GLOBAL PREBIOTIC ASSOCIATION Live Webinar

Understanding the Prebiotic Market – Scope, Trends & Opportunities

WELCOME

Featuring:

Len Monheit
Executive Director, GPA

Elizabeth Thundow
Nutrition & Supplement Ingredients Market Expert

2

GLOBAL PREBIOTIC ASSOCIATION

About GPA

The Global Prebiotic Association is comprised of scientifically-validated prebiotic ingredient manufacturers, brand holders, retailers and service companies. The non-profit trade association is focused on the education and awareness building of prebiotics.

The GPA Mission is to champion the prebiotics category by increasing public awareness and understanding of the science supporting both well-known and newfound benefits, and create needed transparency about prebiotics and their interaction with the microbiome.

Additional Resources: PrebioticAssociation.org

/PrebioticAssociation @PrebioticAssoc GlobalPrebioticAssociation

3

MEMBERS

GLOBAL PREBIOTIC ASSOCIATION

AIDP, Deerland Probiotics & Enzymes, CPKelco, UniverSolutions, Intrinsic, Clasado biosciences, ADM, Fresenius Kabi caring for life, Advanced Biotics, Iprona, Olipop, Anderson Advanced Ingredients, nexira, Uplift Good • Mood • Food, atlantia, muniq, PhenoBiome, Firmenich, Vitalus, Prenexus Health, Kyowa, Carbiotix, Cometbio, Microba, nutrasource, Pathway International, Synbiotic Health the microbiome experts, Anagenix, solnul, supergut, KiwiEnzyme.com Actinidin Extracts

4

MARK YOUR CALENDARS!

GLOBAL PREBIOTICS WEEK NOV 6 - 10

Powering the Microbiome

Activities happening online, participate by using #globalprebioticsweek #poweringthemicrobiome

5

Housekeeping

Chat

Keep an eye on the chat box for important information and you can use it to send messages to the hosts for assistance

Q & A

Use the Q&A tab to submit questions for the speakers. We will do our best to answer them all live and follow up on any others when possible

On Demand

This webinar is being recorded and will be available On Demand. Look out for an email with further details after the webinar closes

6

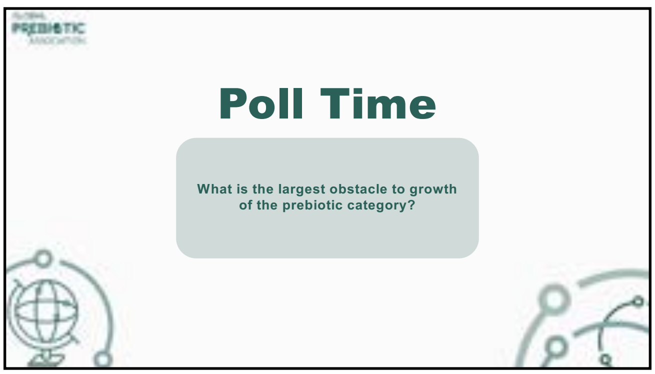
Poll Time

Which health concerns, that prebiotics can potentially impact, have the most market potential?

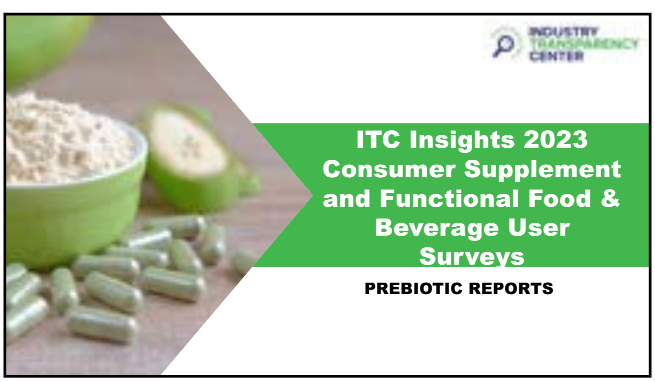
7


Prebiotics – Scope, Trends & Opportunities
Featuring:
Elizabeth Thundow
Nutrition & Supplement Ingredients Market Expert

8


Poll Time
What is the largest obstacle to growth of the prebiotic category?

