

FUNCTIONAL FOODS TASK FORCE REPORT

SPRING 2011

Background of the FFTF

Dairy Council of California recently held its 12th “Functional Foods Task Force” (FFTF) meeting, a task force convened annually as a way to track changes in our external environment that may affect the dairy industry. This 14-member task force 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 recently released 2010 Dietary Guidelines and their impact on dairy.
- The Institute of Medicine’s (IOM) newly updated recommendations for vitamin D and calcium, and the opportunity that this creates for milk and dairy products as primary sources of these nutrients.
- The growing research on health benefits of probiotics and prebiotics, and regulatory hurdles restricting health and label claims around these.
- The sustainability arena—what this means to consumers and how they are incorporating it into food choices.
- The public-health focus on “negative” nutrients such as solid fats, salt and sugar and how this is affecting the dairy industry.
- The accumulating evidence that dairy may play a protective role against heart disease, stroke, diabetes and hypertension.
- The focus on protein and its multiple health benefits, and how whey protein fits into this arena.

Opportunities and Vulnerabilities for Dairy Products

Opportunities abound for dairy with the 2010 Dietary Guidelines and new vitamin D and calcium recommendations

There was considerable discussion at the recent meeting around the release of the IOM’s vitamin D and calcium recommendations in late 2010 and the new Dietary Guidelines early in 2011, which sparked renewed interest in and discussion around dairy foods. The calcium recommendations remained the same for most age groups, and vitamin D recommendations doubled or tripled as a result of the new research. The Dietary Guidelines increased the recommended number of dairy servings to two-and-one-half cups for children aged 4 – 8 years, an increase of one-half cup per day. Both committees agreed that obtaining these nutrients from foods first (rather than supplements) was the best tactic, which opens up opportunities for dairy foods as being good or excellent sources of both.

The task force agreed, however, that fortification of other foods with vitamin D, such as breads and grains, would pose challenges as dairy tries to maintain its hold over this market. There was discussion around increasing the amount of vitamin D fortified in milk to make it easier for consumers to meet their needs from milk.

There was also discussion around whether our current food supply could amply support the consumption of the Dietary Guidelines recommendations for all Americans, with data showing, for example, that dairy production would need to increase 80 percent to meet the milk recommendation for the entire U.S. population.





Protein, including whey protein, continues to shine for its health benefits

Protein is no longer just for the athlete, as research continues to show promise for its effects on weight management, bone health, blood-glucose control, heart health and the prevention of sarcopenia (muscle wasting in the elderly). In order to reap the full benefits of this macronutrient, intake should ideally be spread fairly evenly throughout the day. This presents significant opportunities for the dairy industry, as the variety of milk and milk products on the market fit into many meal- and snack-time occasions. The task force cautioned against treating all proteins equally, as research indicates considerable differences in types of protein. For example, there could be different metabolic effects between plant versus animal protein or casein versus whey versus soy protein—an area that research is just starting to tease out.

Whey protein in particular is associated with benefits over other types of protein for its effect on satiety, weight management, sarcopenia in the aging and possibly metabolic syndrome and diabetes. The task force acknowledged that the biggest challenge when obtaining whey protein from foods is the quantity needed—as the amount used in research protocols exceeds the amount realistically consumed from foods. They also encouraged communicating whey protein's benefits to audiences beyond the traditional athlete for these additional health effects.

The task force noted that although most Americans obtain adequate protein in their diets, specific subgroups that are at risk for low protein intakes are children, pregnant women, older adults and those who do not consume animal proteins.

Dairy's health-promoting and disease-fighting effects accumulate, yet barriers to implementing research remain

The task force outlined areas of promise in regard to dairy's association with health and disease prevention, highlighting preventive effects against heart disease, blood pressure, type 2 diabetes and metabolic syndrome. Unfortunately, this burgeoning body of research was not deemed substantive enough to be considered in recent dietary recommendations, which for calcium and vitamin D focused solely on bone health.

