

## What is the ITC 2020 Survey?

Ingredient Transparency Center recently concluded its third annual consumer survey, involving 2000 consumers from the US, UK and Germany. Our multi-category insights drive understanding of supplement purchasing behaviors and decisions with an intense focus on emerging and important categories, placed into context by comparing these against more established and broader categories like probiotics, omega-3s, vitamin D and protein.

The emerging categories explored include astaxanthin, coenzyme Q10, collagen, curcumin/turmeric, glucosamine, prebiotics and vitamin K.

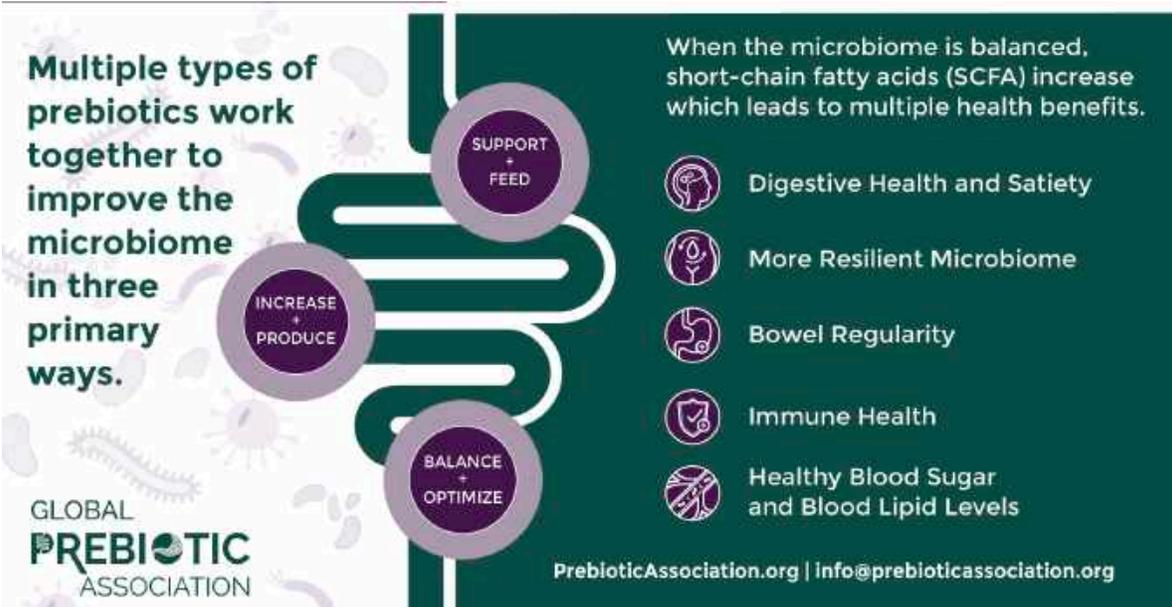
This is the first year that multiple countries have been included in our survey, allowing ITC to present comparisons across the US, UK and Germany in all these categories. We've also looked at year over year data in the US though some findings have been impacted by COVID which are noted.



## Digging into prebiotics:

The Global Prebiotics Association (GPA), , the non-profit trade association representing the worldwide prebiotics category, defines a prebiotic as **a nutritional product or ingredient selected to be utilized in the microbiome producing health benefits.**

There are several known mechanisms by which prebiotics act to confer health benefits, with new science allowing us to track what is happening even at receptor level within the microbiome. In simple terms, prebiotics act either chemically or physically, often but not always by interacting with gut microbes and generally serve to: support and feed, increase and produce and balance and optimize – all within the microbiome.