9


INDUSTRY TRANSPARENCY CENTER
ITC Insights 2023 Consumer Supplement and Functional Food & Beverage User Surveys
PREBIOTIC REPORTS

10

2023 CONSUMER SURVEYS

INDUSTRY TRANSPARENCY CENTER

- Fielded March 2023 (Supplements) and June 2023 (Functional Foods & Beverages)
  - Written & analyzed by Industry Transparency Center
- Supplements - 3,500 consumers
  - 1,000 US, 500 UK, 500 Germany, 500 Italy, 500 South Korea, 500 Australia
- Functional Foods & Beverages
  - 1,000 US, 1,000 UK
- Disqualified poor quality responses and respondents who did not fit survey consumer profile parameters

The information in this presentation is for the recipient only and should not be shared in its entirety. You may share components of this survey data with attribution

11

PREBIOTIC USERS GENERALLY SKEW YOUNGER

12

WHO USES PREBIOTICS?

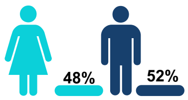
Key Insights:

- While overall respondents were fairly split between male and female, UK respondents notably skewed male while Italian, South Korean, and Australian respondents notably skewed female.
- There were notably fewer respondents aged 55+ in all countries; the US and Australia were the only countries where respondents aged 18-34 outnumbered respondents aged 35-54.

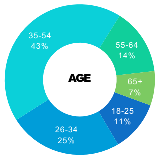
	All Prebiotic Users		US Prebiotic Users		UK Prebiotic Users		DE Prebiotic Users		IT Prebiotic Users		KR Prebiotic Users		AU Prebiotic Users	
	n=1711		n=499		n=213		n=196		n=290		n=295		n=218	
Female	n=863	50%	n=249	50%	n=91	43%	n=96	49%	n=155	53%	n=157	53%	n=115	53%
Male	n=845	49%	n=249	50%	n=122	57%	n=99	51%	n=134	46%	n=138	47%	n=103	47%
Non-binary/prefer to self-describe	n=3	<1%	n=1	<1%	n=0	n/a	n=1	<1%	n=1	<1%	n=0	n/a	n=0	n/a
18-34	n=663	39%	n=212	42%	n=78	37%	n=76	39%	n=93	32%	n=101	34%	n=103	47%
35--54	n=719	42%	n=209	42%	n=87	41%	n=91	46%	n=130	45%	n=124	42%	n=78	36%
55+	n=329	19%	n=78	16%	n=48	23%	n=29	15%	n=67	23%	n=70	24%	n=37	17%

13

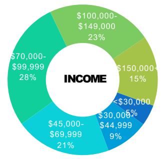
FF&B: WHO USES PREBIOTICS?



Even mix of men and women.
Female n=602
Male n=657



We surveyed a well-diversified set of age brackets, in this survey, across all countries/markets.



A diverse balance of all income groups was achieved, via individualized country quotas.

Note: All Prebiotic users n=1261.

ITC 2023 Consumer Prebiotic Survey 14

14

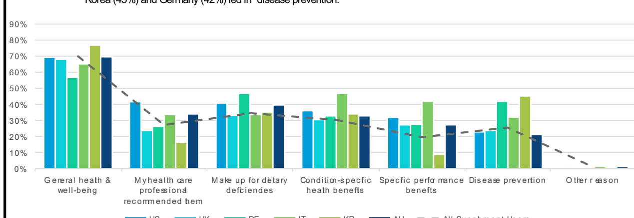
FROM STRESS AND ANXIETY TO GENERAL WELLBEING, CONSUMERS HAVE A VARIETY OF REASONS TO TAKE SUPPLEMENTS

15

WHY DO PREBIOTIC USERS TAKE SUPPLEMENTS?

Key Insights:

- "General health and well-being" was the dominant response in all countries, most of all in South Korea (77%). Interestingly, South Korea was the least likely to cite "my health care professional recommended them" (16%) as a reason for supplement use.
- Italy led in "condition-specific health benefits" (47%) and "specific performance benefits" (42%) as given reasons, while South Korea (45%) and Germany (42%) led in "disease prevention."



