

Dairy Research Institute Studies Dairy's Disease-Fighting Attributes

Dairy Research Institute finds dairy consumption has beneficial effect on heart disease risk.

By Diane Toops, News and Trends Editor | 10/28/2011

As concern mounts regarding obesity and increasing rates of obesity-related diseases such as Type 2 diabetes and heart disease, the Rosemont, Ill.-based Dairy Research Institute, established in 2010 under the leadership of America's dairy farmers through Dairy Management Inc. (DMI), continues to fund research identifying how dairy foods and dairy ingredients can help consumers achieve healthier diets.

"It has been a very exciting year for dairy research," said Gregory D. Miller, Ph.D., president of the Dairy Research Institute. "We have added to the science showing the value of dairy in a healthy eating plan and also have begun to see potential new benefits in the areas of Type 2 diabetes, heart health, and body composition. We continue to see evidence that meeting the recommended daily intake of three servings of dairy per day can provide extraordinary benefits."

Top insights from 2010 dairy nutrition and product research include: A published study indicates that a specific type of fat found primarily in dairy products is associated with greater whole-fat dairy consumption, a more favorable metabolic profile, and a significantly lower incidence of Type 2 diabetes; A study administered by the Rosemont, Ill.-based Dairy Research Institute showed that adequate dairy intake (3.5 daily servings compared with less than 0.5) can improve key metabolic risk factors associated with obesity. According to lead author Dr. Michael Zemel, dairy also lowered blood insulin levels and increased insulin.

DRI also found that dairy consumption could also have a beneficial effect on heart disease risk. Higher blood levels of fatty acids found specifically in dairy products are associated with a decrease in the likelihood of a first heart attack in women. And older women on a reduced-calorie diet supplemented with whey protein showed significantly greater fat loss than those consuming the same amount of calories from carbohydrates.

In its June 2010 report, the 2010 Dietary Guidelines Advisory Committee wrote, "Under-consumption of milk and milk products is associated with an increase in cardiovascular disease and Type 2 diabetes, as well as an increased risk for poor bone health and related diseases."

Though some children shun the idea of drinking milk due to taste or consistency issues, DRI found that establishing good milk-drinking habits early in life could lead to improved nutrient intake into the teen years and beyond. DRI reported on research that stated girls who drank more soda and less milk than other kids at age 5 were likely to have similar habits at age 15, a critical time for building bones. In this study, girls with lower dairy intake also had lower intakes of important nutrients like

calcium, magnesium, potassium and phosphorous—nutrients that are vital for their growing bodies.

From a marketability perspective, DRI found dairy protein continues to excel in terms of nutrition and product value for food and beverage manufacturers. In 2010, DRI administered sensory, application and nutrition research to further develop dairy protein options for food and beverage manufacturers to make tasty, nutritious, protein-enhanced products. More heat stable whey proteins are now available, increasing the amount of protein that can be used in meal replacement beverages from 5 percent to 10 percent. In recent research with older women, study participants on a reduced-calorie diet supplemented with whey protein showed significantly greater fat loss than those consuming the same amount of calories from carbohydrates.

Milk performs better than other beverages in Swedish Nutrient Density-Climate Impact study. A research team developed a new Nutrient Density to Climate Impact Index to examine nutrient profiles related to greenhouse gas emissions in the production life cycle of various beverages. Milk had the highest nutrient density scores in relation to greenhouse gas emissions, performing better than the other beverages tested (soy drink, orange juice, carbonated water, soft drinks, beer, red wine, and oat drink).

Dr. Miller expects to see more research this year regarding the role of three servings of dairy each day to improve metabolic health and dairy's effect on decreasing risks for Type 2 diabetes and heart disease; more news on chocolate milk's role in muscle recovery and a shift in nutrition community advice away from a focus on individual nutrients towards providing more practical, total diet advice. www.usdairy.com/dairyresearchinstitute.

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