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The sunny side of eggs

Eggs have a bad reputation because of their high cholesterol content: 210 milligrams in the yolk of a large egg. But, in fact, they do not raise blood cholesterol in most people—and they may even be good for your heart in some ways. Here's the latest on eggs.

Eggs and your heart

You may be surprised to learn that dietary cholesterol, found in animal foods, raises blood cholesterol in only about one-third of people. And, as shown in some egg studies, dietary cholesterol causes the body to produce HDL (“good”) cholesterol along with LDL (“bad”) cholesterol in these “hyper-responders,” thus helping offset potential adverse effects. Moreover, the LDL particles that form are larger in size—and larger LDL particles are thought to be less dangerous than small ones. In studies at the University of Connecticut, for example, eating three eggs a day for 30 days increased cholesterol in susceptible people, but their LDL particles were larger, and there was no change in the ratio between LDL and HDL, which suggests no major change in coronary risk.

More significantly, eggs do not appear to contribute to heart disease in most people. A pivotal study from Harvard in 1999, of nearly 120,000 men and women, found no association between eggs—up to one a day—and heart disease, except in people with diabetes. Nor did it find a link between eggs and strokes. Studies since then have similarly vindicated eggs, including a Japanese study of more than 90,000 middle-aged people in the *British Journal of Nutrition* in 2006, and a study in 2007 from the University of Medicine and Dentistry of New Jersey, which both found no link between frequent egg consumption and heart disease. In light of these findings, recommendations about eggs have changed over the years, and cholesterol guidelines, in general, are being rethought. The unsaturated fats and other nutrients, including B vitamins, in eggs may even be beneficial to heart health. It's the saturated-fat-rich foods that typically accompany eggs (bacon, sausage, cheese, and biscuits) and how eggs are often prepared (fried in lots of butter) that can raise blood cholesterol and the risk of heart disease. A large egg has only 1.5 grams of saturated fat and about 70 calories. A Bacon, Egg & Cheese

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RETHINKING CHOLESTEROL ADVICE

The American Heart Association (AHA) has no specific limit on how many eggs you can eat, as long as you limit your total cholesterol consumption to 300 milligrams a day, on average (200 milligrams if you have heart disease, high cholesterol, or other coronary risk factors). Many researchers believe that the AHA guidelines are too restrictive, however, and endorse a higher daily upper limit for cholesterol for healthy people. A more reasonable goal is 500 milligrams a day (but still 200 milligrams if you have risk factors for heart disease, including diabetes). That would allow for an egg a day—even two on some days—and still leave room for other sources of cholesterol. Other countries, including Canada, the U.K., and Australia, don't set any recommended upper limits for cholesterol,

citing a lack of evidence that dietary cholesterol has a major impact on blood cholesterol.

Keep in mind that even if it's okay for most people to consume more cholesterol than previously advised, this does not change recommendations to limit saturated and trans fats (from partially hydrogenated oils), as these fats affect blood cholesterol levels more than the cholesterol you eat does. Only a few foods—notably eggs, shrimp, and squid—are very high in cholesterol anyway—and they are low in saturated fat. The biggest problem with meat and dairy foods is not their cholesterol, but their high saturated fat content, which is why you should choose lean cuts and low-fat varieties.

Biscuit from McDonald's, on the other hand, has 11 grams of saturated fat and 1,360 milligrams of sodium (more than half the daily limit for these nutrients) and 450 calories.

Good for your eyes . . . and maybe your waist

- Egg yolks are a rich source of lutein and zeaxanthin, relatives of beta carotene that may help keep eyes healthy and have been linked to a reduced risk of age-related macular degeneration. Not only are these carotenoids well-absorbed and better used by the body than those from spinach or supplements, but a study in the *Journal of Nutrition* in 2006 also found that women eating six eggs a week for 12 weeks had increased macular pigment, which is thought to protect the retina of the eye from the damaging effects of light.

- There's some evidence that eggs promote satiety, due in part to their protein. In a study of overweight women, reported in the *Journal of the American College of Nutrition* in 2005, those who had two eggs for breakfast felt fuller afterwards and ate significantly fewer calories at lunch than women who had a bagel-based breakfast with the same number of calories.

What's in an egg

- One large egg contains 6 grams of high-quality protein (in both the yolk and the white). The yolk is also a source of zinc, B vitamins (including riboflavin and folate), vitamin A, iron, and other nutrients.

- In addition to lutein and zeaxanthin, egg yolks provide choline, an essential nutrient, which is especially important for fetal brain development. Researchers have also identified other compounds in eggs that may have anti-cancer, anti-hyperten-

sive, immune-boosting, and antioxidant properties.

- “Designer” eggs, from chickens fed special diets, usually contain more lutein, vitamin E, and/or heart-healthy omega-3 fats. But they rarely provide enough extra nutrients to be worth their higher cost. Eggs that claim to be rich in omega-3s, for example, contain only a small amount compared to fatty fish, such as salmon.

- Brown eggs are not more nutritious than white. Different breeds simply lay eggs with different shell colors—even blue and green. Yolk color depends on what the chicken ate: wheat and barley produce a light yolk, corn a medium-yellow yolk, and marigold petals a deep yellow. Though not a sure indication, darker yellow yolks may have more omega-3s and carotenoids. Organic eggs, from chickens fed an organic diet, do not have more nutrients than conventionally produced eggs, though some people may prefer them as a way to support organic production.

Words to the wise: Eggs are good food. Most people can eat one or two a day. Just don't mess them up by preparing them with fatty, salty ingredients or serving them with unhealthy side dishes.

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