Note: Prebiotic US N=499, UK n=213, DE n=196, IT n=290, KR n=295, AU n=218, all Supplement users n=3677. Question GS1: "Why do you take dietary supplements?"

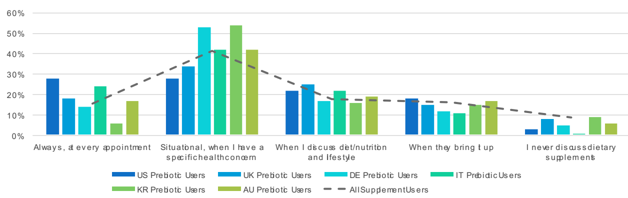
ITC 2023 Consumer Prebiotic Survey 16

16

DO THEY DISCUSS SUPPLEMENTS WITH A HEALTH CARE PROFESSIONAL?

Key Insights:

- US prebiotic users are equally likely (28%) to always or situationally discuss supplement use with a health care professional, with users in this category over-indexing significantly compared to all supplement users.
- South Korean prebiotic users are least likely to always discuss supplement use (6%), and most likely to situationally (54%) and never (9%) discuss it with a health care professional.

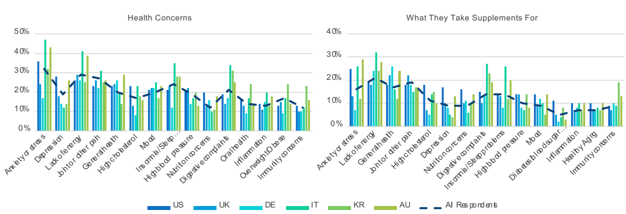


Note: Prebiotic users US N=499, UK n=213, DE n=196, It n=290, KR n=295, AU n=218, all supplement users n=3677. Question GS6: "Under which circumstances would you discuss your dietary supplements with your health care professional?"

HEALTH CONCERNS & WHAT THEY TAKE SUPPLEMENTS FOR

Key Insight:

- We see consistent, significant unmet need when we examine those with particular concerns and then what users actually take supplements for.
- Having anxiety and stress as a concern is highest in Italy followed by Australia, both well over 40%, yet Australia sits at 29% and Italy at 27% for usage. This type of delta might indicate co-formulation opportunities.

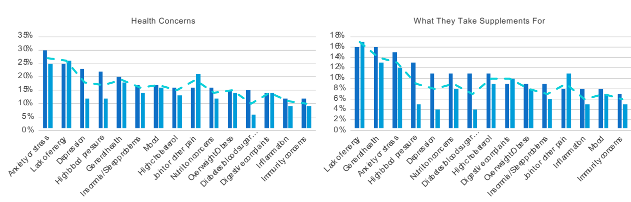


Note: Left Chart: Prebiotic users US n=499, UK n=213, DE n=196, IT n=290, KR n=295, AU n=218, all supplement users n=3677. Question D4: "Which of the following health conditions or concerns currently impact or impacted you within the past year?" Top 15 shown.
Right Chart: Prebiotic users US n=450, UK n=181, DE n=165, IT n=277, KR n=271, AU n=197, all respondents n=3249. Question D5: "Did you take supplements for any of the following reasons over the past year?" Only asked of respondents indicating they had the health concern. Top 15 shown.

FF&B: HEALTH CONCERNS & WHAT THEY TAKE FUNCTIONAL FOODS & BEVERAGES FOR

Key Insights:

- US prebiotic users noticeably over-indexed for reporting mental health issues such as anxiety or stress and depression.
- The number of respondents consuming functional foods and/or beverages for specific health reasons is noticeably lower than the number of respondents reporting those issues also indicating the level of unmet need.



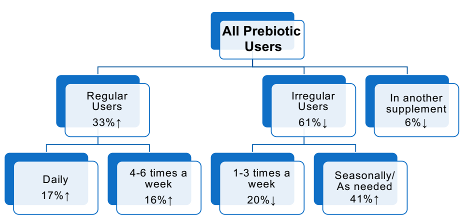
Note: Left Chart: Prebiotic Users: US n=651, UK n=610, All Prebiotic Users n=1261. Question: "Which of the following health conditions or concerns currently impact or impacted you within the past year?" Top 15 shown.
Right Chart: Prebiotic Users: US n=651, UK n=610, All Prebiotic Users n=1261. Question: "Did you consume functional foods or beverages for any of the following reasons over the past year?" Top 15 shown.

