Nutrition

Nutrition Label

Based on assay figures and labeling rounding rules for nutrients, a label on a typical 1-dozen carton of large eggs might read as follows:

Nutrition Facts

Serving Size 1 egg (50g)
Serving per Container

Amount Per Serving

Calories 70 Calories from Fat 40

	% Daily Value *
Total Fat 4.5g	**7%**
Saturated Fat 1.5g Polyunsaturated Fat .5g	**8%**
Monounsaturated Fat 2.0g	
Cholesterol 215mg	**71%**
Sodium 65mg	**3%**
Potassium 60mg	**2%**
Total Carbohydrate 1g	**0%**
Protein 6g	**10%**

Vitamin A 6% ; Vitamin C 0%

Calcium 2% ; Iron 4% ; Thiamin 2%

Riboflavin 15% ; Vitamin B-6 4%

Folate 6% ; Vitamin B-12 8%

Phosphorus 8% ; Zinc 4%

Not a significant source of Dietary Fiber or Sugars.

*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.

	Calories	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2400mg
Potassium		3,500mg	3500mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g
Protein		50g	65g

Calories per gram
Fat 9 ; Carbohydrate 4 ; Protein 4

NUTRIENT VALUE OF A LARGE EGG

With all the media attention on cholesterol, consumers often lose sight of the fact that eggs are a nutrient rich, affordable contributor to a healthy diet. Not only do eggs contain the highest quality source of protein available but they also contain almost every essential vitamin and mineral needed by humans. Sorry, no Vitamin C in eggs. Chickens, unlike humans, can produce their own Vitamin C and do not need to get it from the diet. In fact, egg protein is of such high quality that it is used as the standard by which other proteins are compared. Eggs have a biological value of 93.7%. Comparable values are 84.5% for milk, 76% for fish, and 74.3% for beef. Eggs really are the best protein money can buy, and it has all those other valuable vitamins and minerals too.

NUTRIENT (unit)	WHOLE EGG	EGG WHITE	EGG YOLK
Calories (kcal)	75	17	59
Protein (g)	6.25	3.52	2.78
Total Lipid (g)	5.01	0	5.12
Total Carbohydrate (g)	0.6	0.3	0.3
Fatty Acids (g)	4.33	0	4.33
Saturated Fat (g)	1.55	0	1.55
Monounsaturated Fat (g)	1.91	0	1.91
Polyunsaturated Fat (g)	0.68	0	0.68
Cholesterol (mg)	213	0	213
Thiamin (mg)	0.031	0.002	0.028
Riboflavin (mg)	0.254	0.151	0.103
Niacin (mg)	0.036	0.031	0.005
Vitamin B6 (mg)	0.070	0.001	0.0069
Folate (mcg)	23.5	1.0	22.5
Vitamin B12 (mcg)	0.50	0.07	0.43
Vitamin A (IU)	317.5	0	317
Vitamin E (mg)	0.70	0	0.70
Vitamin D (IU)	24.5	0	24.5
Choline (mg)	215.1	0.42	214.6
Biotin (mcg)	9.98	2.31	7.58
Calcium, Ca (mg)	25	2	23
Iron, Fe (mg)	0.72	0.01	0.59
Magnesium, Mg (mg)	5	4	1
Copper, Cu (mg)	0.007	0.002	0.004
Iodine, I (mg)	0.024	0.001	0.022
Zinc, Zn (mg)	0.55	0	0.52
Sodium, Na (mg)	63	55	7
Manganese, Mn (mg)	0.012	0.001	0.012

WATER SOLUBLE VITAMINS

Water soluble B vitamins have many similar functions in the body. They are critical in releasing energy from macronutrients. Thanks to fortification of grain and bread products in the U.S., deficiency of B vitamins are no longer the serious public health issue it once was. Beriberi, a disease of thiamin deficiency, and pellagra, a disease of niacin deficiency, are very rare. However, alcoholics are one group vulnerable to suboptimum levels of water soluble vitamins due to their poor dietary habits. It is important to meet daily needs for these vitamins since any excess of these vitamins are excreted rather than stored in the body. And typically, multiple deficiencies will be evident since food sources for these vitamins are often the same. Clinical symptoms of mild deficiencies can be quickly reversed by eating a nutrient-rich diet.

