



GUT INSTINCT:

Understanding the new
digestive health consumer

Gut health is increasingly being linked to overall health.¹ So it's little wonder that gastrointestinal health has become a \$2 billion business, with double-digit growth for products that help to address these issues or promise to support healthy digestive function, according to data from Nutrition Business Journal.²

And the future outlook is bright, as research suggests potential links between gastrointestinal function and physiological benefits, while consumers show greater literacy in the ways they choose to address digestive health.

Emerging research is uncovering potential links between gastrointestinal health and immune function, mental focus and acuity, energy levels, and healthy weight.^{3,4,5,6} Certainly there is growing consumer awareness about the importance of digestive function.⁷ But while it takes more than just an apple a day for a healthy gut, there is a lot to understand, and consumer perceptions are mixed about how well some of these products work.

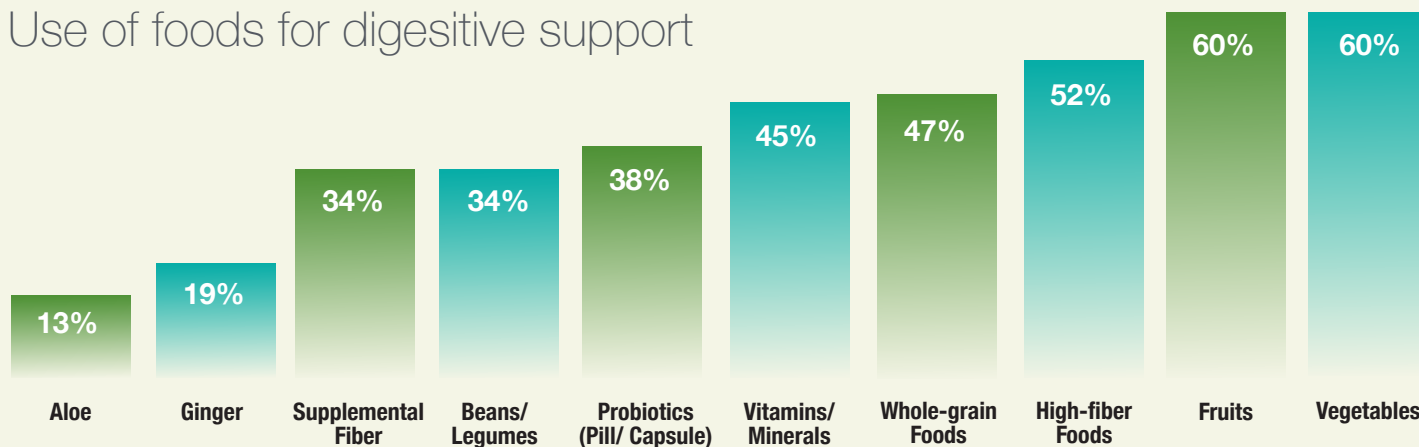
While there is plenty of opportunity for products offering support for digestive function, it is also a very complex landscape... and brands have a big challenge to communicate the evidence as well as clarify the complexities of the intestinal tract, including the role of probiotics, prebiotics, enzymes, bioactives, and whole grains.

The digestive health consumer

The key to doing this successfully is understanding how consumers are thinking about digestive health. So who is the digestive health consumer and what do they care about? In *New Nutrition Business' "10 Key Trends in Food, Nutrition and Health 2018,"* there are two key consumers of digestive wellness products: Women, who are three times more prone to suffer from digestive health problems, and people over age 40, as digestive health issues become more prevalent with age.⁸

According to a 2016 report, "The Mind of the Consumer: Digestive Health" with data compiled by the Natural Marketing Institute, more than one in four U.S. adults use products designed for digestive health support. Usage was fairly consistent across generations, with about one-third of product users indicating that they do so to manage issues such as occasional intestinal irregularity and heartburn.⁹ Consumers are also looking for products to help them address the issues that may result from an unhealthy diet and stress.¹⁰

Use of foods for digesitive support



Source: Natural Marketing Institute

Most people try to manage their symptoms first with the use of foods, in particular by eating more fiber from fruits and vegetables, beans, nuts, seeds and whole grains, wrote NMI's Steve French in the report.¹¹ As consumers become more educated about this area, they are also looking for foods higher in nutrients.

Opportunities and strategies

With food as one way to help manage digestive health, there are increasing opportunities for new, nutrient-dense products in the digestive wellness space. Dairy products and probiotics have been the dominant force, but as the category evolves, there are numerous ingredients and product formats that offer digestive health potential. According to Julian Mellentin, editor of *New Nutrition Business* and author of the 2018 "10 Key Trends" report, there are seven strategies for products touting digestive health. The top consumer trends are gluten-free products, which have grown based on a desire to avoid gluten in the diet; probiotics and fermented foods, which have capitalized on the science behind digestive function, as well as discussion of these issues in the media; and plant-based ingredients that offer desirable ingredients from fruit, fiber and probiotics.

Probiotics still offer strong potential in the space, but the approach is now more focused, according to Mellentin, who noted that instead of products that flood the digestive tract with good bacteria, manufacturers are now offering products that target particular health conditions with specific strains.

