



GO WITH THE GUT:

Strategies and trends in digestive wellness

“Listening to your gut” has taken on new meaning for consumers around the world as they gain understanding of the connection between their gut health and overall well-being. Digestive health is now a top priority for nearly eight in 10 consumers globally, and more than half are now choosing products that help support their digestive health.¹

Interest in products with digestive health benefits is prompting big opportunities in food and beverage formulation, with habits now moving beyond just picking up a yogurt or kombucha. Consumers are now embracing a wide range of products that offer digestive health support, from bakery items to cereals and snacks.

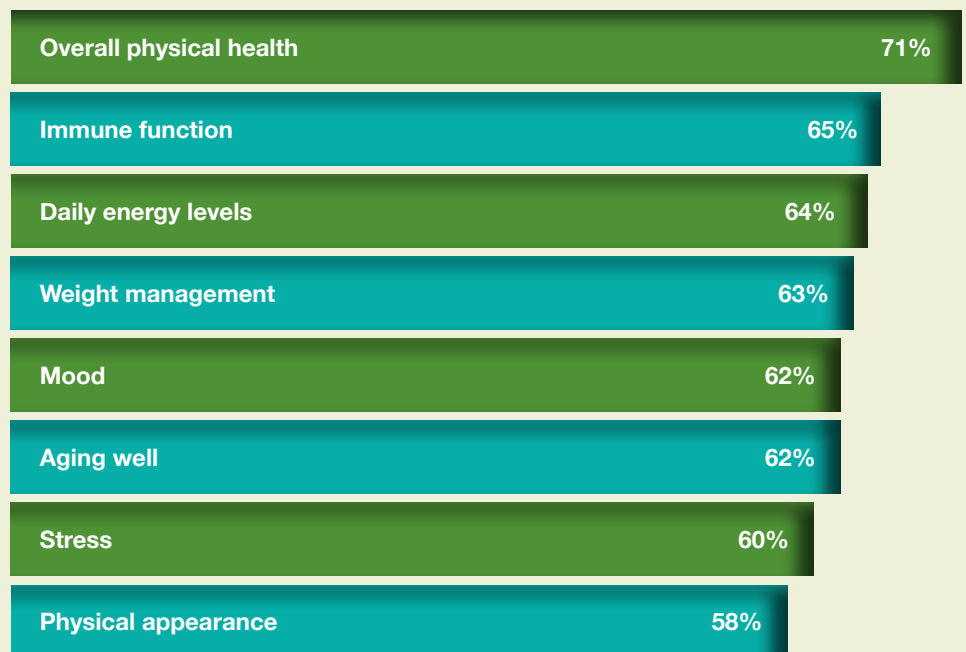
Digestive wellness is now the number-one trend in nutrition and health, as noted by *New Nutrition Business*’ “Ten Key Trends in Food, Nutrition and Health 2020.” Not surprisingly, the category is generating strong numbers, with overall global sales predicted to reach \$57 billion by 2026 on a 7% CAGR.²

Part of what’s driving this significant growth is that consumers are shifting from older dietary paradigms which support, for example, heart health, to those emphasizing digestive health as being at the center of overall health and wellness. This is compounded by the fact that digestive health concerns are fairly common at 20%, with 45% of global consumers noting high concern about digestive health.³

There is also a perceived connection between gut health and a variety of overall health attributes, ranging from physical health to appearance, according to a 2018 report on gut health from HealthFocus International.

How important is the role your digestive health plays in each of the following?

% Extremely/very important



Source: HealthFocus International. 2018 Gut Health Report.

Interestingly, consumers in North America and Europe are somewhat behind the curve in making the connection between digestion and general health. It is important for about two in three of these consumers, as compared to more than 90% in South Asia.⁴ As such, they are currently somewhat less likely to be choosing products for digestive health... but that attitude shifts when considering the digestive health of their children. Nearly 60% of consumers in North America, and 65% of consumers in Europe, say they are extremely or very likely to select such products, although this is still lower than consumers in Asia (75%-79%) and Latin America (81%).

While attitudes about digestive health do vary regionally, the overall trend seems to be gaining momentum in new products, in part because many of the digestive health ingredients are not only scientifically substantiated; they also provide a noticeable benefit in that people feel the difference from eating these products. “Feeling better inside” is a powerful motivator for consumers and a driver behind the success of many brands in the space, according to Julian Mellentin, editor of the *New Nutrition Business Ten Key Trends* report.

