

Dairy may be key to reducing risks of metabolic syndrome

By a Dairy Herd news source | Updated: September 22, 2011

ROSEMONT, III.— Metabolic syndrome poses a significant public health threat in the United States. Affecting over one-third of American adults, it is a cluster of symptoms that increases the risk of cardiovascular disease and type 2 diabetes and accounts for billions of dollars of health care costs annually. Research has associated dairy consumption with a reduced risk of metabolic syndrome and its related diseases. A new scientific review, published in *Advances in Nutrition*, discusses how components of dairy's unique nutrient package may account for dairy's positive effects. The review was authored by research scientists at the Dairy Research Institute[®], an organization founded under the leadership of dairy farmers who have a commitment to product, nutrition and sustainability research.

Dairy foods are an important source of key nutrients, contributing 50 percent of calcium and more than 10 percent of magnesium and potassium, and milk is the number one food source of calcium, vitamin D and potassium in the American diet.[1] This research review reported that these and other components within dairy, specifically milkfat and whey proteins, together may help regulate one or more elements of metabolic syndrome, including, blood pressure, fasting glucose levels, the makeup of fats in the blood and body composition.[2]

"Dairy is a great example of the whole being greater than the sum of its parts. This review provides further evidence that it's the components in dairy working together that provide nutrition and health benefits, in this case, related to improved metabolic health," said Beth H. Rice, Ph.D., lead author of the review article and manager of scientific affairs for the Dairy Research Institute and the National Dairy Council®. "Although more research is needed to confirm the potential benefits related to cardiovascular disease and type 2 diabetes, this research does reinforce for the dairy industry the need to communicate the value of dairy's nutrient package and its distinguishable contributions to consumer health and wellness."

The review highlights recent studies that show dairy protein provides wellness benefits. Some of these findings have indicated that dairy protein, specifically whey protein, may be associated with beneficial changes in body composition when accompanied by routine resistance exercise. Whey protein is regarded as a "fast" protein because it is rapidly digested, allowing for quick delivery of amino acids to muscle. It is also one of the highest sources of essential amino acids, leucine in particular, which is uniquely recognized as an activator of muscle protein synthesis and believed to have an overall beneficial effect on muscle metabolism.

"Whey protein in particular is an asset to dairy's nutrient package. Its ability to impact body composition and potentially impact risk factors associated with metabolic syndrome are an important benefit to dairy consumption," said Gregory Miller, Ph.D., president of the Dairy Research Institute. "Further research on the mechanisms of whey protein involved with body composition benefits, specifically when compared to other dietary proteins, could strengthen our understanding of dairy's role in reducing the risk of metabolic syndrome."

Visit www.USDairy.com/dairyresearchinstitute for more information.