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NEWS/BUSINESS

Study finds dairy calcium may play a role in reducing fat absorption, maintaining HDL

ROSEMONT, Ill. — The nutrient combination of calcium and milkfat present in dairy may play a role in reducing fat absorption and may help the human body to maintain good cholesterol (HDL), while minimizing any increase in bad cholesterol (LDL), according to an article published in the February issue of the *British Journal of Nutrition*.

The study, designed to explore why dairy products containing saturated fat and high contents of calcium do not seem to significantly affect blood cholesterol levels as much as saturated fat from other sources, lends credence to the notion that milk and other dairy products with a high content of calcium might reduce the risk of cardiovascular disease.

Study authors note that historically, intervention studies have pointed to a relationship between a diet high in saturated fat and increases in total cholesterol and LDL cholesterol. As a result, some nutrition experts have recommended that consumers limit the intake of high-fat dairy products. However, observational studies have found an inverse relation between intake of milk and other dairy products with a high content of calcium and incidence of cardiovascular disease.

The authors aimed to study whether the high calcium content of dairy products influences the effect of dairy fat on the lipid profile.

"In theory, without calcium, dairy would have a bigger impact on LDL levels. The protective function of dairy calcium seems to set it apart from sources of fat," says Arne Astrup, professor and director of the Department of Human Nutrition at the Faculty of Life Sciences, University of Copenhagen, and one of the study's authors. "This study supports previous research we have conducted that indicates dairy intake may actually play a role in minimizing the risk for cardiovascular disease vs. increasing the risk."

In addition, Gregory Miller, president of the Dairy Research Institute and vice president of the National Dairy Council, notes that many adults currently are concerned about their fat intake, cholesterol levels and heart disease risk.

"We believe this study underscores the importance of dairy as a good daily source of calcium, protein and other nutrients while mitigating the impact on cholesterol," Miller says. "The study reinforces findings published in the Dietary Guidelines Advisory Committee report in 2010 that suggests 'bioactive components that alter serum lipid levels may be contained in milk fat,' or the effect of milkfat on blood lipids is different than what might be predicted.

"This is valuable information for the industry and for the consumer. It is an area of research the Dairy Research Institute continues to focus on," he adds.

The study, "Dairy calcium intake modifies responsiveness of fat metabolism and blood lipids to a high-fat diet," was a small, clinical trial that included participants completing four separate diets over a period of 10 days, with each diet differing in the amount of calcium and fat content.

For more information on this and other dairy-related topics, visit USDairy.com. **CMN**