Marrying TASTE & HEALTH

Exhibitors at the 2012 IFT Food Expo showcased offerings that demonstrated a new hierarchy for health, a trend toward rediscovering texture, and, of course, myriad tantalizing new tastes.

aste and health walked the Expo floor hand-in-hand in Las Vegas as the demand for more natural flavors and colors and naturally functional food ingredients remained center stage at the 2012 IFT Annual Meeting & Food Expo[®].

Innova Market Insights' Taste the Trend exhibit presented 10 important trends for 2012, led by "pure is the new natural." Innova reported that natural, no additives/preservatives, and organic are mainstream among new product introductions around the globe.

Natural colorants were a popular topic this year. According to a 2011 Nielsen survey, 92% of consumers in 10 counties are concerned about artificial colors, and 88% said they preferred natural ingredients.

A presentation titled "Formulating & Marketing for Health" delivered by Mintel experts during the course of the Annual Meeting & Food Expo confirmed that ethical/environmental claims are rising on new U.S. foods/drinks. Moreover, these claims are being tied to a product's formulation, not just the packaging, underscoring the fact that wellness extends to a company's environmental responsibility.

Claims that more clearly describe specific attributes of products (e.g., no additives, vitamin fortification) show stronger activity than the less specific label "all natural."

Mintel reported that consumers are demanding more kosher foods because they feel they are more wholesome, not necessarily for religious reasons. The Islamic Food and Nutrition Council of America's booth helped draw attention to the 1.6 billion Muslims worldwide seeking certified Halal products.

Where a product comes from is also influencing the consumer's perception of wellness, according to Mintel. Even more than natural, the origin, sourcing, and natural goodness of a product's ingredients are now important for maximizing consumer appeal.

With Deloitte's 2011 Food Safety Survey confirming that U.S. consumers believe that Canada has the most wholesome food supply in the world, Saskatoon berries from Saskatchewan-based companies (highlighted in the Saskatchewan Trade & Export Partnership booth) are well positioned in the market-place as are Canadian flours, pulses, grains, oilseeds, and ancient grains.

Flavor Invasions

According to Innova Market Insights' "Trends & Innovation" presentation, use of natural flavors in new products globally is at an all-time high; flavored by nature and naturally flavored are among the new claims.

Use of real, authentic, and ancestral flavors is also rising in new foods/beverages. Authentic flavors from specific regions are also trendy among marketers and product developers. Retro flavors and older flavors that evoke memories of a simpler time (e.g., quince) are getting renewed attention as well.

Innova Market Insights reported that fruit flavors are merging into new categories (e.g., cooking sauces, soups, coffee, pasta, and ready meals.) Virginia Dare's new natural *Macoun, Fuji, Jazz,* and *Honeycrisp* apple flavors are right on target for the hot new trend among chefs to create menu offerings featuring varietal ingredients. Virginia Dare's "gulp-able" apple tea was a big hit among Food Expo attendees.

Seasonal flavors were another new direction highlighted at the Food Expo. Wild Flavors had fun showcasing seasonally positioned products such as *Strawberry Melon Mojito* for summer and *Vanilla Cinnamon Ready-to-Drink Coffee* for autumn.

Jean Niel toyed with Mother Nature. Its 2012 Flavor Collection Seasonal Surprises line offers fruit flavors with slightly different flavor notes that emerge from growing fruit "out of season."

Maqui berry, dandelion, and mango are among the new superfruit flavors gaining in popularity worldwide, per Innova Market Insights. Cherry, calamansi (a small citrus fruit), and melon are among the emerging flavors worth tracking.

More unusual vegetable flavor options are moving onto the scene as well. The floral flavor trend is also blooming, especially in teas; Innova Market Insights reports they represent 31% of new global tea product introductions. Rose, hibiscus, jasmine, and chrysanthemum were the top floral flavors in 2011.





The addition of whey protein and buttermilk converts sorbet into a refreshing snack that is also a source of 5 g of protein. Photo courtesy of the U.S. Dairy Export Council

In another beverage-inspired offering, David Michael & Co. showcased flavored water ices featuring its *Adults Only*® flavors inspired by classic cocktails. And while green tea flavors have mostly been used in soft drinks, Innova Market Insights reports they are finding their way into sweet goods, snacks, and candies.