Thiamin

Thiamin is also known as vitamin B1, since it was the first B vitamin to be discovered. Beriberi is a disease of thiamin deficiency.

Functions

Thiamin is required for normal function of all body cells, especially nerves. It plays a critical part in releasing acetylcholine, the nerve chemical that regulates memory. Like other B vitamins, thiamin is involved in numerous body processes that break down macronutrients for energy.

Nutrient Interactions

High alcohol and tea consumption decreases thiamin absorption. Thiamin is sensitive to heat. Foods high in thiamin are also good sources of other B vitamins, especially, riboflavin, niacin, vitamin B6, biotin, and pantothenic acid.

Riboflavin

Riboflavin is important for normal growth and development, the production and regulations of certain hormones, and the formation of red blood cells. Riboflavin helps activate vitamin B6 and converts tryptophan to niacin.

Nutrient Interactions

Riboflavin is heat stable but light sensitive. Riboflavin enhances the role of iron in treating anemia.

Niacin

Like vitamins D and K, the body can make niacin from the amino acid tryptophan. Niacin deficiency causes pellagra with 4 classic symptoms; dermatitis, diarrhea, dementia, and death.

Functions

Niacin is known to be involved in more than 50 body processes and also in detoxifications of several drugs and chemicals. Niacin can also decrease blood cholesterol levels.

Nutrient Interactions

Therapeutic doses of niacin are used to treat heart disease, cancer, diabetes, and epilepsy.

Vitamin B6

Pyridoxine, pyridoxamine, and pyridoxal are 3 compounds that make up vitamin B6.

Functions

Primary role of B6 is synthesis of amino acids and protein. This vitamin is involved in the manufacture of protein-related compounds such as hormone, hemoglobin, nerve chemicals, and many enzymes. It also plays a critical role in regulation mental processes and mood.

Nutrient Interactions

Therapeutic doses of vitamin B6 are sometimes used to treat carpal tunnel, premenstrual symptoms, and cancer. Along with other B vitamins, B6 can lower homocysteine levels, which has been associated with heart disease risk. Toxicity is possible with large doses of B6 supplements.

Vitamin B12

Vitamin B12 is a group of cobalamin-containing compounds. Vitamin B12 is an interesting water soluble vitamin in that it is stored in the liver, kidney and other tissues and deficiency is only manifested upon years of inadequate intake. The elderly are at risk of B12 deficiency due to decreased absorption resulting from low levels of intrinsic factor, found in gastric juice. Synthetic for vitamin B12 is cyanocobalamin.

Functions

Along with its role in breaking down macronutrients, this vitamin plays a critical role in myelin sheath and neurotransmitter formation. It is also thought that low levels of vitamin B12 may contribute to Alzheimer's disease, pernicious anemia, and diabetes.

Nutrient Interactions

High folate intake can mask anemia associated with B12 deficiency. Optimum levels of Calcium and vitamin B6 facilitate vitamin B12 absorption.

Folic Acid

Functions

Folic acid plays a critical role in regulating cell division and the transfer of inherited traits from one cell to another. Beginning in 1999, all grain products are fortified with folic acid to protect unborn babies against neural tube defects. Also it is involved in production of neurotransmitters, such as serotonin, that regulate appetite, sleep, and mood.

Nutrient Interactions

Vitamin B12, niacin, and vitamin C are needed to help convert folic acid to its biologically active form. Excess folic acid levels may mask B12 deficiency.

Biotin (Vitamin B7)

Like vitamin K, some biotin is produced by bacteria in the intestine. Biotin has many similar functions as other B vitamins.

Nutrient Interactions

Chronic use of antibiotics will interfere with biotin production and increase risk of biotin deficiency.

Pantothenic Acid

This vitamin is named after the Greek word panto, meaning "everywhere." It is found in both plants and animal products.

Functions

Pantothenic acid is essential for production of coenzyme A, an important catalyst in the breakdown of fats, carbohydrates, and protein for energy. Coenzyme A also functions in the synthesis of fat's cholesterol, bile vitamin D, red blood cells, and some hormones, and neurotransmitters.

Nutrient Interactions

Pantothenic acid is necessary for vitamin D production. Biotin lessens the symptoms of pantothenic acid deficiency.

