Dairy Research Trends

DRI cites diabetes, heart health and diet qualities as key focus areas.

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Adequate calcium and vitamin D intake has long been a part of the healthy lifestyle vernacular. In a time when incidences of obesity-related diseases are at an all time high, research continues to point to the power of dairy as an increasingly important component of a healthy diet. So too does a report issued by Rosemont, IL-based Dairy Research Institute (DRI), which recently compiled what it believed to be the top most influential trends regarding dairy research.

“It has been a very exciting year for dairy research,” said Gregory D. Miller, PhD, president of DRI. “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.”

The Centers for Disease Control and Prevention (CDC) predicted that by the year 2050, up to one-third of the U.S. population could have diabetes. Emerging research indicates that dairy may play a positive role in reducing this risk.

A study administered by DRI showed that adequate dairy intake (3.5 daily servings compared with less than 0.5) can improve key metabolic risk factors associated with obesity. Lead author Dr. Michael Zemel reported that dairy also lowered blood insulin levels and increased insulin sensitivity in this study, demonstrating a potential decreased risk for developing metabolic syndrome and type 2 diabetes.

“We believe Type 2 diabetes is the disease that will break the healthcare bank,” Dr. Miller said. “The good news for the dairy industry is that we are not part of the problem, and we may be part of the solution.”

Like Type 2 diabetes, DRI also found that dairy consumption could also have a beneficial effect heart disease risk. According to an observational study administered by , higher blood levels of fatty acids found specifically in dairy products were associated with a decrease in the likelihood of a first heart attack in women.

The 2010 Dietary Guidelines Advisory Committee also recognized the aforementioned conditions as key emerging areas of dairy research. In its June 2010 report, the 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."

Good Signs for Dairy

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. For example, more heat stable whey proteins are now available, increasing the amount of protein that can be used in meal replacement beverages from 5% to 10%. According to DRI, this is important as the role of dairy protein in good health and body composition becomes better understood. 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.

Dr. Miller said he expected 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.