Savory meal flavors are also gaining in popularity; one example of such a product displayed by Innova Market Insights is *Bangkok Grilled Chicken Wing Pringles*. Peruvian cuisine was the latest ethnic food style drawing attention in Las Vegas, along with Indian, Thai, Vietnamese, and regional American cuisines.

Innova Market Insights reported that kokumi is now among the fast-est-emerging flavors. Kokumi (which is said to enhance certain flavors) has been dubbed the sixth sense, in contrast to umami, which has been termed the fifth element of taste.

Food Forms and Followings

Concepts that play off classic street foods from exotic destinations were popular at this year's Expo. French's Flavor Ingredient chefs turned a mundane chicken taco into a Spicy BBQ Chipotle Chicken and Avocado Slaw.

From almond crunch to rich smoothies, texture was another central food theme at the Food Expo. According to Technomic's 2011 Consumer Flavor Report, one-quarter of consumers are very likely to order

foods described as crispy or rich.

The U.S. Dairy Export Council identified "Late Day Crunch" as a significant snacking occasion opportunity and showcased prototypes such as high protein *Wellness Wafers* (with 5 g of protein) and *Cheesy Crunchers*.

Research presented by the Dairy Research Institute confirmed that those who skip breakfast tend to weigh more and have other unhealthy habits (e.g., consuming too many sugary drinks or high-calorie snacks).

The American Egg Board reported that in addition to protein, eggs are a naturally nutrient-dense food with 13 essential nutrients and just 70 calories for a large egg.

Non-carbonated was the word in beverages this year. Glanbia Nutritionals offered a cherry protein sports nutrition drink featuring a micronutrient premix with L-carnitine, L-tartrate, vitamins B-6 and B-12, and electrolytes to support muscle recovery and hydration. Fortitech showcased a cranstrawberry relaxation drink with GABA, L-theanine, and 5-HTP.

Healthy Does It

It was really the cutting-edge healthy ingredients that stole the show. According to the 2012 Virginia Dare Consumer Health Survey presented in Las Vegas, 86% of consumers believe that fiber contributes to curative or preventive health measures, 73% have that opinion of protein, 55% green tea, 45% resveratrol/

red wine, 40% probiotics, 31% low-glycemic foods, and 21% lutein.

With experts at last year's IFT meeting reporting that spreading protein intake out throughout the day helps to build muscle and manage weight, it's not surprising that, according to a 2012 consumer survey conducted by the U.S. Dairy Export Council, 55% of consumers are trying to up their intake of protein.

Product prototypes from the U.S. Dairy Export Council showcased dairy proteins in a wide variety of applications including *Citrus Crystal Ice* beverage with 5 g of protein and a savory Greekstyle yogurt with 22 g of protein.

Glanbia touted high-protein chocolate bites and a thicker Greek yogurt with fortified toppings made with probiotic-containing, reduced-sugar *Flaxola* granola. Main Street Ingredients featured a high-protein fortified coating for snack foods.

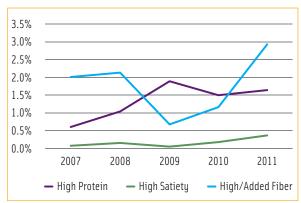
Solazyme Roquette Nutritionals' Almagine microalgae-based whole food ingredient was showcased in healthy chocolate chip cookies. A new range of protein ingredients based on beans, pulses, nuts, seeds, and grains were also on display.

Naturally functional ingredients including food concentrates, phytochemicals, and superfruit concentrates remain a very hot trend. Draco Natural Products featured its *Superfruit Phytoconcentrates* including *Jackfruit* and *Yumberry* as well as broccoli, artichoke, and brussels sprouts extracts and *Purple Pigment* extracts.