Choline

Choline is the latest nutrient to be added as an essential nutrient by the Institute of Medicine. Choline plays an important role in brain development in the young and memory retention in the old. Choline deficiency has been shown to increase the risk of liver damage.

Vitamin C

Humans are one of the few species that cannot produce vitamin C (ascorbic acid). Prior to its discovery, scurvy, a disease of vitamin C deficiency claimed the lives of many crew members on long ocean voyages.

Functions

Vitamin C plays an important role in the formation and maintenance of collagen, "cement" that holds all the cells together. Vitamin C promotes the healing of wounds. Vitamin C is also a powerful antioxidant that works with vitamin E to fight oxidative stressors that damage cells and cause cancer and other chronic diseases.

Nutrient Interactions

Vitamin C enhances iron absorption.

FAT SOLUABLE VITAMINS

Vitamin A

In 1913 the first vitamin, vitamin A, was isolated from the retina. Vitamin A is a family of compounds that includes retinal, retinol, and retinoic acid, and carotenoids. Retinal and retinol are found in foods of animal origin and can be used directly by the body. Carotenoids, pro-vitamin form of vitamin A, of which beta carotene is the most active, is found in plants. Pro-vitamin is converted into vitamin A through an enzymatic process. Vitamin A deficiency continues to be a leading cause of blindness in developing countries, but here in the States, toxicity is more of a problem when people consume supplements with large doses of vitamin A.

Functions

Vitamin A plays an essential role in helping eyes work properly, especially with night vision. It also promotes the growth and health of cells and tissues throughout the body including bones and soft tissues. Vitamin A is involved in the immune system. Carotenoids act as antioxidants and protect against certain cancers and diseases associated with aging, such as heart disease.

Nutrient Interactions

Vitamin A's function is enhanced by adequate intake of zinc and optimum blood levels of vitamin E. Medications that interfere with dietary fat absorption will also decrease vitamin A absorption.

Vitamin D

Vitamin D is also known as the "sunshine" vitamin since our body uses ultraviolet sun light to produce vitamin D. Ten minutes of sun exposure per day is thought to be adequate. However, dietary sources of vitamin D continue to be important for people that do not get enough sun and for elderly, who have a diminished ability to make vitamin D. Rickets, a disease of malformed bones, is nearly eliminated in children due to fortified milk, but osteomalacia, another bone disease that occurs in the elderly with low vitamin D intake, continues to be a problem.

Functions

The primary function of vitamin D is homeostasis of calcium and phosphorus in the body. Vitamin D ensures bones and teeth are strong as well as making sure that nerves and muscles work properly by regulating calcium levels in the blood. It is also thought that vitamin D is involved in insulin production, the immune system, and in treating skin disorders.

Nutrient Interactions

Pantothenic acid is needed for vitamin D synthesis.

Vitamin E

Vitamin E is a powerful antioxidant that protects our body by neutralizing cell damage. It was first named tocopherol, which in Greek means child birth and to bear, after it was shown to prevent fetal death. Of the various tocopherals and tocotrienols classified as vitamin E, alpha-tocopheral is the most abundant and biologically active.

Functions

Due to its ability to neutralize free radicals that are produced in the body or from the environment, studies indicate that vitamin E can protect against heart disease, cancer, Alzheimer's disease and other chronic diseases.

Nutrient Interactions

It works with other antioxidants to protect against premature aging. Vitamin E might be needed to make B 12 work properly. Vitamin E might mask symptoms of zinc deficiency. Large doses of vitamin E can interfere with coagulation property of vitamin K.

Vitamin K

Vitamin K is actually a group of compounds derived from naphthoquinone. In the gut, intestinal bacteria can synthesize vitamin K. Limited amounts of vitamin K are stored in the body.

Functions

Vitamin K is essential in the production of prothrombin, a protein essential for blood coagulation; therefore, vitamin K is critical in regulating normal blood clotting. It also is involved in bone and kidney metabolism.

Nutrient Interactions

Chronic use of antibiotic can destroy the bacteria that produce vitamin K. Blood thinning medications can counter the effects of vitamin K.

Derived from Egg Nutrition Center. Look for them on the web at www.enc-online.org.

