

STATEMENT BY THE EGG NUTRITION CENTER AND AMERICAN EGG BOARD ON RECENTLY PUBLISHED RESEARCH ON EGG AND CHOLESTEROL CONSUMPTION

Park Ridge, Ill. (August 14, 2012) – Eggs have been shown to have a wide range of health benefits, providing 13 essential vitamins and minerals, high-quality protein and antioxidants, all for just 70 calories. Years of credible research has demonstrated the positive effects of the high-quality protein and nutrients in eggs on satiety, weight management, eye health and in supporting a healthy pregnancy. The journal *Atherosclerosis* recently published a study examining the association between the number of egg yolks consumed per week and amount of plaque in the carotid artery, a risk factor for coronary artery disease.ⁱ The researchers concluded that regular consumption of egg yolks should be avoided by those at risk for cardiovascular disease. These findings are surprising and contradict more than 40 years of research demonstrating that healthy adults can enjoy eggs without significantly impacting their risk of heart disease.

A Harvard study with more than one hundred thousand subjects found no significant difference in cardiovascular disease risk between those consuming less than one egg per week and those consuming one egg per day. The researchers concluded that consumption of up to one egg per day is unlikely to have substantial overall impact on the risk of heart disease or stroke among healthy men and women.ⁱⁱ Another study published in *Risk Analysis* estimates that eating one egg per day is responsible for less than one percent of the risk of coronary heart disease in healthy adults.

Alternatively, lifestyle factors including poor diet, smoking, obesity and physical inactivity contribute to 30 to 40 percent of heart disease risk, depending on gender.ⁱⁱⁱ Additionally, research has shown that saturated fat may be more likely to raise a person's serum cholesterol than dietary cholesterol.^{iv}

“The 2010 Dietary Guidelines for Americans recognize eggs as a nutrient-dense food that can be part of a healthful diet,” says Mitch Kanter, PhD, Executive Director of the Egg Nutrition Center. “While eggs provide many nutrients and make an important contribution to overall diet quality, they are often accompanied by foods high in saturated fat and calories. These pairings were not taken into consideration in the *Atherosclerosis* study.”

The *Atherosclerosis* study is an observational study that can only suggest potential relationships, not determine actual cause-and-effect conclusions. In this study, it is important to note that the researchers did not account for any dietary or behavioral factors beyond egg intake and smoking. The study did not control for exercise habits, waist circumference, intake of saturated fat, alcohol or foods commonly eaten with eggs like high-fat meats and other high-fat side dishes.

Study subjects with higher egg intakes tended to also be heavy smokers, and only a small percentage of the population consumed more than five eggs per week, meaning that the conclusions were based on a small number of subjects. Lastly, although the study shows a link between egg consumption and carotid

plaque area, no associations to many traditional markers of cardiovascular disease, including total serum cholesterol, LDL-cholesterol, HDL-cholesterol or body mass index (BMI) were reported.

It is important to pair eggs with other good-for-you foods, such as fruits, vegetables, low-fat dairy and whole grains as part of a balanced diet. Enjoying an egg a day can fall within current cholesterol guidelines, particularly if individuals opt for other low-cholesterol foods throughout the day.

For more information, visit IncredibleEgg.org or EggNutritionCenter.org.

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References:

i Spence DJ, Jenkins DJA, Davignon J. Egg yolk consumption and carotid plaque. Atherosclerosis. 2012 Jul 31. [E-pub ahead of print]

ii Hu FB, Stampfer MJ, Rimm EB et al. A prospective study of egg consumption and risk of cardiovascular disease in men and women. JAMA. 1999; 281: 1387-94.

iii Barraj et al. A comparison of egg consumption with other modifiable coronary heart disease lifestyle risk factors: A relative risk apportionment study. Risk Analysis, published online November 2008.

iv Harman NL, et al. Increased dietary cholesterol does not increase plasma low density lipoprotein when accompanied by an energy-restricted diet and weight loss. European Journal of Nutrition 2008; 47:287-293.

About the American Egg Board (AEB)

AEB is the U.S. egg producer's link to the consumer in communicating the value of The incredible edible egg™ and is funded from a national legislative checkoff on all egg production from companies with greater than 75,000 layers, in the continental United States. The board consists of 18 members and 18 alternates from all regions of the country who are appointed by the Secretary of Agriculture. The AEB staff carries out the programs under the board direction. AEB is located in Park Ridge, Ill. Visit IncredibleEgg.org for more information.

About the Egg Nutrition Center (ENC)

Established in 1979, ENC provides science-based information to health promotion agencies, physicians, dietitians, nutritional scientists, media and consumers on issues related to egg nutrition and the role of eggs in the American diet. ENC is located in Park Ridge, Ill. Visit EggNutritionCenter.org or NutritionUnscrambled.com for more information. The Egg Nutrition Center (ENC) is the health education and research center of the American Egg Board.