



All the right ingredients

Gone are the days of “got milk?®” and “Ahh, the power of Cheese.™” as Dairy Management Inc. (DMI) has shifted its focus from promotion to efforts aimed at helping develop new foods that include dairy ingredients and are desired by consumers. This entails developing partnerships with every link in the food chain: dairy suppliers, food and beverage manufacturers, marketers, foodservice outlets and schools.

The Ingredient program’s goals are to provide technical, scientific and marketing resources to assist the industry in increasing sales of dairy ingredients, and to contribute to the launch of new or re-formulated products using domestic dairy ingredients.

DMI’s ingredient group is currently focused on six key product areas where it sees the best opportunity for growth for dairy ingredients: beverages, sports nutrition bars, meal replacements, yogurt/ice cream/frozen desserts, packaged dinners/appetizers and infant formula.

“To accomplish this goal, DMI offers considerable resources to the industry in the areas of product and nutrition research, technical support, market research and industry communications,” says Alan Reed, senior vice president of U.S. Manufacturing and Ingredient Marketing at DMI.

All these resources are available to industry suppliers and their customers.

- Funded by DMI, the National Dairy Foods Research Center Program is a unified, coordinated national **research program** conducted through research centers, application labs and other universities to help the industry innovate to address unmet consumer demand for dairy foods and other foods that use dairy ingredients.
- DMI sponsors **nutrition research** with independent, highly regarded scientists around the world. Current nutritional research priorities include studies on body composition, satiety, muscle function, blood lipids and blood pressure.

- DMI conducts **market research** that would be costly or impractical for individual companies to conduct alone. For instance, DMI regularly uses research to analyze market size, opportunities and trends for dairy applications to aid in message and claim optimization. DMI leverages a variety of data sources — primary, secondary and syndicated — and can set up focus groups for exploring industrywide issues.
- DMI also helps educate and inform industry suppliers through a variety of **trade communications** vehicles. DMI participates in, organizes and sponsors seminars, symposia and conferences, hosts an informative Web site (www.InnovateWithDairy.com), provides timely articles to industry trade media, and distributes print and electronic publications.

DMI partners with manufacturers and marketers to exchange information and assist with product development and application projects, product innovation and even commercialization.

To learn more about how DMI’s ingredient group can be of assistance, contact Jim Dodson, DMI’s director of U.S. Manufacturing and Ingredient Marketing, at 847-627-3317, or e-mail jdodson@rosedmi.com.

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Whey plays a role in nutrition



The 2008 International Whey Conference placed a premium on what the latest science says about the nutritional benefits of whey.

The first scientific session, chaired by Dr. Gertjan Schaafsma from Han University in the Netherlands, focused on the role of higher-protein diets and whey protein on body composition across different population groups. Of note, Dr. Stuart Phillips from McMaster University in Hamilton, Ontario, Canada, presented new, unpublished data that documented a greater increase in muscle protein synthesis at rest and following resistance exercise for subjects who consumed whey proteins versus casein and soy protein.

The study, which tracked healthy young men, showed muscle protein synthesis at rest was approximately 83 percent and 59 percent greater after whey protein consumption compared with casein or soy, respectively. After a single bout of resistance training exercise, muscle protein synthesis was approximately 94 percent and 65 percent greater after whey consumption compared with casein or soy ($p < 0.05$).

The second session, chaired by Dr. Matt Pikosky, director of research transfer for DMI's nutrition group, focused on the role of protein and whey protein in satiety, weight management and gut-health promotion.

Dr. Harvey Anderson from the University of Toronto presented some new, unpublished data in the area of satiety. Of note was one experiment that investigated the impact of varying amounts of whey protein on satiety, as assessed by measuring the food intake of study participants in a test meal one hour after having a protein-laden snack. The results found that subjects who consumed 20g of whey protein as a snack prior to a test meal had greater caloric compensation (less total calories consumed combining the snack and test meal) compared to a group that consumed a calorie-free snack prior to the test meal. There was no difference in caloric compensation between participants whose preload snacks were 20g and 30g of whey protein. The group with the 40g preload serving had the greatest reduction in total caloric intake.

"The takeaway from the conference was that there are definitely a lot of future opportunities for whey protein in the nutrition and health areas," Pikosky says.

International Whey Conference



Every three years, researchers, suppliers and users of whey proteins come together from all corners of the globe for the International Whey Conference. This year's event was held Sept. 7-9 in Paris, attracting more than 600 participants from 44 countries. The two major themes at this conference were whey's value-added benefits, and health and wellness applications. Separate symposium tracks focused on nutrition, consumer issues and production/technical issues.

"The industry is focusing on moving away from a commodity mentality to one that emphasizes creating products with unique capabilities," says Jim Dodson, director of U.S. Manufacturing and Ingredient Marketing for Dairy Management Inc.™, one of the event sponsors and exhibitors.

Researchers shared their continued explorations of differentiated fractions, whey components with added functionality (like gelling capability or heat stability) and whey proteins with additional nutritional features.

Food and beverage manufacturers are increasingly targeting whey as an ingredient to build health and wellness into their products. Key nutritional benefits under investigation address satiety, weight management and sarcopenia.