Similarly, in spite of a large number of accumulated studies on the health benefits of probiotics—many of which are positive—the results have still not been deemed conclusive enough for health claims to be approved. It was agreed that we need to better understand the role of probiotics and prebiotics on gut microflora and what it means to overall health and disease prevention before promoting those benefits.

The task force agreed that strong clinical research in these newer areas should be conducted now, in preparation for the 2015 Dietary Guidelines discussions that will take place in the coming years. Considering health benefits beyond bone health will further secure milk and dairy foods' strong positioning in future dietary advice and food-guide systems ... at a time when competitive foods abound and negative components of foods seem to be a focus.



Restrictive diets and legislation focus on saturated fat, sodium and sugar

Public-health efforts to fight obesity and improve our nation's health continue to have a restrictive focus, as “negative” components such as saturated fat, sodium, sugar, high-fructose corn syrup and trans fat are villainized. This is leading to policies such as omitting flavored milk in schools for its added sweeteners, offering “meatless Mondays” at many hospitals and institutions across the country, proposing a “fat tax” on certain food items and even eliminating cheese-based entrees (e.g. pizza, macaroni and cheese and grilled-cheese sandwiches) from school food service in some districts to reduce sodium and fat intake.



The task force agreed that a more positive approach is to focus on the nutrients that foods DO provide. For example, cheese provides calcium and protein; flavored milk provides the same powerhouse of nutrients that unflavored milk offers; meat provides iron, zinc, protein, vitamin B12 and other important nutrients.

The task force also agreed that we are heading toward an era of more personalized health. This means that restrictive diets are not necessary for everyone to follow—and, in fact, can be harmful to certain sub-segments of the population. For example, there is some evidence that low-sodium diets can actually lead to higher blood pressure, as well as insulin resistance—a predecessor to diabetes—in certain individuals. Personalized nutrition advice will allow for tailoring of diets to meet one's specific needs.

Strategies Identified for the Industry

- Stay abreast of research on protein's health benefits, and inform the consumer of dairy's significant contribution to total protein intake. Communicate the need to spread protein intake throughout the day, incorporating it at each meal and snack rather than “end-loading” the day at the dinner meal.
- Continue researching whey protein's health benefits, specifically those around satiety, athletic performance and sarcopenia prevention ... and communicate these benefits to appropriate consumer audiences.
- Educate the health professional and consumer about the variety and health effects of different saturated fats—not all are created equal.
- Continue to research and reformulate products to contain less sodium, yet still meet consumer expectations for taste and food safety. Educate the consumer about the reasons why salt is needed in foods—flavor, moisture and stability/shelf-life.
- Keep abreast of the research around health effects (positive and negative) of sodium intake. Work together with food scientists, nutritionists and public-health experts to promote the concept of personalization of sodium recommendations, considering the variable responses to sodium in one's diet.
- Research the benefits of obtaining nutrients from the whole food matrix, rather than focusing on individual nutrients. Dairy bodes well as an ideal delivery vehicle for many dietary components such as probiotics and prebiotics, as well as traditional nutrients—vitamins A and D, calcium, potassium and magnesium.
- Educate the consumer of the nutritional similarities between different types of milk—flavored versus unflavored, organic versus conventionally produced, fat-free versus low fat or reduced fat—to clarify common misperceptions about these products.
- Continue to investigate ways to improve the sustainability practices of producing dairy products, reducing carbon footprint and improving animal welfare.
- Follow the research on the effect of oligosaccharides on mineral absorption, a promising new area of research. Consider working together as an industry to get oligosaccharides defined as a type of “fiber,” such that the industry can piggyback on related health claims.
- Be more proactive about labeling milk and milk products for their inherent and health-promoting nutrients, such as protein, calcium, magnesium, potassium and vitamins A and D. Highlighting their positive components may be the best way to counter the current public-health focus on negative nutrients. Stay tuned for the front-of-package labeling rules, which will be established in the near future.

**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.



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