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Eggs: Brain food or viral fad?

Eggs are rich in nutrients, but dietitians advise against overeating them



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Once vilified for their cholesterol content, eggs are now touted on social media as the cornerstone of a healthy diet and building blocks for the brain.

In an Aug 10 Instagram post, American physician and health content creator Paul Saladino (@paulsaladinomd) urged his three million followers to “eat more eggs and your brain will thank you”.

Chiropractor and health content creator Eric Berg, who has 2.8 million followers for his @drericberg account, has garnered more than 328,000 views for a Sept 10 post recommending four eggs a day. He says eggs are rich in choline, which the body uses to make acetylcholine, a neurotransmitter involved in memory.

The Sunday Times asks dietitians and neurologists for their expert views on the changing reputation of eggs, the role of eggs in a healthy diet and if there is a “safe” number of eggs to eat.

HOW EGGS GOT A BAD NAME

In 1968, the American Heart Association (AHA) advised limiting egg yolks to no more than three a week. At the time, high blood cholesterol was linked to heart disease, and cholesterol-rich foods were assumed to raise cholesterol in the blood.

Chaitra Jagdish, 56, a lecturer at Republic Polytechnic’s School of Applied Science with 25 years of experience in nutrition and dietetics, says eggs became a target because a large egg contains about 185mg to 200mg of cholesterol, almost all of it in the yolk.

But dietary cholesterol and blood cholesterol are not the same thing. The body produces much of its own cholesterol, while genetics, saturated-fat intake and overall diet also affect blood cholesterol levels.

“Eggs can increase LDL cholesterol, but the effect is usually modest and varies between individuals,” says Jagdish. Low-density lipoprotein (LDL) cholesterol is often viewed as “bad” cholesterol as a high LDL level can lead to a build-up of cholesterol in the arteries.

She adds that while egg yolk is high in cholesterol, it is relatively low in saturated fat. A whole egg contains only around 1.5g saturated fat, whereas foods such as butter, fatty meat and coconut fat can provide substantially more saturated fat.

Saturated fat generally has a greater effect on LDL cholesterol than dietary cholesterol, although individual responses to both can vary.

In 2002, the AHA dropped its specific egg restriction of three to four a week. More than a decade later, in 2015, the United States Dietary Guidelines Advisory Committee removed its previous daily limit of 300mg of dietary cholesterol.

Shalene Tan Yien, 25, a dietitian at National University Hospital, says while modern research shows dietary cholesterol in eggs has little effect on blood cholesterol for most people, the impact of dietary cholesterol on blood cholesterol levels varies among individuals due to the differences in how the body processes cholesterol.

Some people, known as “hyper-responders”, may experience a rise in blood cholesterol when consuming eggs, while others, known as “hypo-responders”, may not see a significant change, she explains.

Saturated and trans fats influen-

ce cholesterol far more, and eggs are low in saturated fat and contain no trans fat.

Still, the removal of the limit for daily cholesterol consumption does not equate to eating unlimited eggs as overall diet quality remains paramount, she says.

Angel Tey, 30, a senior dietitian at Woodlands Hospital, says individuals who are “hyper absorbers” may tend to absorb more dietary cholesterol than others. She adds: “However, there are currently no routine tests to identify these people and we know that dietary cholesterol from foods such as eggs has a smaller impact on our blood LDL cholesterol levels.”

ARE EGGS REALLY ‘BRAIN FOOD’?

Jennifer Hung, 36, a consultant at National University Hospital’s Division of Neurology and assistant professor at NUS Yong Loo Lin School of Medicine, says from a clinical neurology and nutritional neuroscience perspective, the social media claim that eggs are “brain food” is plausible and supported by moderate scientific evidence, but social media trends frequently overstate what the data actually proves.

Eggs are one of the most concentrated dietary sources of choline and also contain lutein, zeaxanthin and vitamin B12, which play roles in neural membrane health.

Most research linking eggs with cognitive health is observational, she says. Such studies can show an association, but cannot prove that eating eggs improves memory or prevents dementia.

For someone who already gets enough choline, eating more eggs is unlikely to work like a “smart drug” or supercharge memory.

