most of the eggs available in retail stores are unfertilized, hence they can’t be hatched into chickens.
5. **Egg carton dates reflect food safety**- The sell-by date on an egg carton serves as a guideline for food safety. More often, eggs are safe to eat up to 5 weeks after the printed date, but sometimes the retailers don’t change the date that hampers the freshness of the eggs along with its safety level to consume.
6. **Pregnant women should not consume eggs**- Some misconceptions are there that eggs produce more heat that is not desirable during pregnancy. But in reality, the nutritional composition of egg is proved to be very beneficial for the growth and development of both the mother and the foetus.
7. **Eggs have to go on the refrigerator’s egg shelf**- Though there are egg slots in fridge doors to store it, the slots are not the ideal place as the temperature of fridge door is always shifting because of its opening and closing. Eggs should be stored at a consistent temperature.

8. **Bad eggs more often have a bad smell** – It’s not true always as an egg having good smell and taste can have *Salmonella* in it possessing health risks.
9. **Raw eggs are healthier than the cooked ones**- This concept is mostly prevalent in sports sector. But in actual, raw eggs possess biotin-avidin complex that is not a problem in cooked egg. Besides, raw eggs are not easily digestible and absorbable by body as the cooked ones. The risk of getting infected by *Salmonella* increases with intake of raw ones. No advantages of eating raw eggs are confirmed yet.
10. **Raw eggs have more protein** – It’s completely a vague concept. Rather cooking makes changes in protein structure in eggs making it more available for digestion and absorption. Proteins of raw eggs are 50 per cent bio-available whereas that of cooked eggs are 91 per cent bio-available.
11. **Egg yolks facilitates the process of gaining weight**- The yolk is the store house of nutrients for the chick development. Lutein and zeaxanthin present in egg yolk help as antioxidants. Essential fatty acids help in increasing HDL level in blood imposing no risk of elevation of total cholesterol and body weight.
12. **Eating eggs every day is bad for us**- It is safe to have an egg in meal every day to get enough protein, fat, minerals and vitamins. No ill effect on health will occur on every day consumption of egg.

Eggs are a perfect single-ingredient food. Easy to prepare, they are a convenient and healthy source of protein, fat, and other nutrients such as biotin and iron, which are important for growth and a healthy body. Eggs are easily available and cost-effective food items that one can incorporate in every day diet to get a well-built, healthy body and sound mind. Its nutritive value proves it to be a superfood having much more health and nutritional benefits which we can afford easily. Hence, everyone should choose eggs in daily diet in sight of the dietary advantages of this superfood.

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