



# bakingBUSINESS.com

Sosland Publishing's **Baking & Snack** and **Milling & Baking News**.

Login

Search   Advanced Search | Search Tips

- Home
- News
- Features
- Opinion
- Multimedia
- Resources
- Magazine

[Home](#) > [Features](#) > Formulations

- Features
- Operations
- Formulations
- Company Profiles
- Innovations
- International

## In pursuit of lifestyle nutrients

August 16, 2016 - by Donna Berry



Baked foods served to children can be fortified with the nutrients they need for proper brain and body development.

There's a tremendous shift occurring in the way we eat and drink, and we are in the thick of it, according to Melissa Abbott, vice-president of culinary insights, The Hartman Group. Consumers want more from their food and beverage choices, with wellness and deliciousness going hand-in-hand.

That "more" Ms. Abbott referred to suggests nutrients that go beyond basic nutrition. This is not to be confused with the more that comes from traditional food fortification, which continues to be of utmost importance in preventing dietary deficiencies that can lead to disease. Rather, this new more is all about lifestyle fortification. It's personalized nutritional enhancement for a specific life stage or health condition.

Lifestyle fortification presents bakers with an opportunity to differentiate their products in the crowded marketplace by giving them a boost of extra nutrition. This is either by adding isolated vitamins, minerals and micronutrients, or selecting whole food ingredients concentrated in the vital components

**ELIMINATE:**

- DATEM
- SSL
- CSL
- ADA

**IBIE BOOTH #4609**

**Bene Grain**  
Sprouted Whole Wheat Flour

**Superior flavor and performance in every batch.**

### Most Popular

Read	Shared	Comments
1	Priorities placed on U.S. snacks portfolio pays for Kellogg	
2	Flowers faces review by D.O.L.	
3	Flavor innovation going nuts	
4	Slideshow: New products from General Mills, Kellogg, Mondelez	
5	Shiver gives voice to powerful sense of urgency, confidence at Flowers	

( more )

Maintain high product quality with quick, thorough freezing.

See how a Praxair freezing system could benefit your operation.

**PRAXAIR**  
Making our planet more productive.

subscribe

today's consumers want for their bodies to function as best as possible.

### Why fortify?

Fortification refers to the act of supplementing foods with nutrients not previously present in the food or not naturally occurring at high enough levels to serve a functional purpose in the body. The term is often confused with enrichment, which describes the practice of adding back nutrients lost during processing.

The latter is what millers do with wheat flour marketed as enriched. They add back vitamins and iron depleted during refinement. Enriched flour is also fortified. Since 1988, the Food and Drug Administration has required that all flour marketed as enriched be supplemented with folic acid, a B vitamin not inherent to wheat. Millers also have the option to fortify enriched flour with calcium and magnesium.

“Fortification of foods helps millions of people meet their nutrient requirements annually,” said Hugh Welsh, president, DSM North America. “Before food fortification, deficiency diseases were prevalent in the US.

“Research consistently shows that people who avoid fortified foods are at increased risk of micronutrient deficiencies,” he said. “It is very difficult to eat a nutritionally dense diet, meaning one that provides all the required nutrients in recommended amounts and maintain a healthy body weight. When people restrict the amounts they consume to maintain a healthy body weight, then the goal of meeting essential nutrient requirements becomes even more difficult. This is even more challenging when on a weight-loss diet. Fortification increases the nutrient density of foods and makes it easier to obtain essential nutrients and maintain health.”

Historically, fortification was all about adding vitamins and minerals to everyday foods. For example, many ready-to-eat cereals, especially those targeted to children, are fortified with a dozen or more vitamins and minerals to assist with ensuring youngsters receive proper nutrition for adequate growth.

“Fortification with some basic vitamins and minerals, along with fiber, proteins and good fats will enhance the nutritive value of processed foods, including baked goods,” said Mike Petrushka, general manager, Prinova USA.

Things are changing, according to Alice Wilkinson, vice-president, nutritional innovation, Watson Inc. “Although we have seen some uptick in requests for fortification with additional nutrients like proteins and omega-3 fatty acids, the real area of interest lately has been in individualized

to the PRINT edition, or click below for free INSTANT ACCESS to valuable news and insights in the Digital Edition.



digital edition



take Baking&Snack with you



network with MBN



network with Baking&Snack

nutrition, which we refer to as 'nutrition for you,' as well as condition-specific premixes," she said.

