

EGGCELLENT EGGS



THE HEALTH BENEFITS



THE EGG PROJECT NOV 2020



all things good

Eggs have the highest nutritional quality protein of all food sources, providing all the essential amino acids in amounts that closely match human requirements. One serve of eggs (2 x 60g eggs) contains 12.7 grams of protein, representing 20% of the recommended dietary intake (RDI) for men, 27% of the RDI for women and 33% of the RDI for children.

Eggs are a very good source of inexpensive, high-quality protein. More than half the protein of an egg is found in the egg white, which also includes vitamin B2 and lower amounts of fat than the yolk.

Eggs are rich sources of selenium, vitamin D, B6, B12 and minerals such as zinc, iron and copper. They are a source of fat-soluble vitamins A, D, E and K and lecithin. Vitamin D is important for the absorption of calcium from your stomach and for the functioning of calcium in your body. This helps your bones to stay healthy and your muscles to work well. Vitamin D has been shown to help reduce falls and fractures in older people,

Both our Free Range and Free Range Organic chickens are fed extra Vitamin D and Calcium so they can more readily absorb the calcium to make stronger shells and more nutritious eggs! You can imagine how much calcium is needed by a chicken to produce an egg every day!

About 5% of adults in New Zealand are deficient in vitamin D. A further 27% are below the recommended blood level of vitamin D.



Just one boiled egg contains:

- ***40% of your daily vitamin D requirements***
- ***25% of your daily folate requirements***
- ***12% of your daily riboflavin (Vitamin B2) requirements***
- ***20% of your daily selenium requirements***

Eggs also contain vitamins A, E, B5, B12, as well as iron, iodine and phosphorus.

Zinc helps your immune system and metabolism function. Zinc is also important to wound healing and your sense of taste and smell.

Eggs are regarded as a 'complete' source of protein as they contain all nine essential amino acids, the ones we cannot synthesize in our bodies and must obtain from our diet.



EGGS ARE EGGCEPTIONAL!



The cholesterol question

For years, eggs were considered more of a health risk than a healthy food. This is because they were considered a high-cholesterol food, so those with high cholesterol levels were advised to avoid them.

We now know that the cholesterol found in food has much less of an effect on our blood cholesterol than the amount of saturated fat we eat. If you've been advised by your GP to change your diet in an attempt to reduce your blood cholesterol levels, the best thing to do is to keep to daily

guideline intakes for saturated fat (20g for the average woman and 30g for the average man) opting instead for monounsaturated fats found in olive and rapeseed (canola) oils.

Eggs help increase levels of high-density lipoprotein (HDL), or "good" cholesterol as it's commonly known. Higher levels of HDL can help reduce the risk of heart disease. It's low-density lipoprotein (LDL), or "bad" cholesterol, that can put heart health at risk. Meals high in saturated fats and trans-fats such as deep-fried takeaway

foods will increase levels of LDL cholesterol. It's also a good idea to increase your intake of vegetables, wholegrains, lean meats and low-fat dairy while minimising sugars and refined carbs.

EGGS FOR HEALTH

Eggs are rich in several nutrients that promote heart health, such as betaine and choline. A recent study of nearly half a million people in China suggests that eating one egg a day may reduce the risk of heart disease and stroke, although experts stress that eggs need to be consumed as part of a healthy lifestyle in order to be beneficial.

During pregnancy and breast feeding, an adequate supply of choline is particularly important, since choline is essential for normal brain development. Eggs are one of the best sources of Choline.

Eggs are a useful source of vitamin D, as it is essential for the body to be able to absorb calcium and phosphorus, which helps to develop and protect bones and prevent osteoporosis and rickets. There is mounting evidence that it plays a beneficial role in the prevention and/or treatment of a wide range of diseases.. Vitamin D appears capable of inhibiting pulmonary (lung) inflammatory responses while enhancing innate defense mechanisms against respiratory pathogens.

Research has shown that vitamin D might play an important role in regulating mood and warding off depression. Scientists have found that people with depression who received vitamin D supplements noticed an improvement in their symptoms. A couple of our eggs a day will do the same thing!

In another study of people with fibromyalgia, researchers found vitamin D deficiency was more common in those who were also experiencing anxiety and depression.



Remember to shop wisely, because the method of production – free range, organic or barn-raised – can make a difference to vitamin D content. Egg yolk from free range and organic systems can contain a 42% greater concentration of vitamin D3 than did those from indoor systems.

