

FUNCTIONAL FOODS TASK FORCE REPORT

SPRING 2012

Background of the Task Force

Dairy Council of California recently held its 13th “Functional Foods Task Force” (FFTF) meeting, a group convened annually to track changes in our external environment that may affect the dairy industry. This 14-member group is comprised of industry experts from around the country, representing research and development, academia, marketing, education and communications. The members discuss nutrition and dairy research, public policy, regulations and consumer perceptions that impact dairy and strategize what DCC and the industry can do to optimize dairy’s positioning in this rapidly changing environment.

Priority areas addressed at the recent meeting included:

- The accumulating positive research on protein and its health benefits beyond muscle, including opportunities for dairy such as its optimal distribution throughout the day
- The changing paradigm on dietary fat, driven by new research—specifically the health effects of different types of saturated fat on heart-disease risk
- The accumulating evidence that dairy may play a protective role against heart disease, stroke, diabetes, hypertension and obesity
- The developing evidence that bioactives, alpha-lactalbumin and other components in milk may play an important role in health
- The balance between consumers’ quest for health and their desire for indulgence, recognizing taste as a critical factor in their food choices
- The inherent nutrients in, and natural health benefits of, dairy foods
- The growing number of public-health recommendations and initiatives focused on limiting “negative” food components like sodium, solid fats and sugar ... and how the food industry is responding
- The negativity around processed foods and how to refocus on the benefits of food processing
- Measures aimed at preventing obesity encompassing schools, the home environment, the marketplace, communities, healthcare and the workplace—all aimed at creating environments conducive to healthy diets and lifestyles
- Growing research on pre- and probiotics, countered by worldwide regulatory hurdles restricting health and label claims.



Opportunities for Dairy Products

Protein research continues to unveil health benefits, opportunities for dairy

Research supports higher protein-intake levels than the Recommended Dietary Allowance—which is based on minimum needs to prevent deficiency—and suggests that daily protein intake should be spread equally between morning, midday and evening meals. The task force highlighted this as an opportunity for dairy, particularly in the morning when protein intakes need to be boosted. This could easily be accomplished by adding a serving of milk, yogurt or kefir to breakfast.



Marketers can target across age ranges and demographics, as everyone gains advantage from adequate and optimally distributed protein intakes for a variety of health benefits—growth and muscle-protein accretion; prevention of osteoporosis, sarcopenia, heart disease and obesity; and improving blood-sugar control and body composition.

The task force predicted that future research efforts will focus on manipulating protein composition and customizing protein content in milk through pre-harvest practices. Whey protein is already seen as a superior-quality source, and worldwide demand has risen beyond the supply.

The task force recognized an opportunity for dairy as consumers are opting for some meatless meals (think Meatless Mondays). Cheese, yogurt and other dairy products are ideal alternatives to meat-based dishes and meals. Cheese offers the added benefits of flavor and moisture to products. The dairy industry is not alone in wanting to promote their products as a source of high-quality protein; a growing number of protein-fortified products in the marketplace may pose a threat.

Sensory aspects of diets appeal to consumers

The task force identified opportunities in the indulgence arena as consumers balance their quest for nutrition and health with their need for enjoyment. This is apparent in their preference for reduced- and low-fat products versus fat-free products. On the product-development side, this means that the industry will need to make what people will buy, rather than expect them to buy what the industry makes. This movement is consistent with the long-standing number-one reason people consume the foods that they do—for taste, something about which they are unwilling to compromise.

Along these lines, premier products, including all-natural cream-top yogurt, tasty whole milk and super-rich Belgian chocolate milk, give people an excuse to indulge themselves. The popularity of Greek yogurt falls into this movement, with its higher protein content, creamier texture and more satisfying experience, and the consumer does not seem to mind paying a premium for it.



Teaching cooking skills presents an opportunity as an art form that gives people control over their health and nutrition, and at the same time provides an outlet for creativity and indulgence. Dairy bodes well here, as the plethora of high-quality ingredients is key in good-tasting meals and dishes.