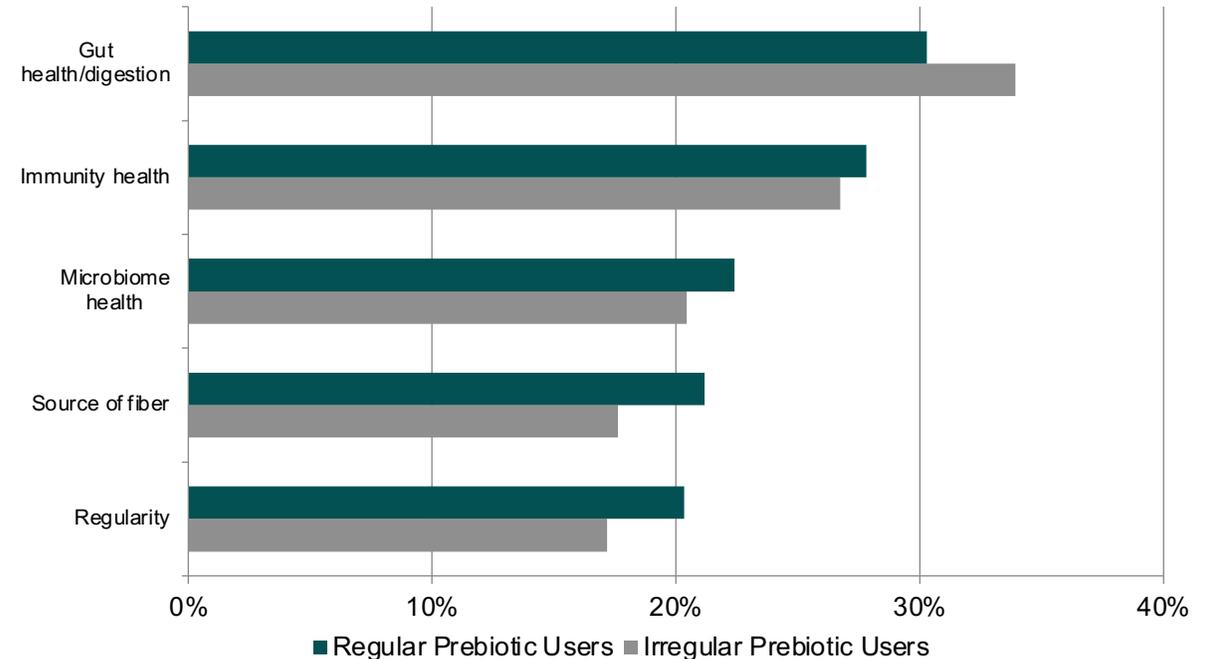


The prebiotic category has seen rapid growth over multiple years moving out of the shadow of probiotics for multiple health conditions and benefits: gut health and digestion; increasingly into overall immunity; and even more in areas such as mood and mental wellness as scientific research expands the prospects.

This acceleration and broadening of perceived and possible health benefits is clearly shown in the insights results as awareness is growing.

In the very early days of the prebiotic category, much of the emphasis was on fiber, with fiber frequently used instead of – or interchangeably with – the term ‘prebiotic’.

## TOP 5 BENEFITS



Consumers in all three countries surveyed (US, UK and Germany) are increasingly knowledgeable and discerning – illustrated by what they look for when buying prebiotic products.

This matches ITCs analysis of the marketplace, as product developers look to formulate with multiple prebiotic sources and new or emerging prebiotic ingredients like (XOS) xylo-oligosaccharides, pectin oligosaccharides, acacia fiber, arabinoxylan and beta-glucans , while the science base has broadened for well-documented ingredients such as resistant starch.

### What Prebiotic Consumers Look For

|  |     |
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| Look that it is labelled as a prebiotic    | 39% |
| Look for a probiotic/prebiotic combination | 31% |
| Look for fiber                             | 30% |

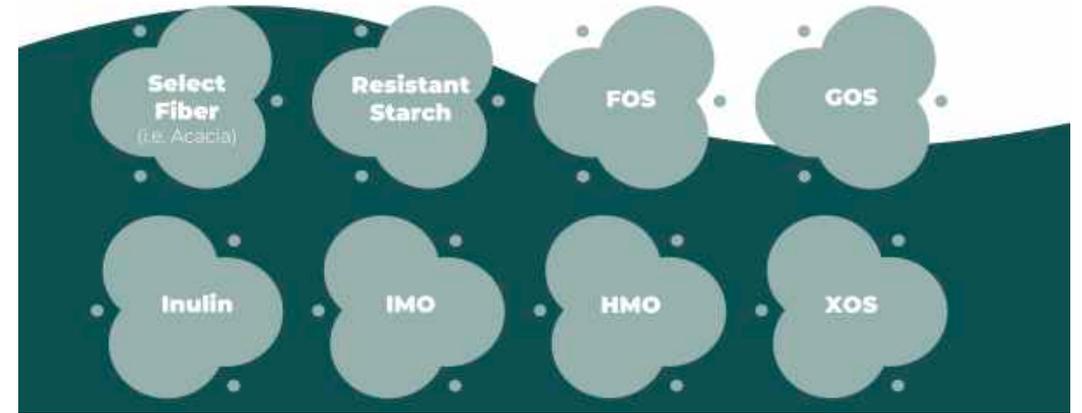
In the very early days of the prebiotic category, much of the emphasis was on fiber, with fiber frequently used instead of – or interchangeably with – the term ‘prebiotic’.

However, it is important to note that not all fibers are prebiotic – and there are many more food constituents shown to exhibit prebiotic activity than simple fiber sources.