Wild Flavors *Vegeceuticals* are special taste-free vegetable extracts that can be easily incorporated into a wide array of foods/drinks, delivering nutrients including beta-carotene, naturally. »»

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Figure 1. Food and drink products making selected health claims as % of all (U.S.). From Mintel, 2012



Although Mintel reported that some of the U.S. "low-in" claims (i.e., low/no fat, cholesterol, and sugar) have dropped or have flattened for new product introductions, technologies and ingredients to help reduce fat, calories, sodium, and sugar dominated the IFT exhibit floor. Only low-calorie claims have shown an increase, according to Mintel.

While sodium reduction was a key topic of discussion in Las Vegas, research firm HealthFocus International points out that many consumers are very confused as to how to go about achieving a lower-sodium diet because they misjudge their sources of sodium.

According to Mintel's "Approaches to Weight Management" presentation, new products featuring protein, satiety, and fiber

claims are growing fast, with satiety in particular an emerging area for product claims (Figure 1).

With new guidelines for school lunches, the new LiveWell program at the National Restaurant Assn., and bans on sugary beverages pending, it's not surprising that kids' health was also an important theme.

Fortitech featured a fortified macaroni and cheese. Cargill offered a reduced-sugar, fat-free chocolate milk formulated with *Truvia* stevia-based sweetener. In a study by the Milk Processor Education Program (MILKPep) in elementary schools, student milk consumption dropped an average of 35% when flavored milks were not offered.

A variety of fun, healthy foods for kids were showcased at the Food Expo. Glanbia Nutritionals touted gluten-free whoopie pies; Fortitech offered fortified *Pop Rocks*.

Fortitech's *PowerCaps* were another novelty item on display. They release (from the bottlecap) active nutritional ingredients into bottled water or other beverages.

Seriously Functional

In a new Virginia Dare survey, eye care topped the list of health concerns consumers said were very important to them. The importance of a variety of other health issues to the consumers polled are mapped out in Figure 2.

The Wright Group's Tropical

Fruit Flavored Immunity Drink contains immune-boosting vitamins and antioxidants via a green tea extract; its Strawberry Flavored Energy Punch is formulated with L-taurine, glucuronolactone, and inositol, which the company described as "key vitamins used in the body's natural energy generation."

Artery health was a new topic of discussion this year. The endothelium, a fine layer of cells that lines blood vessel walls, has an intricate role in maintaining vascular tone and blood flow. Dysfunction is a serious contributor to atherosclerosis and cardiovascular risk. Omega-3, antioxidant vitamins, B vitamins (folic acid), l-arginine, flavonoids, and erythritol have been indicated in improving function.

The role of resistant starch and other carbohydrate systems in blood sugar management was a noteworthy topic at this year's Food Expo. Ingredients positioned to help product developers meet consumer expectations for clean labels represented another Food Expo trend. Ribus non-GMO rice ingredients allow manufacturers to cite "rice extract" and "rice concentrate" on their labels and deliver a clean label with a no allergen statement (including gluten). Scelta Mushrooms' mushroom concentrate is a salt reduction tool and a clean label alternative to MSG for products including meats and soups. Novozymes' Acrylaway® helps block acrylamide formation.

Of course, the preceding examples are but a small sampling of the offerings featured at the 2012 IFT Food Expo. But they certainly underscore the point that, all in all, when it comes to expectations for a future replete with high quality, tasty, healthy foods, for those who attended the Food Expo, it was a very good year.

Figure 2. Health concerns that are of personal preventative or curative concern to consumers polled by Virginia Dare or to members of their households. From Virginia Dare, 2012

Answer Options	Very Important	Important	Somewhat	Not Important
			Important	
Eye Care	53.2%	31.2%	9.3%	5.9%
Dental Care/Cavities	38.0%	36.7%	16.0%	5.9%
High Blood Pressure/Hypertension	38.0%	29.1%	15.2%	16.5%
Obesity	34.2%	27.8%	14.8%	20.3%
Cancer	32.1%	26.2%	22.8%	16.0%
Diabetes	29.1%	23.6%	20.7%	24.1%
Digestive Health	25.7%	35.4%	24.1%	11.8%
Osteoporosis/Bone Health	24.5%	29.1%	27.0%	16.9%
Skin/Dermatological Conditions	19.0%	26.2%	29.1%	21.5%
Atherosclerosis	13.9%	21.9%	28.3%	29.1%

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