She attributes this to improvements in obtaining information about our own bodies with the advent of reasonably priced gene sequencing and new science around our microbiomes. Still, the food industry is not quite at the point of providing individualized custom nutrition on demand, but it's not too far in the future.



Cereal bars lend themselves to whole food fortification via fruit-based fillings.

### Delivering on more

Today's shoppers understand the important role food choices play in their health yet still struggle to make changes to improve their food selections, according to results presented in the 2016 Shopping for Health Report, compiled by The Food Marketing Institute and Rodale. The study was based on an online survey of 1,404 Americans, which took place mid-November 2015.

According to the survey, two in three shoppers (66%) agreed that their food choices are an important factor affecting their health. Almost the same number (62%) viewed the food they eat as medicine for the body and, as such, tried to buy a mix of foods that will offer different health benefits.

Interestingly, three in four shoppers (73%) switched to a healthier version of at least one type of food this past year, with bread (26%) being one of the Top 3 foods, right after yogurt (32%) and milk (27%). What constitutes as healthier varies from shopper to shopper, but seeking out foods that contribute to health — an attribute directly correlated to ingredients — is important to a majority.

According to the survey, more than three-fourths (76%) of shoppers said maintaining or improving heart health is very or somewhat important. Not far behind was increased energy (73%), digestive health (70%), maintaining or improving mind health (70%), preventing cancer (69%), improving immunity (68%) and improving bone density

(61%). An impressive 54% of respondents said they seek out foods that can improve their skin and help them look younger.

All of this is possible with fortification

“The future of fortification is changing right now,” said Debi Rogers, PhD, director of baking services, AIB International. “FDA recently announced a huge shift not only in how the Nutrition Facts Panel appears on all products but also by taking a stern approach on how Daily Values (DVs) are indicated.”

For the many Americans looking to improve their health by consuming more vital nutrients, these label changes will better communicate the nutrient density of a food and will likely influence purchases.

“Baked goods can be a source of calcium, potassium and other minerals essential for a healthy lifestyle,” said Kim Powell, commercial development specialist, bakery, Innophos, Inc. “Protein, fiber, healthy fats and antioxidants are also increasingly being incorporated into baked goods and snack foods in the form of bars and other on-the-go products needed for busy lifestyles.

“Baked goods also lend themselves well to the addition of nuts and seeds for an added source of non-animal protein from whole ingredients,” she continued. “Ancient grain flours and the grains themselves are also gaining popularity in this market as non-allergen, gluten-free alternatives that provide added protein as well as baking functionality to the product.”



Exercise performance can be improved by curcumin, a powerful antioxidant and polyphenol.

### **Manufacturing strategies**

As consumers seek improved health benefits in everyday baked goods and snacks, manufacturers are turning toward functional ingredients, everything from probiotic cultures for digestive health to plant extracts with antioxidant properties.

“Fruits, vegetables, botanicals and spice extracts contain functional components that can provide various health benefits,” said Alice Hirschel, PhD, commercial development specialist, Innophos Nutrition Inc. “For example, curcumin is a powerful antioxidant and polyphenol that has been shown to enhance exercise performance, support joint health and promote healthy cell aging. Incorporation of such potent antioxidants and polyphenols into baked goods enhances health benefits for a variety of consumers.”

A number of recent product introductions exemplify the lifestyle fortification trend. Many are designed to deliver extra nutrition while eliminating ingredients often perceived as objectionable, such as allergens and artificial colors, flavors and preservatives.

That’s what you get with the new mini cookie line from Zemas Madhouse Foods, Highland Park, IL.

“They are your grandmother’s cookies with delicious nutritional upgrades,” said Jill Motew, founder and president. “We bake with ancient, gluten-free grains that add essential vitamins and minerals, as well as include super seeds, such as chia, flax and hemp. These provide healthful omega-3 fatty acids and protein.”

The company’s sweet potato spice cookies include vitamin-A packed Peruvian sweet potato flour, enabling a single serving (five mini cookies, about 28 g) to provide 20% of the DV for vitamin A.

Zemas is all about manufacturing gluten-free, ancient whole grain products that support a clean-eating lifestyle. The bakery uses minimally processed ingredients that can safely be part of diets that are healthy, limited and allergy-free, according to Ms. Motew. Zemas commits to being free of dairy, soy, rice, sesame, yeast, tree nuts, peanuts, sulfites, additives, trans fats, preservatives and refined sugar, while delivering on delicious nutrition.