Mineral	What the mineral does	Food sources	US Recommended Dietary Allowances or Adequate Intake
›odium	Maintains fluid and electrolyte balance, supports muscle contraction and nerve impulse transmission	Table salt, soy sauce, processed food, soups, chips, condiments	Adults 31-50 yrs: 500 mg Children 4-8 yrs: 400 mg Infants 7-12 mo: 120-200 mg Pregnant/ lactating: 500 mg
›nloride	Maintains fluid and electrolyte balance, aids in digestion	Table salt, processed foods	Adults 31-50 yrs: 750 mg Children 4-8 yrs: 600 mg Infants 7-12 mo: 180-300 mg Pregnant/Lactating: 750 mg
›otassium	Maintains fluid and electrolyte balance, cell integrity, muscle contractions and nerve impulse transmission	Widely distributed in many unprocessed foods, fruits, vegetables, meat	Adults 31-50 yrs: 2000 mg Children 4-8 yrs: 1600 mg Infants 7-12 mo: 500-700 mg Pregnant/Lactating: 2000 mg
›alcium	Formation of bones and teeth, supports blood clotting	Milk, yogurt, cheddar cheese, Swiss cheese, tofu, canned fish, fortified orange juice, green leafy vegetables	Adults 31-50 yrs: 1000 mg Children 4-8 yrs: 800mg Infants 7-12 mo: 270 mg Pregnant/Lactating: 1000 mg
›hosphorus	Formation of cells, bones and teeth, maintains acid-base balance	Meats, fish, poultry, eggs, milk, soft drinks, bakery products	Adults 31-50 yrs: 700 mg Children 4-8 yrs: 500mg Infants 7-12 mo: 270 mg Pregnant/Lactating: 700 mg
›agnesium	Supports bone mineralization, protein building, muscular contraction, nerve impulse transmission, immunity	Wheat, bran, green vegetables, nuts, chocolate, legumes	Adults 31-50 yrs: 420 mg/males; 320 mg/females Children 4-8 yrs: 130mg Infants 7-12 mo: 75 mg Pregnant/Lactating: 320-360 mg
›on	Part of the protein hemoglobin (carries oxygen throughout body's cells)	Meat, eggs, poultry, fish, fortified cereals, vegetables	Adults 31-50 yrs: 8 mg/males; 18 mg/females Children 4-8 yrs: 10mg Infants 7-12 mo: 11 mg Pregnant/Lactating: 27 mg
›inc	A part of many enzymes, involved in production of genetic material and proteins, transports vitamin A, taste perception, wound healing, sperm production and the normal development of the fetus	Meats, seafood, eggs, liver, oysters	Adults 31-50 yrs: 11 mg/males; 8 mg/females Children 4-8 yrs: 5mg Infants 7-12 mo: 3mg Pregnant/Lactating: 12 mg
›elenium	Antioxidant. Works with vitamin E to protect body from oxidation	Seafood, meat, nuts, fish, liver, seeds, whole grains	Adults 31-50 yrs: 55 ug Children 4-8 yrs: 30 ug Infants 7-12 mo: 20 ug Pregnant/Lactating: 60-70 ug
››dine	Component of thyroid hormones that help regulate growth, development and metabolic rate	Iodized salt, seafood, bread, milk, cheese	Adults 31-50 yrs: 150 ug Children 4-8 yrs: 90 ug Infants 7-12 mo: 130 ug Pregnant/Lactating: 220-290 ug
›opper	Necessary for the absorption and utilization of iron, supports formation of hemoglobin and several enzymes	Liver, cocoa, beans, nuts, whole grains, dried fruit	Adults 31-50 yrs: 900 ug Children 4-8 yrs: 440 ug Infants 7-12 mo: 220 ug Pregnant/Lactating: 1.0-1.3 mg
›anganese	Cofactor for enzymes needed in carbohydrate metabolism, bone formation	Whole grains and cereal products, fruit vegetables, tea	Adults 31-50 yrs: 2.3 mg/males; 1. 8 mg/females Children 4-8 yrs: 1.5mg Infants 7-12 mo: 0.6mg Pregnant/Lactating: 2-2.6 mg
›uoride	Involved in the formation of bones and teeth, helps to make teeth resistant to decay	Fluoridated drinking water, tea, seafood, dental products, seaweed	Adults 31-50 yrs: 4mg males; 3mg/females Children 4-8 yrs: 1mg Infants 7-12 mo: .5mg Pregnant/Lactating: 3 mg
›hromium	Involved in glucose tolerance and associated with normal cholesterol and triglyceride blood levels	Egg yolks, whole grains, pork, nuts, mushrooms, beer	Adults 31-50 yrs: 135 ug/males, 25 females Children 4-8 yrs: 15 ug Infants 7-12 mo: 5.5 ug Pregnant/Lactating: 30-45 ug
›olybdenum	Assists enzymes needed in uric acid formation and mobilization of iron from the liver	Milk, beans, cereal bread	Adults 31-50 yrs: 45 ug Children 4-8 yrs: 22ug Infants 7-12 mo: 3 ug Pregnant/Lactating: 50 ug

