

FUNCTIONAL FOODS TASK FORCE REPORT

Spring 2015

BACKGROUND OF THE TASK FORCE

Dairy Council of California recently led its 15th Functional Foods Task Force meeting. The task force is convened annually to track changes in the external environment that affect the dairy industry. This 14-member group is composed of industry experts from around the country, representing food and nutrition research and development, academia, marketing, education and communications. Discussions ensue around nutrition and dairy research, public policy, regulations and consumer perceptions that impact dairy. Strategies are identified that Dairy Council of California and the industry can pursue to optimize dairy's positioning in a rapidly changing environment.

OPPORTUNITIES AND BARRIERS FOR DAIRY PRODUCTS

Dietary Guidelines discussions mostly positive for dairy.

Considerable discussion among task force members centered on the upcoming 2015 Dietary Guidelines for Americans (DG). In the 2015 Dietary Guidelines Advisory Committee meetings, open to the public via webcast, dairy products were positively positioned due to their high content of three of the four under-consumed nutrients in the U.S. diet—calcium, vitamin D and potassium. Dairy was also recognized for its numerous health benefits, including lower risk of diabetes, metabolic syndrome, cardiovascular disease and obesity.

Dietary patterns were a focus of DG discussions. Healthy dietary patterns were identified as higher in vegetables, fruits, whole grains, low-fat or fat-free dairy, seafood, legumes and nuts; moderate in alcohol (among adults); lower in red and processed meats; and low in sugar-sweetened foods, drinks and refined grains. The task force agrees that dietary pattern discussions were positive for dairy; however, reducing red meats would negatively impact the industry.

Another area of concern to dairy, discussed in depth at the task force meeting, was a move away from sugar-sweetened foods and products high in sodium, which could have implications for yogurt, flavored milk and cheese.



This was the first time in DG discussions that the environmental impact of diets was considered. While the evidence guiding recommendations in this area is still limited, the task force members concur that future dietary recommendations will likely incorporate sustainability issues.

Interest in plant-based diets grows due to sustainability concerns.

The task force agrees that plant-based diets are becoming mainstream, with purported benefits not just to health but also to the environment. Greenhouse gas emissions (GHGE) for production of many foods have been quantified, and GHGE for plant-based foods are generally lower than for animal foods. However, discussions of GHGE often fail to recognize the role of nutrients and calories contributed. The task force agrees that the dairy industry has an opportunity to educate health professionals and consumers that, while GHGE may be higher for milk and dairy products, the powerhouse of nutrients these foods supply cannot be replaced by any plant-based food. An all-encompassing definition of sustainability is needed to incorporate factors beyond simple GHGE.

Other positive factors in the sustainability arena are milk's ready availability and economic price, which are important to consumers but often overlooked. In addition, milk is a whole food and one of the few products that has been researched as such, rather than as individual components.

The task force agrees that there is continued opportunity to communicate about the improvements the dairy industry has made in reducing its environmental "footprint."

Protein's health halo still glows among all consumer segments.

As protein's list of health benefits continues to grow, consumers of all ages and demographics eagerly seek out protein-containing products. However, they do not differentiate between high-quality complete proteins like dairy and meat and lower-quality incomplete proteins from plant-based foods. Manufacturers also do not differentiate, often adding cheaper plant protein to products to make a high-protein claim without deference to quality. The task force agrees there is opportunity to educate consumers and health professionals about the various types and qualities of protein, highlighting dairy protein. In addition, consuming 25 to 30 grams of protein per meal seems to be optimal, which is not a difficult amount to achieve if dairy products are a part of every meal.

There was also discussion around the U.S. Food and Drug Administration (FDA) plans to change the measurement of protein quality to the Digestible Indispensable Amino Acid Score (DIASS) method, a more accurate method than the current one and one that would position dairy very strongly in the protein market.



The task force discussed how whey protein is now mainstream and the market continues to grow, particularly in the sports nutrition arena and in the quest for specific amino acids. Additionally, whey protein is being researched for clinical benefits such as its ability to help with blood sugar control in diabetics. The task force agrees that whey protein's sustainability story is very strong; it is a nutritional powerhouse developed from the by-product of cheese—the ultimate in recycling.

Groundswell of saturated fat research challenges traditional thinking.

Research continues to accumulate that saturated fat—eschewed for its contribution to heart disease—is not as bad as once thought. It is now clear that there are many types of saturated fats, and not all are harmful. In fact, some studies indicate dairy saturated fat is neutral or possibly even beneficial. This is a hard pill to swallow for traditional health professionals and older consumers who were taught that saturated fat irrevocably leads to heart disease. It was discussed that in order to change the paradigm and influence practitioners, medical schools need to be targeted for education. In addition, young authority figures with influence in the health care arena and in consumer circles need to endorse the changing view of saturated fat and heart disease.

