

Using their ‘gut instincts’

Health-conscious consumers spark growth of fiber, probiotics

RISING CONSUMER HEALTH CONSCIOUSNESS IN RECENT YEARS HAS BOOSTED the demand for functional beverages because of their potential to reduce the risk of health issues and boost overall wellness. In the midst of this growing awareness, dietary fiber has become a large part of this category for its potential to support digestion, immunity, coronary artery health, glucose metabolism, cholesterol reduction and blood lipid regulation, experts note. Along with fiber, ingredients such as prebiotics, probiotics and postbiotics are resonating in functional foods and beverages.

Holly McHugh, marketing associate at Niles, Ill.-based Imbibe, says demand for beverages with gut-friendly ingredients such as probiotics, prebiotics and other types of dietary fiber is growing.

“There’s been a lot of hype from researchers, media and lifestyle bloggers about the importance of a healthy microbiome for overall well-being,” she says. “This has generated substantial demand for products that aid digestion.”

Justin Green, director of scientific affairs at Embria Health Sciences, Ankeny, Iowa, says that according to the findings of HealthFocus International’s “2019 USA Trend Study: Shoppers’ Journey Toward Living & Eating Healthier,” 70 percent of U.S. shoppers indicate that digestive health is “extremely” or “very important” to them. Additionally, 32 percent report “always” or “usually” choose foods and beverages for improved digestion, the report found.

“Understandably, current conditions have sparked unprecedented interest in and awareness of the importance of immune support,” Green says. “Clearly, digestive and immune health are key concerns.”



▲ Crafted with raw kombucha, fresh pressed ginger, young coconut water and blue spirulina, GT's Kombucha Sacred Life is a limited-edition flavor that celebrates the brand's 25th anniversary. (Image courtesy of GT's Living Foods)

THE CASE FOR FIBER

With its importance commonly emphasized by general practitioners, consumers have a generally strong awareness about fiber and its benefits.

Kritika Mamtani, senior research analyst at Selbyville, Del.-based Global Market Insights (GMI), says consumers increasingly are aware of the benefits of fiber-rich diets, along with being concerned about the prevalence of nutritional deficiencies.

“The motivation for fiber intake varies with the age of consumers. The youth seek dietary fiber to ensure weight management, as there is significant awareness of its benefits in reducing obesity, such as regulating glycemic response and satiety,” she says. “Older consumers prefer dietary fiber for its digestive health benefits, such as improved gut health and normalized bowel movements.”

Marissa Barnes, marketing director for sweeteners and fibers

with Chicago-based Archer Daniels Midland (ADM), says the company’s “Fiber Occasions” research study found that not only do 22 percent of all eating and drinking occasions involve the desire for fiber, but also that 63 percent of consumers are trying to add dietary fiber to their diet.

However, Sue Butler, technical category manager for nutrition, bakery and confectionary at Hoffman Estates, Ill.-based Tate & Lyle, notes that most are not consuming the recommended daily amount of 25 grams of fiber per day.

“This raises the question: how can we in the food and beverage industry improve this?” she says.

Kirstie Canine-Adams, senior scientist for global nutrition at Tate & Lyle, says the company has developed a soluble fiber that human studies have demonstrated could promote the growth or activity of specific bacteria, while limiting the growth of less-desirable bacteria and increasing the production of short-chain fatty acids.

“PROMITOR Soluble Fibre has superior digestive tolerance, as it resists digestion in the stomach and small intestine, passing into the large intestine for fermentation by the microbiota,” she says.

ADDING TO THE MIX

Yet, fiber is just one of the digestive health warriors that formulators can utilize.

International Dehydrated Foods LLC (IDF), Springfield, Mo., expanded its CHiKPRO portfolio to include CHiKPRO Collagen Bone Broth, an ingredient that recently received a patent for collagen content and significant prebiotic effect in preclinical research trials. The trials demonstrated a significant prebiotic effect of increasing Lactobacillus, which poses the opportunity of reducing and/or eliminating the need for regular probiotic supplements, it adds.

ADM offers its Fibersol, a prebiotic dietary fiber that integrates into various beverage formulations. The company’s clinical studies have shown it could support healthy gut function and increase satiety hormones that signal feeling of fullness, Barnes says.

“Clinical studies have shown that Fibersol dietary fiber, which is highly soluble and can be used in a wide variety of beverage formulations, may support

GLOBAL PROBIOTICS MARKET VALUE

2018	2019-2026	2026
>\$2 BILLION	CAGR 7.3%	>\$3.5 BILLION

SOURCE: GLOBAL MARKET INSIGHTS. Published Date: Nov 2019.
Report ID: GMI418. Authors: Kunal Ahuja, Kritika Mamtani

▲ According to Global Market Insights (GMI), the global probiotics market exceeded \$2 billion globally in 2018 and is estimated to grow at a compound annual growth rate of approximately 7.3 percent between 2019 and 2026.

or maintain intestinal regularity, relieve occasional constipation, support gut health and nourish the intestinal flora essential for a healthy intestinal tract environment," she explains.