Eggs should be included as part of a varied and balanced diet. They are filling, and when enjoyed for breakfast, may help with weight management as part of a weight-loss programme, as the high protein content helps us to feel fuller for longer.

A number of groups within the population may benefit from increased intakes or higher quality protein sources, including ovo-vegetarians, children and teenagers, older adults and those participating in resistance training.

OVO-VEGETARIANS:

Despite the total protein content of a vegetarian diet being significantly lower than an omnivore diet, the majority of vegetarians are still meeting current protein recommendations. It has been suggested, however, that total protein requirements should be higher for vegetarians if low levels of animal protein are consumed or if single plant sources are relied upon for protein due to the lower digestibility of protein from plant sources.

Due to their high protein quality and high digestibility, eggs may therefore be particularly useful in the diets of ovo-vegetarians.



CHILDREN AND TEENAGERS:

Children and adolescents have increased requirements for protein during periods of growth.

Evidence also shows that higher protein, low glycemic load diets can improve symptoms of acne that is common in teenagers.

A higher protein egg-rich breakfast has also been shown to help suppress appetite, reduce subsequent cravings and snacking and prevent body fat gain in adolescent girls.

Eggs are an excellent source of protein for children and adolescents due to their ideal amino acid profile, nutrient density and versatility.

Eggs are a perfect single-ingredient food for your baby and should be introduced around 6 months of age. They are 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 a top source of protein for children and are easy to make and serve. You can give your baby the entire egg (yolk and white). If you do have a history of egg allergies in your family, talk to your health practitioner first.

OLDER ADULTS (≥ 70 YEARS):

Older adults, aged 70 years and over, have a greater protein RDI (recommended daily intake) than younger people, as they may need further additional protein to stimulate muscle protein formation and maintain fat free mass.

It has been widely demonstrated that the formation of muscle protein in older adults can be stimulated by the increased availability of protein and/or amino acids from foods.

Muscle mass in older adults can be maintained through adequate protein intake combined with resistance training.

Increasing protein intake may also assist wound healing and immune function in older adults.



Protein intakes as high as 2g per kg of bodyweight per day (equal to 140g per day for a 70kg adult) have been recommended for older adults with severe illness or malnutrition.

Eggs are an ideal protein source for older adults as they are economical, easy to prepare and easy to chew.



EGGS FOR ATHLETES

Some athletes can benefit from higher protein intakes for preservation of lean muscle mass and weight loss. Athletes who undergo resistance training, particularly in the early phases of their program where muscle synthesis is high, can also benefit from extra dietary protein. Eggs are a highly bioavailable protein source that can easily be included in the diets of athletes without adding unwanted bulk.

Recent evidence suggests that to maximise the benefits of protein intake in athletes, moderate amounts (approximately 20g) are consumed at regular intervals (every 3 hours) throughout the day. A serve of eggs, providing nearly 13g protein, can be a convenient source of protein for athletes.

An interesting study has shown that differences in the chemical composition between the eggs of organic and conventionally reared hens were significant. The yolk of organic eggs contained the highest protein, K and Cu levels. It was shown that - from the nutritional point of view - organic eggs were characterized by more beneficial chemical composition than conventional ones.



all things good

REFERENCES

Daily egg consumption may reduce cardiovascular disease
<https://www.sciencedaily.com/releases/2018/05/180521184702.htm>

Effects of vitamin D supplementation on symptoms of depression in overweight and obese subjects: randomized double blind trial
<https://onlinelibrary.wiley.com/doi/full/10.1111/j.1365-2796.2008.02008.x>

Free-range farming: a natural alternative to produce vitamin D-enriched eggs
<https://pubmed.ncbi.nlm.nih.gov/24607306/>

Maternal choline supplementation during the third trimester of pregnancy improves infant information processing speed: a randomized, double-blind, controlled feeding study
<https://pubmed.ncbi.nlm.nih.gov/29217669/>

The quality of eggs (organic and nutraceutical vs. conventional) and their technological properties
<https://www.sciencedirect.com/science/article/pii/S0032579119314439>

Vitamin D and respiratory health
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2759054/>

Vitamin D supplementation to prevent acute respiratory tract infections: systematic review and meta-analysis of individual participant data
<https://www.bmj.com/content/356/bmj.i6583>

Vitamin D deficiency is associated with anxiety and depression in fibromyalgia
<https://link.springer.com/article/10.1007/s10067-006-0348-5>

What are the health benefits of vitamin D?
<https://www.medicalnewstoday.com/articles/161618>



all things good