China's Melamine Crisis



We can talk all we want about product innovation and price competitiveness, but the truth is that unless consumers trust the quality and safety of our products, nothing much else matters.

The global dairy community received a stern reminder of this tenet this fall. China's dairy crisis, in which milk products and a host of foods that use dairy ingredients were found adulterated with the industrial chemical melamine, became worldwide news. Sadly, six infants died and more than 300,000 others were hospitalized. Our sympathies go out to the families affected by this tragedy.

As news unfolded, it became apparent that melamine adulteration wasn't an isolated incident, but a problem endemic to the entire Chinese industry. The breakneck growth of China's dairy sector — local milk production up more than fourfold since 2000 — occurred without a commensurate increase in regulatory controls.

"This has exposed chaos in our country's dairy product production and distribution, and serious shortcomings in oversight and administration," the Chinese government said in an official statement on Oct. 6.

"The U.S. dairy industry must continue to be vigilant to ensure consumers' trust."

In the immediate aftermath of the incident, the Chinese dairy industry was decimated. Consumer trust in Chinese brands was severed. Products made domestically were pulled from store shelves, prompting plants to stop collecting milk. China's fledgling dairy and food export business came to a halt when dozens of countries around the world implemented bans and recalls on products of Chinese origin.

The Chinese government and industry have mobilized to address the crisis, implementing changes to fix the structural flaws in the regulatory system. New testing and monitoring mechanisms are in place and financial assistance is earmarked for farmers and processors to keep them in business. Analysts expect it will take one to two years for consumer confidence to be restored and consumption to resume its upward trajectory again.

In the meantime, the United States can point proudly to a record of dairy safety. U.S. regulatory oversight is among the most stringent in the world. Farms and processing plants have been stewards of the "Made in the USA" reputation. But it's no time to rest on our laurels. The U.S. dairy industry must continue to be vigilant to ensure that consumers' trust in our products is never broken.

DMI and the U.S. Dairy Export Council® (USDEC) have developed a series of communications tools to showcase the U.S. dairy ingredient sector's commitment to quality assurance, food safety and traceability, including key messages and fact sheets. To order a copy of the Quality & Safety Initiative Toolkit, contact me at 847-627-3317, or send an e-mail to jdodson@rosedmi.com.

A handwritten signature in black ink that reads "Jim Dodson". The signature is written in a cursive, flowing style.

Jim Dodson,

Director, U.S. Manufacturing and Ingredient Marketing



News and notes

Annual Ingredients Symposium planned for March 2009

The 11th Annual Dairy Ingredients Symposium, co-organized by Dairy Management Inc.™ and the Dairy Products Technology Center at California Polytechnic State University, will be held March 10-11 at Hotel 480 in San Francisco. The Dairy Ingredients Symposium is designed to provide overviews and updates on the latest marketing, science, manufacturing technology and food applications of value-added dairy ingredients. Registration is now open. For details or to register online, go to www.dairyingredients2009.com



High protein chocolate milk introduced

Shamrock Farms in Phoenix, Ariz., introduced *Rockin' Refuel*™, a chocolate milk-based sports beverage with 20 grams of protein in a 12-oz. bottle. The product is fortified with whey protein concentrate. Shamrock positions *Rockin' Refuel* as a sports recovery beverage: "It is the only chocolate milk specially formulated to help tired and depleted muscles recover and rebuild themselves for a stronger body," the company says.

U.S. Dairy Imports, January-September (million pounds)			
	2007	2008	% change
MPC (40% to 88% protein)	73.8	74.1	+0%
MPC (90% protein)	15.7	21.5	+37%
MPC total	89.6	95.6	+7%
Casein	91.0	91.0	NC
Caseinates	47.3	103.9	+119%
Casein/caseinates total	138.4	194.9	+41%

Source: USDA's Foreign Agricultural Service

U.S. imports of milk protein increase

U.S. imports of milk protein concentrate (MPC) and casein/caseinates ran higher in the first nine months of 2008, on track to approach or exceed record levels, according to the U.S. Department of Agriculture's Foreign Agricultural Service.

In the first nine months of the year, imports of MPC with between 40 percent and 88 percent protein were about the same as a year ago. However, imports of higher-protein MPC — though on a much smaller volume — were up 37 percent. Total MPC imports were 95.6 million pounds, up 7 percent from last year's pace.

More than 82 percent of the MPC brought into the U.S. comes from New Zealand, and another 12 percent comes from Australia. Imports from those two countries were up 5 percent and 9 percent, respectively. The small balance primarily comes from Europe.

Imports of caseinates in the first nine months of the year were more than double year-ago levels and had already topped the previous high for a full year. Imports of casein were virtually the same as last year. Total casein/caseinate imports were 194.9 million pounds, up 41 percent from a year ago.

DMI Dairy Ingredient Vantage Point is published by DMI and is designed to provide information about the U.S. dairy industry for the benefit of dairy ingredient manufacturers and distributors.

Dairy Management Inc.™ (DMI) is the nonprofit domestic and international planning and management organization responsible for increasing sales of and demand for U.S.-produced dairy products and ingredients on behalf of America's dairy producers. DMI manages the American Dairy Association®, Innovation Center for U.S. Dairy®, National Dairy Council® and U.S. Dairy Export Council®. DMI's Web site is dairyinfo.com.

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