A LOOK AT PREBIOTIC FAMILIARITY AND USAGE PATTERNS

20

PREBIOTIC SUPPLEMENT USAGE

Key Insights:
- 33% of prebiotic users are regular users which is up 3% over 2022 data. Likewise, irregular usage is slightly down. These are trending in the right direction.
- Converting irregular users to regular users is one of the biggest market opportunities.

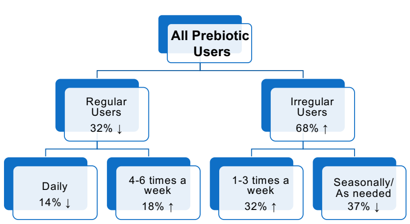


Note: Prebiotic users n=1711. Question: "Which of the following best describes how frequently you are taking prebiotics?"

21

PREBIOTIC FUNCTIONAL FOOD & BEVERAGE CONSUMPTION

Key Insight:
- Usage has seen a shift away from regular daily use and towards irregular usage 1-3 times per week.



Note: Prebiotic Users n=1261. Question: "Which of the following best describes how frequently you are consuming the following functional ingredients as part of your regular diet (in foods or beverages, not as dietary supplements)?" Responses for prebiotics.

22

SUPPLEMENT USAGE

Key Insights:

- More prebiotic users are seasonal/"as needed" users than are regular (4+ times per week) users (41% vs. 33%).

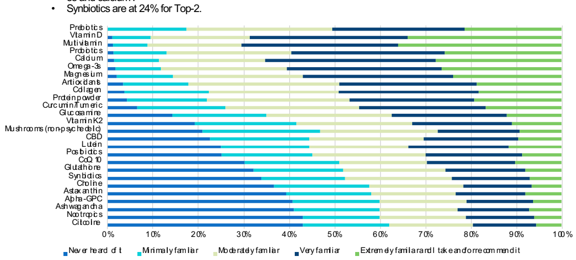
	All Usage by Those familiar	Daily	4-6x/week	1-3x/week	Seasonally/ As Needed	It's in another supplement I take	Never
Prebiotics	100%	17%	16%	20%	41%	6%	0%
Multivitamin	96%	34%	19%	20%	19%	4%	3%
Probiotics	96%	20%	17%	22%	31%	6%	5%
Vitamin D	94%	27%	16%	23%	21%	7%	7%
Magnesium	91%	22%	16%	23%	24%	6%	10%
Antioxidants	89%	17%	17%	20%	29%	6%	12%
Omega-3s	89%	24%	16%	21%	23%	5%	10%
Calcium	88%	20%	16%	21%	23%	8%	11%
Postbiotics	80%	13%	15%	19%	29%	4%	19%
Protein Powder	78%	14%	16%	23%	22%	3%	23%
Nootropics	77%	10%	19%	20%	23%	5%	23%
Vitamin K2	77%	13%	15%	18%	24%	7%	23%
Alpha-GPC	76%	10%	19%	20%	22%	5%	23%
Lutein	76%	14%	18%	18%	21%	5%	23%
Citicoline	76%	13%	18%	19%	22%	4%	24%
Curcumin/Turmeric	76%	13%	14%	19%	26%	4%	24%
Synbiotics	76%	11%	18%	19%	25%	3%	24%
CoQ10	74%	13%	15%	19%	22%	5%	26%
Collagen	74%	14%	13%	18%	24%	5%	26%
Astaxanthin	73%	12%	17%	20%	21%	3%	27%
Glutathione	73%	12%	17%	19%	22%	3%	27%
Ashwagandha	73%	11%	19%	18%	20%	5%	27%
Choline	72%	9%	18%	19%	21%	5%	28%
Glucosamine	71%	13%	14%	15%	24%	5%	29%
CBD	66%	10%	15%	17%	21%	3%	34%
Mushrooms (non-psychedelic)	63%	9%	14%	16%	22%	2%	37%

Note: n varies by supplement. Only those familiar with the ingredient were asked about usage. Question GI3: "Which of the following best describes how frequently you are taking the following supplements?"