“Brain health and memory are not an on-off switch and require a holistic approach,” she says.

Neurologist Zhao Yi Jing, 40, of Mount Elizabeth Hospital, whose main areas of clinical practice and research are brain health and neurology, says there are no randomised controlled studies to provide evidence strong enough to recommend eggs specifically to prevent dementia.

Studies suggesting possible benefits generally involve moderate intake – about half to one egg a day, or even one to three eggs a week – “not several daily”, she says.

For protecting the brain, Zhao says there is stronger evidence for regular physical activity, good sleep, social engagement and lifelong learning, along with limiting ultra-processed foods and eating a Mediterranean diet. The diet focuses on quality proteins, carbohydrates, fats and dietary fibre, all beneficial for overall good cardiovascular and brain health.

While eggs have been labelled “brain food” for their choline content, Jennifer Shim, 39, a senior dietitian at Parkway East Hospital, calls it “an oversimplified marketing term”.

There is a scientific rationale because eggs contain choline, as well as vitamin B12 and folate, which support nervous system health and cognitive function, she says, but these nutrients should be consumed as part of a balanced diet.

Egg whites are not necessarily healthier. The yolk holds most of the egg’s choline; vitamins A, B12, D, E and K; folate; lutein; zeaxanthin; and selenium.

An average egg provides about 6g to 7g of high-quality protein, but Shim points out that similar amounts can also be obtained from milk, yogurt, tofu, fish, chicken or lean meat.

Hung cautions that framing any single food as a “brain food” risks creating a false sense of security, encouraging overconsumption while distracting from interventions with stronger clinical evidence.

She observes that nutrients in eggs – such as lutein and choline,



Eggs may be healthy but that is not a licence to eat as many as you like. PHOTO: ADOBE STOCK

which are associated with brain health – can also be obtained from foods such as dark leafy greens and soya beans.

Tey of Woodlands Hospital says: “Egg whites are no healthier than yolks or whole eggs and vice versa. However, they play a different role depending on every individual’s health or diet goals.”

Family physician Desmond Lee, 32, of Crawford Medical Centre, who is also a medical content creator, has observed that social media content creators promote eating eggs as part of the protein and “brain food” trend.

Some of their posts feature people eating six, eight or even a dozen eggs a day and then showing off their physique, or a set of clean blood test results, creating the impression that it is advisable for everyone else to follow suit.

“How eggs affect your body, for better or worse, varies a great deal with your genetics, your age and any health conditions you already have,” he says.

A person’s diet, sleep and exercise regimens and genetics may have far more to do with those results than eggs alone, he adds.

HOW MANY EGGS TO EAT?

Three dietitians and one nutritionist interviewed say there is no universally agreed upper limit for egg consumption for healthy adults.

Most say one to two eggs a day can fit into a balanced diet, although people with high LDL cholesterol, diabetes, cardiovascular disease or inherited cholesterol disorders may need individual advice.

Jagdish says current evidence supports about one whole egg a day, or seven a week, for healthy adults. The AHA allows up to two eggs daily for healthy older adults with normal cholesterol levels.

The national health portal, HealthHub, also debunks the food myth that eggs are bad for the heart. Its website states that most healthy people can eat an egg a day as the body compensates for the cholesterol intake by manufacturing less cholesterol.

For older adults, protein is another consideration. Lee says his older patients are “far more likely to be eating too little protein than too many eggs”.

Most experts also say what is consumed together with the eggs may have a greater impact on health than the eggs themselves.

Tey notes that bacon, sausages and buttered toast are more likely to push up LDL cholesterol because of their saturated fat content, while vegetables and whole-grain bread make for a more balanced meal.

Lee says a boiled or poached egg with nothing added has about 60 to 80 calories, while frying the egg adds oil or butter. He observes that locally, fried eggs are also often eaten with bacon, luncheon meat or prata – adding saturated fat or sodium – while half-boiled eggs get a generous splash of soya sauce.

He recommends boiled, poached or steamed eggs as the default. If frying eggs, use a modest amount of oil and pay more attention to the rest of the plate than to the egg itself.

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