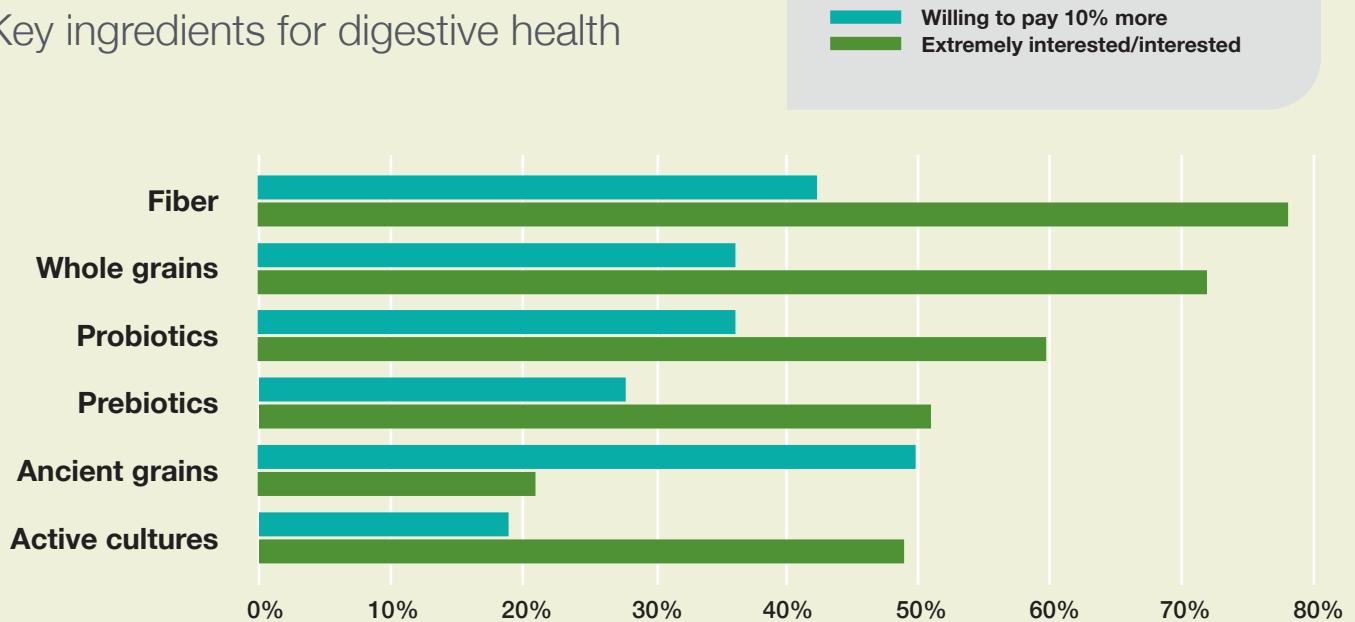
That noted, consumers are not necessarily looking for specific digestive health benefits. The large majority of these shoppers are choosing products that offer a holistic approach to maintain general health and wellness.⁵

The road to digestive wellness success

Bakery products, as well as cereals and snacks, are among the best growth opportunities in the digestive health segment. This is due in part to rising awareness of key ingredients such as fiber, whole grains, probiotics and prebiotics that are now suitable for use in an expanding array of product applications.

Fiber and whole grains are the darlings in the space, enjoying more than 70% awareness of their digestive health benefits, and close to 40% of consumers saying they are willing to pay a 10% premium for these products. That said, probiotics, and particularly prebiotics, are on the rise in new products, according to data from Innova Market Insights.

Key ingredients for digestive health



Source: HealthFocus International. 2018 Gut Health Report.

This is prompting a considerable number of new product launches with these ingredients.

Product launches with digestive benefits (2017-2019)

	<u>CAGR</u>
Prebiotics	+15%
Probiotics	+12%
High/source of fiber	+3%

Source: Innova Market Insights

While there are numerous categories and strategies for digestive wellness success, the following trends seem to be gaining the most traction in the baked goods, cereals and snacks categories.

TREND #1

Still going strong: gluten- and grain-free

Despite skepticism about the staying power of gluten-free products, foods and beverages with this positioning have remained fairly steady, coupled with the emergence of grain-free products. One reason for this, according to Mellentin, is that consumers are still, first and foremost, looking for products that don't contain ingredients they view as "bad" for their digestive system. The gluten-free trend has also benefited from consumer adoption of popular trending diets. Consumers now simply have a desire to explore new ways of eating that might be healthier, and this includes going gluten-free.⁶

The gluten-free claim has become so ubiquitous on foods and beverages that it no longer represents a huge growth opportunity. But grain-free products are now emerging as an increasingly popular product positioning, especially in cereals and snacking.⁷ A number of new plant-based and alternative flours are helping to make these products not only possible, but also improving their taste to better meet existing consumer expectations.

TREND #2

Fiber 2.0 (Prebiotics)

Fiber has seen renewed consumer interest as an important nutrient tied to digestive wellness, and high fiber is an increasingly common positioning on products containing insoluble bulking fibers from ingredients like soy or oats. But the new kids on the block are soluble fibers – also known as prebiotics – that consumers are just beginning to recognize for their critical role in helping maintain healthy microflora (or probiotics) in the digestive tract.