Touting the health benefits of probiotics is hindered by regulatory barriers

Science continues to be very supportive of probiotics in areas such as gut, immune and even cognitive and psychological health, and there is more focus on specific strains and species. However, only one of the more than 200 health claims submitted to EFSA (European Food Safety Authority) has been approved. Reasons cited for this include poor study design, inadequate human data and unclear dose, frequency and duration of consumption needed for benefits.



Marketers can continue to use structure-function claims if they are substantiated by research, and they can also continue to educate the consumer about the health benefits of probiotics through marketing materials and point-of-purchase information. The consumers will drive this movement, as they want to reap the rewards of these ‘good bugs’ that they hear about long before claims are official.

Research on prebiotics, which are essentially nutrients for probiotics, is also growing. For example, oligosaccharides, resistant starches, inulin and fiber may help with diabetes management. However, the lack of clinical studies on prebiotics remains a hurdle. Yogurt may be a good carrier for both pre- and probiotics.

Industry more assertive in labeling dairy’s natural nutrition benefits

Dairy manufacturers are getting better at touting the natural health benefits of their products. Key words that resonate with the consumer include: fresh, pure, calcium, real dairy, made with milk, lactose-free, local, probiotics and protein.

The task force agreed that still more labeling could be done in this area. Potassium, for example, was deemed an under-consumed nutrient by the 2010 Dietary Guidelines Committee; however, very few people recognize this as a nutrient of concern or are aware that milk is a good source of it. Capitalizing on the natural nutrients found inherently in dairy—rather than looking to fortify additional nutrients in dairy—may be the industry’s best strategy, consistent with consumers’ desire for natural, unaltered products.



2012 Task Force Industry and Research Representatives

California Dairy Research Foundation • Cargill, Inc. • California Polytechnic State University, Dairy Products Technology Center • Dairy and Food Communications, Inc. • Dairy and Food Culture Technologies • Davisco • Foods for Health Institute • Glanbia Nutritionals, Inc. • Global Dairy Platform • Hilmar Cheese • International Dairy Foods Association • Land O' Lakes, Inc. • North Carolina State University Department of Food, Bioprocessing and Nutrition Sciences • University of Davis Food Science & Technology Department

Strategies Identified for the Industry

- Highlight dairy's contribution to protein intakes and its health benefits to all age groups—from growth and muscle development in childhood; to body composition, weight management and blood-glucose control in middle adulthood; to sarcopenia prevention in older age.
- Target the middle-aged audience with messages around dairy's protein, calcium and vitamin D for osteoporosis prevention.
- Encourage flavored-milk consumption for refueling and rehydrating after exercise.
- Label products and educate the consumer about the nutrients in milk beyond calcium—such as protein, potassium, magnesium and vitamin D.
- Educate the health professional about the nutritional consequences of elimination diets, such as dairy- and gluten-free diets. For example, people who omit dairy from their diets may not consume enough calcium, vitamin D or protein.
- Educate the health professional and consumer about the real carbon footprint of milk, which is much less than commonly reported, as well as the efforts that the dairy industry has underway to improve the sustainability of their products.
- Support research on bioactive milk proteins, alpha-lactalbumin and other dairy components in promoting good health.
- When conducting research, employ rigorous study designs and register trials appropriately. Have researchers disclose funding sources when reporting results for purposes of transparency. Use third-party spokespeople to add credibility to the interpretation of the research.
- Continue pressure on FDA to approve health claims for probiotics, citing specific strains and their health benefits. In the meantime, use substantiated structure-function claims to educate the consumer about benefits of pro- and prebiotics.



Dairy Council of California

Since 1919, Dairy Council of California has been an innovator in nutrition education. Dairy Council's mission is to help consumers make food choices for optimal health that match individual values. We encourage nutrient-rich foods as part of healthy eating patterns in which milk and milk products are a cornerstone.