Beyond prebiotic fiber, ADM says that postbiotics are well-situated for growth in the beverage category. Postbiotics are bioactive compounds produced by food-grade micro-organisms during a fermentation process, and include microbial cells, cell constituents and metabolites, Embria's Green explains.

Green says the company has partnered with food and beverage-makers to develop a postbiotic called EpiCor, and along with Cargill's application expertise, Embria's food scientists are learning how to best formulate EpiCor into beverages.

"While relatively new to the beverage industry, EpiCor is a science-backed postbiotic 2 fermentate," he explains. "Over a dozen published studies, including eight human clinical trials, support EpiCor's health benefits related to digestive and immune support by beneficially modulating the gut microbiota."

Because EpiCor is not a live organism, it can offer manufacturers stability while boasting a three-year shelf life, Green explains. The postbiotic ingredient also is stable in high-heat processing and can handle varying pH levels, he adds.

ADM also produces a postbiotic called BPL1,

which contains bacteria strains that are no longer living.

"BPL1 can deliver many of the same metabolic health benefits as probiotics," Barnes says. "It also retains efficacy in harsh manufacturing conditions such as pasteurization."

GUT HEALTH IN ACTION

As beverage manufacturers look to incorporate digestive health ingredients into their formulations, experts note that a variety of beverage applications can support this delivery system. According to an April report from New York-based Beverage Marketing Corporation (BMC) titled "Probiotic Beverages in the U.S.," the ready-to-drink (RTD) probiotic beverage market in the United States has displayed fairly significant volume growth the past seven years, although deceleration in that has emerged as of late. The report highlighted the various brands and categories dominating the RTD probiotic beverage market, including drinkable yogurts, kefir, juice, water and kombucha.

One of the early delivery formats for probiotics is kombucha, which has seen its consumer base grow because of its various product attributes.

Hannah Crum, founder and president of Kombucha Brewers International, Beverly Hills,



▲ Bellway's natural fiber supplement is made with organic psyllium as the main source of fiber, a naturally occurring prebiotic that is non-fermentable, the company says. (Image courtesy of Bellway)

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▲ Launching nationwide at Walmart in April, PROBUCHA combines probiotics and kombucha in a lightly carbonated, shelf-stable probiotic drink that is naturally flavored with Meyer lemon and ginger, the company says. (Image courtesy of Neuro Brands LLC)

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Calif., says that, as a nutrient-dense food teeming with living probiotic organisms, healthy acids and trace amounts of nutrients in living form, kombucha is excellent for supporting digestion. In addition, kombucha has less than one-third of the sugar commonly found in soft drinks.

"Kombucha's popularity and sustained double-digit growth in both the natural and conventional channel is an indicator of consumer's desire for probiotic foods and offers an alternative to yogurt for those who may be dairy sensitive," she says.

GETTING IT "JUST RIGHT"

As beverage formulators increasingly work with digestive health ingredients, they must also calculate potential challenges and how to respond to them.

"Consumers told us they wanted something sweet, made with real fruit, but no sugar, stevia or artificial sweeteners. That wasn't easy to come up with a formula that meets all of these demands," says Max Dresse, chief executive officer of New York-based Bellway Fiber. "[Bellway's] natural fiber supplement is made with organic psyllium as the main source of fiber because studies have shown that it's the only naturally occurring prebiotic that is non-fermentable, along with real fruit."

Imbibe's McHugh says that some fiber-rich ingredients have offnotes that require masking by

flavoring with modulating properties or sweeteners. Brands planning on developing probiotic beverages should work with an ingredient supplier to understand different strains and determine how many probiotics should be incorporated to ensure efficacy after processing, she explains.

"Degradation of probiotic levels can occur while a product is in distribution and on-shelf, so it's important to perform shelf-life studies and measure the actual amount that will reach the consumer," McHugh says.

Getting formulation profiles will be important as the demand for immune-boosting solutions is likely to be in high demand.

"The importance of a healthy immune system is likely to gain a higher profile, bringing new consumers to the category," Embria's Green says. "However, consumers also will be seeking products backed by research."

According to ADM research, fiber already is well-positioned for this as 62 percent of consumers sought it out as a top ingredient, a 6 percent increase from 2013 to 2019.

"Consumers are increasingly interested in living a healthy lifestyle and view diet as a crucial component of overall health and wellness," Barnes says. "As such, beverages containing functional fiber are well-positioned to win the approval of wellness-focused consumers." **BI**

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