Public health recommendations have not caught up to this new science and still stand at keeping saturated fat intake to less than 10 percent of calories. Experts on the task force updated the group on current research taking place around the world, particularly on cheese, showing that cheese has a place in a healthy diet. This new research is aimed at demonstrating a benefit of dairy fat, not just an absence of harmful effects. However, there was discussion about how the funding of this research could be a point of contention for many. When industry is the sponsoring agency, research is often seen as biased even though strict criteria are in place for funding and publishing.





Demographics play big role in product development and marketing.

There was considerable task force discussion on targeting population groups for product development and marketing, specifically millennials who are driving the marketplace. Millennials typically have an interest in cooking; avoid processed foods; and seek out simple, clean, locally grown, minimally processed foods. Naturally indulgent products like full-fat dips, cheese and butter are also popular among this group.

Formulating products for specific consumer segments will be key, as consumers from adolescents up through baby boomers want products “just for them.” The task force agrees it is important to know how to communicate with each of these segments. Traditional modes of education and marketing—such as through health professionals and print media—may not be reaching the desired population subsegments. Marketers need to embrace newer modes of messaging like social media.

Sugar is increasingly demonized.

Sugar is becoming the new dominant public health issue, blamed for various maladies from obesity to diabetes. In spite of lack of strong research, it is expected that the 2015 DGs will adopt the World Health Organization guidelines for sugar and lower the U.S. recommended intake to less than 10 percent of total calories (from its current 25 percent) for obesity prevention.

The revised FDA Nutrition Facts Panel is expected to be released in the next year, and the food label will likely include a row for added sugars. The industry will have two to three years after the release to implement the change. This will impact many dairy products such as flavored milk, yogurt and pudding. In addition, California low-fat and reduced-fat milk (1 percent and 2 percent) may need to declare added sugars due to the nonfat dry milk solids added to the milk.



Consumers will be confused about the terminology and may need to be informed how to distinguish between natural and added sugars. However, the task force members do not agree on whether this is a good strategy, as it draws attention to the natural sugars in milk and yogurt. Because there is no metabolic difference in natural versus added sugars, or solid versus liquid sugars, all types of sugars will be targeted.

ADDITIONAL AREAS ADDRESSED BY THE TASK FORCE

- ✦ The growing benefits of probiotics, prebiotics and the microbiome as the key to health and disease prevention as identified in current research.
- ✦ Consumer interest in fermentation, and how dairy products such as yogurt, kefir and some milk can thrive in this market.
- ✦ The continued controversy in the scientific community over the relationship between sodium and blood pressure.
- ✦ Consumer interest in elimination diets such as gluten-free, lactose-free, GMO-free, hormone-free and antibiotic-free and the unintended consequences that can result when whole categories of foods are eliminated.
- ✦ Raw milk's growing popularity for purported health benefits, versus the food safety risk it poses.

STRATEGIES FOR DAIRY COUNCIL OF CALIFORNIA AND THE DAIRY INDUSTRY

- * Communicate the DG's dairy-positive messages—that dairy foods are part of healthy dietary patterns, contribute many nutrients of concern in the U.S. diet and are associated with a lower risk of many chronic diseases.
- * Position dairy as an integral part of plant-based diets, providing nutrients that are difficult to get solely from plants.
- * Educate health professionals and consumers that some foods with natural or added sugars, like milk and yogurt, contribute a significant amount of nutrients.
- * Develop a simple message around protein quality and tailor to specific demographic groups (elderly, young, athletes).
- * Educate about the importance of consuming protein throughout the day—not just at the dinner meal—for optimal effects. Communicate that dairy foods are one of the best sources of high-quality protein.
- * Continue the industry's commitment to environmental stewardship that, to date, has resulted in improved production and processing practices and innovative use of by-products. Whey protein is a prime example.
- * Position dairy in the dialogue around fermented/cultured foods for their health benefits.
- * Target young health professionals through medical schools and other venues to change the saturated fat – heart disease paradigm.
- * Learn how to reach millennials and other subgroups with relevant and meaningful education and marketing messages.
- * Continue to educate consumers and health professionals about the unintended consequences of elimination diets ... such as calcium deficiency when dairy foods are avoided.
- * Disseminate recent research findings that show sodium intake is not closely associated with blood pressure and heart disease risk in certain subgroups. This is an opportunity to tailor public health recommendations to individuals, making recommendations meaningful and relevant to consumers.

TASK FORCE REPRESENTATIVES

California Dairy Research Foundation
Cargill, Inc.
Dairy and Food Communications, Inc.
Dairy and Food Culture Technologies
Davisco Foods International, Inc.
Foods for Health Institute
Global Dairy Platform
Hilmar Cheese Company
International Dairy Foods Association
KaiNutra, LLC, Nutrition and Food Ingredients
Land O'Lakes, Inc.
University of California at Davis, Food Science & Technology Department
University of Southern California, School of Pharmacy

DAIRY COUNCIL OF CALIFORNIA

Since 1919, Dairy Council of California has been an innovator in nutrition education. Dairy Council of California's mission is to educate consumers to make healthy eating choices, with milk as a cornerstone. It is committed to an inclusive food-grouping system, strategies that result in behavior change, accommodating personal choice and promoting the health benefits of milk.