FAMILIARITY: BREAKDOWN

Key Insights:

- Prebiotic familiarity has a normal split among prebiotic users with 22% noting extremely familiar and with a Top-2 of 51%.
- The more ubiquitous categories enjoyed higher levels at extremely and Top-2 such as vitamin D, multivitamins (over 70%), omega-3s and calcium .
- Synbiotics are at 24% for Top-2.

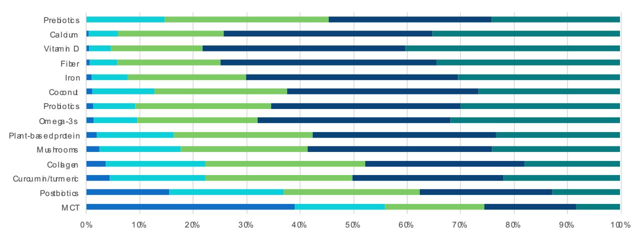


Note: All Prebiotic users n=1711. Question GI1: "How familiar would you consider yourself regarding the use of these supplements?"

FF&B: FAMILIARITY: BREAKDOWN

Key Insights:

- Vitamin D, calcium and fiber receive the highest response rates for extremely familiar.
- While postbiotics and MCT have the highest response rates for never heard of, MCT has more than double the response rate for never heard of then postbiotics (39% compared to 16%).



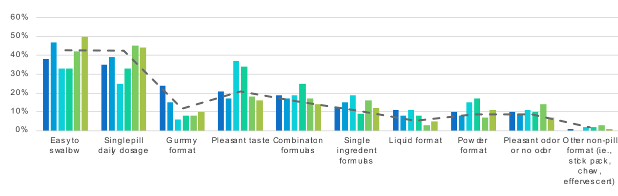
Note: All Prebiotic Users n=1261. Question: "How familiar would you consider yourself regarding these functional ingredients in foods and/or beverages?"

A LOOK AT CHARACTERISTICS AND PURCHASE CRITERIA

26

CHARACTERISTICS INFLUENCING PURCHASE: COUNTRY

Key Insights:
- The UK, South Korea, and Australia were most concerned with ease of swallowing, single pill daily dosage, and pleasant taste.
- Italy and Germany cared more about pleasant taste than any other respondents.
- The US cared more about having an available gummy format than any other country.

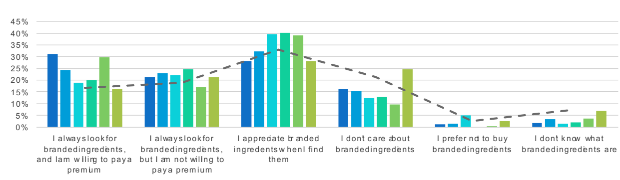


Note: Total supplement users n=3677, US n=499, UK n=213, DE n=196, IT n=290, KR n=295, AU n=218. Question GS4: "Which are the most important purchase considerations for you when choosing which supplement product(s) to purchase?"

27

PREBIOTIC USERS BRANDED INGREDIENTS: COUNTRY

Key Insights:
- US, UK, & South Korean had a strong response for 'always looked for branded ingredients and willing to pay a premium', highly over-indexing compared to all supplement users while German, Italian, and Australian respondents did not.
- Australian respondents were most likely to say they didn't care about branded ingredients (25%).
- Prebiotic users generally were more likely to know what branded ingredients were than general supplement users.



Note: Prebiotic users US n=291, UK n=143, DE n=121, IT n=194, KR n=187, AU n=159, all supplement users n=2417. Question BI2: "When deciding which supplements to purchase, how important is the inclusion of branded or proprietary ingredients?"

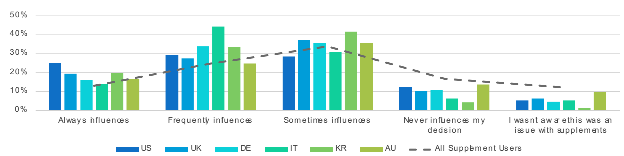
28

IS SUSTAINABILITY IMPORTANT?