Simple Mills, Chicago, is adding crackers to its line of gluten-free bakery products. “We primarily use almond flour,” said Katlin Smith, founder and CEO. “Almond flour has a glycemic index near zero, which minimizes blood sugar impact from eating baked goods. Almond flour also has three times the protein and 80% less carbs than rice flour, the most commonly used gluten-free flour.”

The new gluten-free crackers use a proprietary blend of almonds, sunflower seeds and flax seeds.

“This combination yields a higher vitamin and mineral content than many competitive products, as well as a lower carbohydrate count and glycemic index,” Ms. Smith said. “Most other crackers include ingredients like rice flour, potato

starch, xanthan gum, soy lecithin, ammonium bicarbonate and maltodextrin, with little or no nutritional value.”

Ozery Bakery, Vaughan, ON, developed Morning Rounds Fruit & Grain Breakfast Buns. The handheld, 60-g bun is designed as a better-for-you day-starter for dashboard diners. Made with a blend of traditional enriched unbleached wheat flour and whole grain wheat flour including the germ, the 160-Cal buns pack in protein, fiber, vitamins and minerals.

The Kellogg Company, Battle Creek, MI, relies on enriched flour, wheat bran and steel cut oats to produce its new frozen Eggo Oats & Berries Waffles. The waffle batter is further fortified with vitamins and minerals to deliver 25% DV for calcium and iron, along with 20% DV of many B vitamins and vitamin A, and 10% DV for folic acid.

Atkins Nutritionals Inc., Denver, wants to be more than a weight-loss brand and recently launched a line of low-carbohydrate high-protein bars targeted to fitness enthusiasts. The bars skip the use of flour altogether and rely on a combination of whey protein ingredients and soluble corn fiber to provide 20 g protein and 16 g fiber per 60-g bar.

As the short- and long-term health and wellness benefits of fiber and protein continue to be embraced, bakers will increasingly be fortifying with these nutrients. As we learn more about the role of less-known dietary compounds, such as those found in various plant extracts, we can expect to see more innovation in this area.

“Grain-based baked goods will continue to evolve to meet the changing demands of the consumer,” Ms. Powell concluded.

### Related Articles

[Delicious and nutritious?](#)

[Bean-based nutrition](#)

[Using barley, oats and corn as flours](#)

[Finding the right source of protein](#)

[Read more Formulations >](#)

#### Comment on this Article

We welcome your thoughtful comments. Please comply with our [Community rules](#).

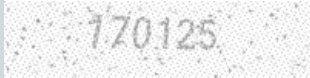
**Your Name:**

**Your Email Address:**

**Add Your Comment:**

The views expressed in the comments section of Baking Business News do not reflect those of Baking Business News or its parent company, Sosland Publishing Co., Kansas City, Mo. Concern regarding a specific comment may be registered with the Editor by clicking the Report Abuse link.

**Enter code as it is shown (required):**



**NEWS**

- [Business](#)
- [New Products](#)
- [Regulatory](#)
- [Trends](#)
- [Supplier Innovations](#)
- [International](#)
- [Purchasing](#)
- [Food Safety](#)
- [Financial Performance](#)
- [Health and Wellness](#)
- [People](#)
- [Food Service](#)
- [Archives](#)

**FEATURES**

- [Operations](#)
- [Formulations](#)
- [Company Profiles](#)
- [Innovations](#)
- [International](#)

**OPINION**

- [Morton I. Sosland](#)
- [Joshua Sosland](#)
- [Baking & Snack](#)

**MULTIMEDIA**

- [Slideshows](#)
- [Videos](#)

**RESOURCES**

- [Research Assistant](#)
- [Events](#)
- [Purchasing Seminar](#)
- [Webinars](#)
- [Classifieds](#)
- [Corporate Profiles](#)
- [White Papers](#)
- [Store](#)
- [Innovation Center](#)

**MAGAZINE**

- [Subscribe](#)
- [Digital Edition](#)
- [Newsletters](#)
- [Reprints](#)
- [Editorial Staff](#)
- [Advertising](#)

[Editorial Staff](#) | [Reprints](#) | [Classifieds](#) | [Contact Us](#)  
©2016 SOSLAND PUBLISHING CO. | [Privacy Policy](#) & [Terms of Use](#)



[bakemag.com](#) | [FoodBusinessNews.net](#) | [instorebuyer.com](#) | [MeatPoultry.com](#) | [PurchasingSeminar.com](#) | [SoslandEsource.com](#) | [World-Grain.com](#)