Experts at Experimental Biology examine dietary cholesterol, egg intake and heart disease risk

EurekAlert

Park Ridge, IL (April 13, 2011) This week at Experimental Biology (EB) 2011 in Washington, D.C., long-standing beliefs about dietary cholesterol intake and cardiovascular disease risk were examined as part of a scientific symposium and a variety of poster presentations. Experts from leading institutions discussed existing and emerging science regarding dietary cholesterol intake and its association with heart disease risk, dispelling some commonly heard myths.

Established research has shown that saturated fat intake may be more likely to raise a person's blood cholesterol than dietary cholesterol intake (1,2). The distinguished panel of EB symposium speakers examined other factors impacting heart disease risk including refined carbohydrate intake, dietary cholesterol metabolism in the body and the effect of egg intake on blood vessels (3).

Dietary Cholesterol and Heart Disease Risk

Many Americans avoid dietary cholesterol for fear of increasing their risk for heart disease. Research discussed at EB, including a review published in *Current Atherosclerosis Reports,* shows that major national epidemiological studies do not support a relationship between increased dietary cholesterol intake and incidence of coronary heart disease (4).

"European countries, Asian countries and Canada do not have an upper limit recommendation for dietary cholesterol," says EB symposium presenter and University of Connecticut professor Dr. Maria Luz-Fernandez. "This session gives the scientific community the opportunity to re-examine years of controversial data regarding dietary cholesterol and how the medical community should talk with consumers about dietary cholesterol containing foods."

Lower-Cholesterol Eggs and Dietary Cholesterol Consumption

Experts from the United States Department of Agriculture's Agricultural Research Service (USDA-ARS) presented new nutrition data that indicates eggs are now lower in cholesterol. The USDA-ARS study found that one large egg contains 185 mg of cholesterol (down from 215 mg), 14 percent lower than previously reported on Nutrition Facts panels. The analysis also revealed that large eggs now contain 41 IU of vitamin D, an increase of 64 percent (5). This analysis was based on a nationwide sampling of large eggs and the complete nutrient analysis is available on the nutrient data lab website at www.ars.usda.gov/nutrientdata [1].

A follow-up study funded by USDA-ARS examined how the new nutrient analysis of eggs impacts the overall dietary cholesterol profile of the American diet. Data from

the *What We Eat in America* food consumption survey shows that among egg-eaters average dietary cholesterol consumption decreased by seven percent due to the decreased amount of cholesterol in eggs. The investigators also reported that there was a slight shift in the percentage contribution of total cholesterol intake from eggs to other foods like meat, poultry and dairy (6).

"Cholesterol-containing foods, such as eggs, are often eaten with foods that are high in saturated fat which gives them a bad reputation by association," says Dr. Mitch Kanter, Executive Director for the Egg Nutrition Center and session moderator at EB. "Eggs are a nutrient-rich food on their own and can easily be enjoyed with other nutrient-rich foods such as vegetables, whole grains and reduced fat milk without worry of increasing heart disease risk."

The 2010 *Dietary Guidelines for Americans* also support the role of eggs in a healthy diet. The policy report, released in late January, states that healthy individuals can enjoy an egg daily and suggests an egg a day does not result in increased blood cholesterol levels. The guidelines recommend that individuals consume, on average, less than 300 mg of cholesterol per day (7).

SOURCE [2]

Links:
[1] http://www.ars.usda.gov/nutrientdata
[2] http://www.eurekalert.org/pub_releases/2011-04/epr-eae041211.php