29

SUSTAINABILITY: COUNTRY

Key Insights:
- Prebiotic users were more likely than general supplement users to be influenced by sustainability of ingredients.
- US respondents were most likely to say sustainability always influences purchasing decisions (25%), while Italian respondents were most likely to say it frequently does so (44%).
- South Korean users were the most likely to say it influenced them to some degree (94%).

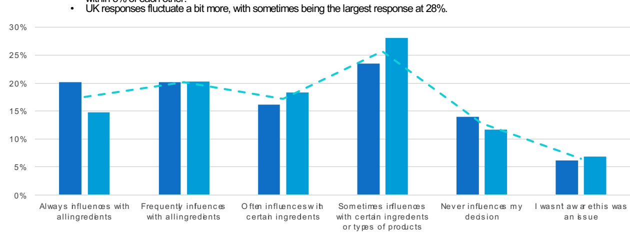


Note: Prebiotic Users US n=499, UK n=213, DE n=196, IT n=290, KR n=295, AU n=218, all supplement users n=3677. Question V1: "When deciding which supplements to purchase, to what degree does the sustainability/environmental impact of a supplement ingredient influence your purchasing decision?"

30

FF&B: SUSTAINABILITY

Key Insights:
- US responses are relatively close across the board, with all but never influences and not being aware of an issue being within 5% of each other.
- UK responses fluctuate a bit more, with sometimes being the largest response at 28%.



Note: Prebiotic Users: US n=651, UK n=610, All Prebiotic Users n=1261. Question: "Does the sustainability/environmental impact of the nutritional ingredients in your food influence your purchase decisions?"

31

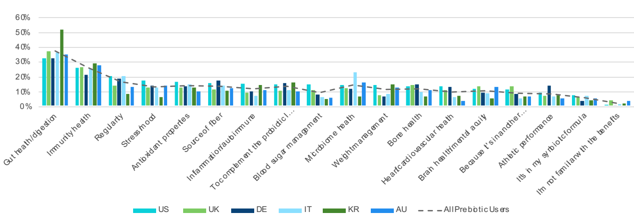
PREBIOTICS DEEP DIVE

32

WHY SUPPLEMENT USERS TAKE PREBIOTICS: COUNTRY

Key Insights:

- South Korean respondents were most likely to use take prebiotics for gut health (52%), which was the top response in all countries.
- Italian prebiotic users were more likely than any other groups to take prebiotics for microbiome health (23%).
- Athletic performance resonated in Germany; that was also the top country for source of fiber.



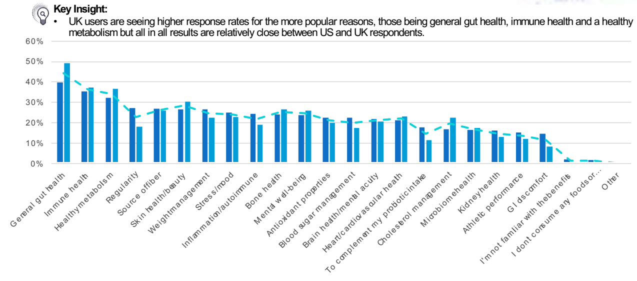
Note: US n=499, UK n=213, DE n=196, IT n=290, KR n=295, AU n=213, all prebiotic users n=1711. Question PRE1: "Why do you take a prebiotic supplement?"

33

FF&B: WHY THEY TAKE PREBIOTICS

Key Insight:

- UK users are seeing higher response rates for the more popular reasons, those being general gut health, immune health and a healthy metabolism but all in all results are relatively close between US and UK respondents.

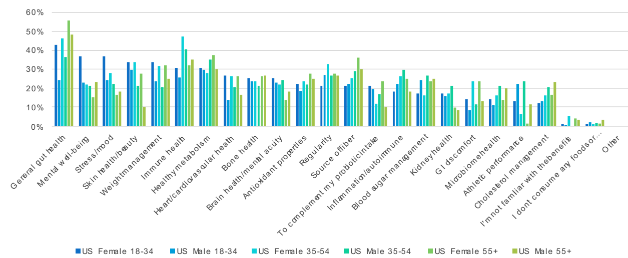


Note: Prebiotic Users: US n=651, UK n=610, All Prebiotic Users n=1261. Question: "What benefits are you looking for when you choose to consume foods/beverages that contain prebiotics?"