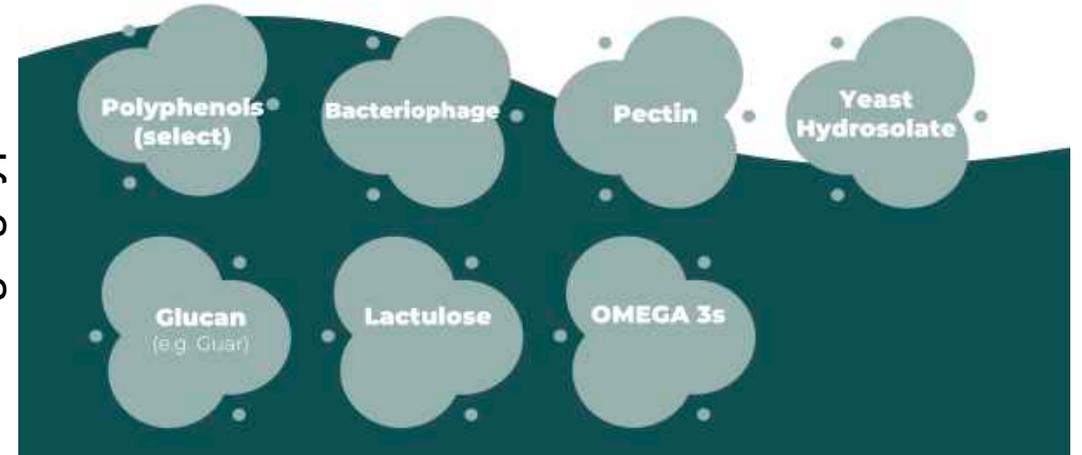
While it remains true that many prebiotics are fibers, other prebiotic ingredients such as selected polyphenols and bacteriophages have been shown to be effective at relatively low doses, meaning product developers can more effectively create products in multiple delivery formats, including traditional dietary supplements formats such as tablets and capsules as well as functional foods and beverages. These lower dosages can also help to overcome the negative consequences of higher dose ingredients, whether that be gastric distress or taste issues.

## PREBIOTIC TYPES

Most common



Emerging types



It should be noted, that while current ITC Insights work only surveys supplement consumers, rather than foods and beverage users, many of the findings do translate across all markets of functional food and drinks.

Overall awareness of prebiotics, in addition to what prebiotic consumers look for on product labels – such as a combination of a probiotic with a prebiotic (symbiotic) – clearly gives insights into broader consumer understanding and marketing tactics.

Emerging microbiome research is revealing roles for prebiotics in satiety, sleep, stress, inflammation and even new gut function mechanisms of action are coming to light.

This new research offers potential for product development across a variety of formats and for numerous conditions. Terms like the 'gut-brain axis' and 'skin microbiome' are quickly moving into the public realm, and with them nutrients like prebiotics that can make a difference.

To put market size in context, the current global human-use prebiotics market is worth approximately \$3.5bn, according to market estimates, with the US market worth around one third of this. These numbers include fiber-based prebiotics across food, beverages and supplements, of which chicory root-sourced inulin remains the dominant prebiotic and major suppliers like Beneo, Sensus and Galam are all in the midst of output-boosting investments to meet rising demand, including for organic inulin.

The above numbers also include established and emerging ingredients such as alpha-amylase resistant starch, psyllium and other fiber/inulin positioned food-type offerings like fructo-oligosaccharides (FOS), galacto-oligosaccharides (GOS), human milk oligosaccharide (HMOs), AXOS, chito-oligosaccharides, neoagaro-oligosaccharides, polyphenols and others, for uses in foods, beverages and supplements.

While conversations around fiber remain important in the wider context, it is important to note that a fiber-based, food-centric, market positioning of prebiotic ingredients is increasingly giving way to the use of more specific and specialist terms, in addition to greater use of the term prebiotic itself, and growing conversations around microbiome modulation.

Recent developments in life-stage nutrition have also seen prebiotics become increasingly important in infant and toddler nutrition, as well as in product development for active and aging populations.

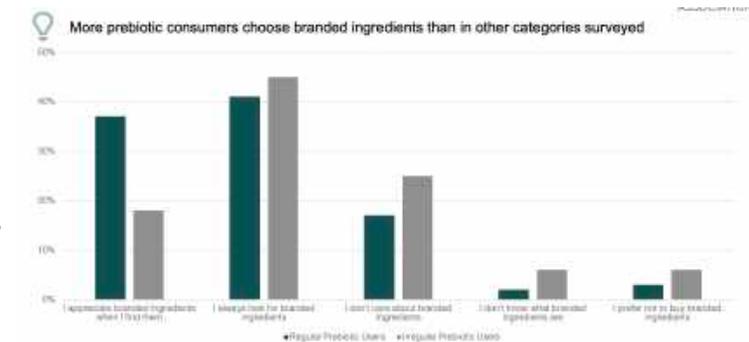
## A growing value proposition

Across the natural products industry, core consumer 'values' drive much of their behavior and prebiotics are a perfect example – they can provide a food-based clean label functional or even multi-functional component such as 'gut health' along with moderate sweetening. Prebiotics also benefit from a gluten-free proposition, and can be a substitute for yeast.

Compared to other categories monitored by ITC Insights, prebiotic users also over-index on monthly spend and are more interested in sustainable solutions and offerings from their brands. Prebiotic users also pay more attention to labels than most other consumers, seeking signals of trust and identifiers of transparency.

In particular, the high interest of prebiotic users in sustainable solutions and transparent supply chains can be of benefit to brands and suppliers who may be able to use story-telling around strong supply chains and sustainable sources, given for example that many prebiotics are developed out of agricultural by-product streams.

Lastly, branded ingredients also impact the buying behaviors of these supplement consumers, with a strong recognition and appreciation of branded ingredients in the prebiotic space.



Future drivers of the category are expected to include broad education, learned from categories such as omega-3's, probiotics and even to a certain extent, vitamin D. Meanwhile, the continued rise of synbiotics and holistic 'microbiome solutions' and 'personalization' all support ongoing category potential.