Fiber from plants is another key opportunity. One in four consumers believe they aren't getting enough fiber, and significant numbers say they are adding more fiber-rich foods to their daily diet.¹² According to the 2017 Food and Health Survey from IFIC, consumers also consider fiber to be one of the most healthy foods, second only to Vitamin D.¹³ Consumers are also gaining a stronger understanding of the difference between fibrous plants and probiotics, as research in this area continues to emerge.¹⁴

A growing number now understand that prebiotics, like fructooligosaccharides (FOS), including inulin, are found naturally in plants like chicory root fiber, Jerusalem artichoke, asparagus, onions, Belgian endive, leeks and garlic. Chicory root fiber, for example, is a naturally sourced prebiotic ingredient, which includes various fibers, such as inulin, short chain inulin (oligofructose), galactooligosaccharides (GOS) and FOS, all of which are well-studied prebiotics and now included in FDA's definition as dietary fibers.^{15, 16, 17, 18}

Prebiotic fibers and probiotics are an increasingly important duo in digestive health products as consumers gain an understanding of how prebiotic fibers from ingredients like chicory root fiber serve as food for the probiotics and that the two can work together to support overall microbiome balance. The fermentation of chicory root fiber by the gut microbiome leads to the production of short-chain fatty acids, which are linked to increased calcium absorption, demonstrating how prebiotic fibers support health.¹⁹

Whichever strategy a company pursues, digestive wellness is certainly a budding category for new product development as consumers seek a broader swath of digestive support products, ranging from snacks and bakery to side dishes.

References

- ¹ Keeping Your Gut in Check. Healthy Options to Stay on Track. NIH News in Health. <https://newsinhealth.nih.gov/2017/05/keeping-your-gut-check>
- ² Healthy Solutions Report, 2015. *Nutrition Business Journal*.
- ³ Singh, RK; Chang, HW; et al. Influence of Diet on the Gut Microbiome and Implications for Human Health. *J. Transl Med.*, 2017, Apr. 8;15(1):73. Doi: 10.1186/s12967-017-1175-y.
- ⁴ Martinez, KB; Pierr, JF; Chang, EB. The Gut Microbiota: The Gateway to Improved Metabolism. *Gastroenterol Clin North Am.* 2016 Dec.;45(4):601-614. Doi: 10.1016/j.gtc.2016.07.001
- ⁵ Healy, GR; Murphy, R; et al. Interindividual Variability in Gut Microbiota and Host Response to Dietary Interventions. *Nutr. Rev.* 2017 Dec. 1;75(12): 1059-1080. Doi 10.1093/nutrit/nux062.
- ⁶ Wiley, NC; Dinan, TC; Ross, RP; et al. The Microbiota-Gut Brain Axis as a Key Regulatory of Neural Function and the Stress Response: Implications for Human and Animal Health. *J Anim Sci.* 2017 Jul; 95(7):32253246. Doi; 10.2527/jas.2016.1256.
- ⁷ Digestive Health Tops Nutraceutical Agenda, Nutraceuticals World, Jan. 28, 2018. https://www.nutraceuticalsworld.com/issues/2018-03-01/view_breaking-news/digestive-health-tops-nutraceutical-agenda/
- ⁸ Mellentin, J. 10 Key Trends in Health, Nutrition and Food 2018. *New Nutrition Business*. <https://www.new-nutrition.com/>
- ⁹ French S. The Mind of the Consumer: Digestive Health. Natural Marketing Institute. November 2016. *NaturalProductsINSIDER*. <https://www.naturalproductsinsider.com/reports/2016/11/the-mind-of-the-consumer-digestive-health.aspx>
- ¹⁰ Johnson C. Growth of Digestive Health Market and Popular Ingredients. *NaturalProductsINSIDER*. May 2016. <https://www.naturalproductsinsider.com/articles/2016/05/growth-of-digestive-health-market-and-popular-ing.aspx>
- ¹¹ French, S. The Mind of the Consumer: Digestive Health. Natural Marketing Institute. November 2016. *NaturalProductsINSIDER*. <https://www.naturalproductsinsider.com/reports/2016/11/the-mind-of-the-consumer-digestive-health.aspx>
- ¹² French, S. The Mind of the Consumer: Digestive Health. Natural Marketing Institute. November 2016. *NaturalProductsINSIDER*. <https://www.naturalproductsinsider.com/reports/2016/11/the-mind-of-the-consumer-digestive-health.aspx>
- ¹³ 2017 Food and Health Survey. International Food Information Council Foundation. <http://www.foodinsight.org/2017-food-and-health-survey>
- ¹⁴ Martinez, RC; Bedani, R; et al. Scientific Evidence for Health Effects Attributed to the Consumption of Probiotics: An Update for Current Perspectives and Future Challenges. *Br J Nutr.* 2015 Dec 28;114(12):1993-2015. Doi: 10-1017/S0007114515003864.
- ¹⁵ Wilson, B; Whelan, K. Prebiotic Inulin-Type Fructans and Galactooligosaccharides: Definition, Specificity, Function and Application in Gastrointestinal Disorders, *J Gastroenterol Hepatol.* 2017 Mar;32 Suppl 1:64-68. Doi:10.1111/jgh.13700.
- ¹⁶ Liu, F; et al. Effect of Inulin-Type Fructans on Blood Lipid Profile and Glucose Level: a Systematic Review and Meta-Analysis of Randomized Controlled Trials. *Eur J Clin Nutr.* 2017 Jan;71(1);9-20. Doi:10.1038/ejcn.2016.156.
- ¹⁷ Liber, A; Szajewska, H. Effects of Inulin-Type Fructans on Appetite, Energy Intake and Body Weight in Children and Adults; Systematic Review of Randomized Controlled Trials. *Ann Nutr Metab.* 2013;63(102):42-54. Doi:10.1159/000350312. E-pub 2013 Jul 23.
- ¹⁸ Review of Scientific Evidence on the Physiological Effects of Certain Non-Digestible Carbohydrates. June 2018. Office of Nutrition and Food Labeling, Center for Food Safety and Applied Nutrition. Food and Drug Administration. U.S. Department of Health and Human Services. <https://www.fda.gov/ucm/groups/fdagov-public/@fdagov-foods-gen/documents/document/ucm610139.pdf>
- ¹⁹ Ibid. Review of Scientific Evidence on the Physiological Effects of Certain Non-Digestible Carbohydrates, June 2018.