34

FF&B: WHY THEY TAKE PREBIOTICS: US AGE & GENDER

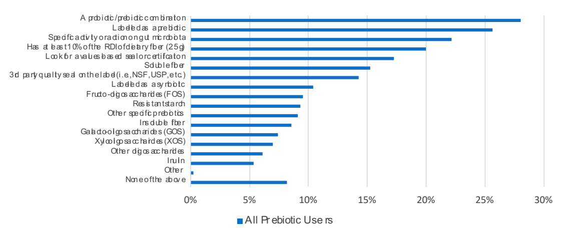
Key Insight:
- General gut health is heavily skewed older and female among US users.



Note: Prebiotic Users: US Female 18-34 n=98, US Male 18-34 n=144, US Female 35-54 n=110, US Male 35-54 n=165, US Female 55+ n=72, US Male 55+ n=60. Question: "What benefits are you looking for when you choose to consume foods/beverages that contain prebiotics?"

WHAT THEY LOOK FOR ON THE LABEL

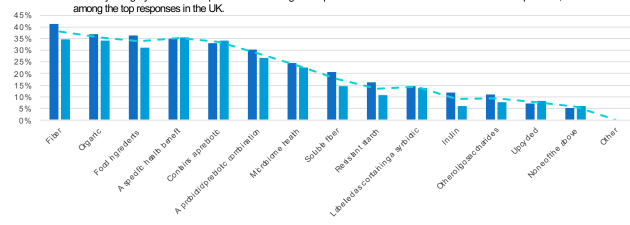
Key Insights:
- Prebiotic users were most likely to seek out a probiotic/prebiotic combination (28%) displacing previous top overall response 'looking for a prebiotic'.



Note: Prebiotic users n=1656. Question PRE2: "When you select what prebiotic to purchase, what characteristics do you look for on the label?"

FF&B: WHAT THEY LOOK FOR ON THE LABEL

Key Insight:
- Unlike supplements, the fiber claim is what consumers, especially in the US, are primarily looking for when associated with foods and beverages; the other response where the US was much higher than the UK was looking for 'food ingredients' menaing real or whole food ingredients.
- The only category where UK respondents have a higher response rate than those in the US is for contain a prebiotic, which is the among the top responses in the UK.



Note: Prebiotic Users: US n=640, UK n=601, All Prebiotic Users n=1241. Question: "What do you look for on the label when choosing a food or beverage containing prebiotics?"

KEY TAKEAWAYS

INDUSTRY TRANSPARENCY CENTER

- By age, gender and country prebiotic users are engaged yet are looking for different things, and this includes younger consumers who represent higher lifetime value.
- There are significant unmet needs, where consumers have a concern but are not taking products (supplements or functional foods and beverages) to address them
- There are white space opportunities for co-formulation where ingredient familiarity is already high
- Branded ingredients and sustainability heavily over-index for the category. If you're a supplier - let your brands know. If you're a brand, leverage your suppliers alongside your own proposition
- Food and beverage consumers are different and seeking different types of products for different reasons.
- This is still a developing and exciting category - there are new consumers to engage, existing ones to nurture and health conditions to research - may we grow together

MARK YOUR CALENDARS!

INDUSTRY TRANSPARENCY CENTER

GLOBAL PREBIOTICS WEEK NOV 6 - 10

Powering the Microbiome

Activities happening online, participate by using #globalprebioticsweek #poweringthemicrobiome

QUESTIONS

+1 (303) 746-9555

len@itcstrategy.com

itcstrategy.com

#itcinsights


PREBIOTIC
Understanding the Prebiotic Market – Scope, Trends & Opportunities
Thank You for attending!
Featuring:
Len Monheit
Executive Director, GPA
Elizabeth Thundow
Nutrition & Supplement Ingredients Market Expert

41


UNLOCK THE POWER OF OUR DATA-DRIVEN INSIGHTS TODAY!
Visit our data-driven insights page to discover actionable knowledge that can transform your decision-making.

42