Prebiotics, the most common of which are inulins and fructooligosaccharides (FOS), have substantial scientific backing for their digestive health benefits. Naturally sourced chicory root fiber, which includes various fibers such as inulin, oligofructose, short-chain FOS and galactooligosaccharides (GOS), is one of the most well-studied.⁸ Cargill's Oliggo-Fiber® chicory root fiber, for example, has been shown to be an effective prebiotic-stimulating bifidobacteria at dosages of at least five grams a day.^{9,10}

These soluble fibers have also proven versatile in a variety of applications, especially baked items, cereals and bars, where they serve as natural sugar replacers and bulking agents, while helping to keep products fresh and shelf-stable.

TREND #3

Postbiotics

Postbiotics are a new, emerging health ingredient category that is starting to gain momentum in the immunity and gut health space. According to Dutch researcher Carrie A. M. Wegeh, postbiotics are bioactive compounds produced by food-grade microorganisms during a fermentation process. Postbiotics include microbial cells, cell constituents and metabolites. In a fermentation process, probiotics consume prebiotics, which then creates postbiotics, which are the metabolites. As a new alternative or complement to prebiotics and probiotics, postbiotics gives formulators a new, science-based option to add gut and immune claims to their products.

Cargill's EpiCor® fermentate is a clinically researched postbiotic which, when taken daily, may support immune health – and emerging science suggests it may support a healthy gut ecology. EpiCor is a one-of-a-kind ingredient comprised of a unique composition of metabolites.

As a postbiotic comprised of non-living metabolites, EpiCor is very heat-stable, making it suitable for baking and cooking. With a savory umami flavor and a 500mg daily efficacious dose, Cargill has successfully formulated EpiCor into delectable bars, chocolates, teas and more.

TREND #4

Add the Veggies

It may not be the most intuitive path, but plant-based ingredients are now playing expanded roles in products across the spectrum – and bakery items are no exception. New flours from plants like peas and lentils not

only bring a more sustainable, label-friendly profile to baked goods, they also add plenty of nutritional value and high protein content. As consumers become more receptive to protein from plant sources, these ingredients are becoming an attractive option in baked goods, offering mild taste and texture that is close to traditional products.

However, formulating plant proteins into baked goods can be challenging. Because some proteins are absorbed at different rates, this can increase the density of certain baked products. Some may make the dough stiff and difficult to stretch and sheet, which could cause production issues. Others have unique flavors that are difficult to mask.

Formulators are making strides by blending plant-based proteins into baked goods in the right order, which helps create finished products that meet consumer expectations, while also addressing production standards for dough machinability and water management.

While dairy products and fermented foods may still be the darlings of the digestive health space, baked goods are now showing emerging potential for digestive health. And the good news is that there are now plenty of ingredient options that can also help consumers feel good about indulging in a favorite bakery product that not only tastes great, but offers added nutritional value and sustainable sourcing. And that is a plus for everyone.

¹ HealthFocus International (HFI). 2018 Gut Health Report.

² Acumen Research and Consulting. "Digestive Health Products Market Size Worth Around U.S. \$57 Billion by 2026." <https://www.globenewswire.com/news-release/2019/03/05/1747951/0/en/Digestive-Health-Products-Market-Size-Worth-Around-US-57-billion-by-2026-Acumen-Research-and-Consulting.html>

³ Ibid. HFI.

⁴ Ibid. HFI.

⁵ Ibid.

⁶ Hartman Group. "Eating Gluten Free." 2018. <https://www.hartman-group.com/infographics/94708114/focus-on-eating-gluten-free>

⁷ Mellentin, J. New Nutrition Business. "Ten Key Trends in Food, Nutrition and Health 2020."

⁸ Wilson, B; Whelan, K. "Prebiotic Inulin-Type Fructans and Galacto-Oliggosaccharides: Definition, Specificity, Function and Application in Gastrointestinal Disorders." *Journal of Gastroenterology and Hepatology*. 2017 Mar;32 Suppl 1:64-68. Doi:10.1111/jgh.13700.

⁹ Kleeson, B; et al. "Jerusalem Artichoke and Chicory Root Inulin in Bakery Products Can Affect Faecal Microbiota of Healthy Volunteers." *British Journal of Nutrition*. 2007 Sep; 93(3):540-9. Epub 2007 Apr. 20.

¹⁰ Kolida, S; et al. "A Double-Blind Placebo-Controlled Study to Establish the Bifidogenic Dose of Inulin in Healthy Humans." *European Journal of Clinical Nutrition*. 2007 Oct; 61(10):1189-95. Epub 2007 Jan 31.