A DOZEN REASONS TO EAT EGGS

NUTRIENT VALUE

1. Eggs are nutrient rich. Eggs produce a wealth of essential nutrients for maintaining good health. An egg contains varying amounts of 13 important vitamins and minerals. An egg yolk is one of the few foods that naturally contains vitamin D, the sunshine vitamins in combination with the other important nutrients folate, iron and vitamin B12.
2. Eggs supply high quality protein. Egg protein contains all the essential amino acids in a pattern that matches the human body's needs. Egg protein is used as the standard by which other proteins are measured because of its high quality.
3. The carotenoids lutein and zeaxanthin found in eggs, help prevent the increasingly common eye disorder of age related macular degeneration. Eggs contain the perfect mixture of antioxidant vitamins A and E combined with a fat source to assist in their absorption into the body.
4. Choline in eggs has been shown to be an essential nutrient. Necessary for proper brain development in the fetus and newborn, choline may also play a role in memory function throughout life and into advanced age.
5. Each egg yolk contains a mixture of essential fatty acids with other fatty acids that supply energy. A large egg supplies a good distribution of fatty acids with only 1.5 grams of saturated fat and 2 grams of monounsaturated fat and 0.5 grams of polyunsaturated fat. The egg yolk also contains omega-3 fatty acid that may lower your risk of heart disease.

WEIGHT & HUNGER

6. Beginning the day with eggs as part of a balanced meal can help prevent midmorning hunger and improve nutrient intake compared to skipping breakfast. Research has shown that children who did not consume breakfast had significantly lower daily intake of calories and nutrients and did not make up the differences at other meals.
7. Eggs make great snack food because they are easily transported, individually portioned, fun to eat, and are widely available. Finding a source of fresh eggs is rarely a problem due to an abundant supply. Since eggs can be cooked in hundreds of ways, they can be easily prepared in just the right way for each individual's needs and tastes. Once cooked, eggs can safely be kept at room temperature for up to two hours or kept chilled for a late day energy boost.
8. Eggs eaten at mealtime can lower daily calorie intake and prevent snacking between meals. Research has consistently shown an association between meal skipping and overeating later in the day. In fact, recent studies have

found that foods consisting of carbohydrates that are quickly absorbed into the blood stream have a high glycemic index, promoting hunger and excess weight gain. Eggs contain no carbohydrates and therefor lower the total glycemic load of the meal in which they are consumed.

CONVIENENCE

9. Eggs are a fast and satisfying food that can be prepared quickly and eaten on the run, before an athletic event or after a long hard day. After a few minutes in the microwave, a few eggs with a vegetable and bread can become a hot, nourishing meal! For athletes wishing to increase their protein and nutrient intake, an egg custard, hard cooked egg or egg drop soup can be the perfect refresher.
10. Eggs can be used in so many ways, as a garnish to decorate a salad, as a leavening agent in cakes and breads, as a thickener in sauces, as an emulsifier in salad dressings, and as a binding agent in baked dishes.

ECONOMICAL

11. Eggs are economical. Compared with other high protein foods, eggs offer so many nutrients at a relatively low price. Serving an egg main dish and green salad for dinner a few nights a week can help to keep expenses down, while still providing a nutritious and satisfying meal.

CHOLESTEROL

12. Current research has shown an egg eaten daily does not increase your risk of heart disease. In a large study of over 117,000 men and women followed for 8 to 14 years, eating 7 eggs a week was found not to increase heart disease risk. This finding and others have provided the foundation for the American Heart Association to revise their guidelines permitting people to enjoy an egg every day as part of an average daily cholesterol intake of 300 mg.

Modified from the Egg Nutrition Center
Also available in Brochure Format