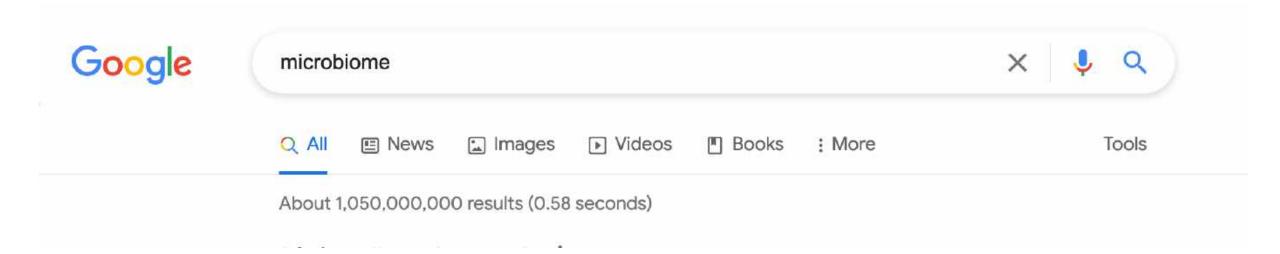




# INSIGHTS INTO THE MICROBIOME MARKET

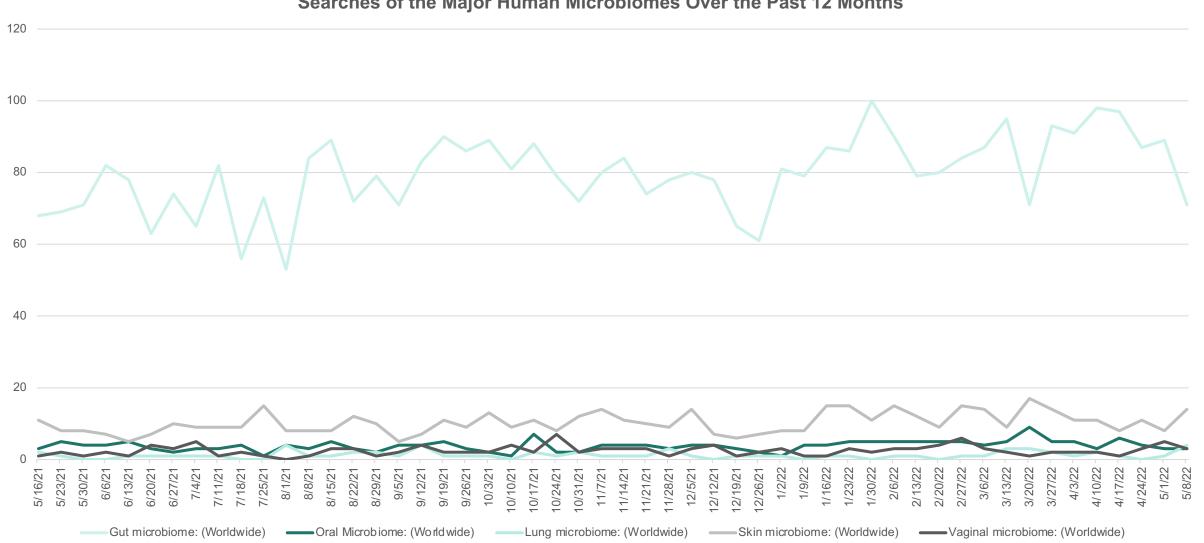
Len Monheit CEO Trust Transparency Center len@trusttransparency.com



## WHAT ARE PEOPLE SEARCHING?



#### **Searches of the Major Human Microbiomes Over the Past 12 Months**

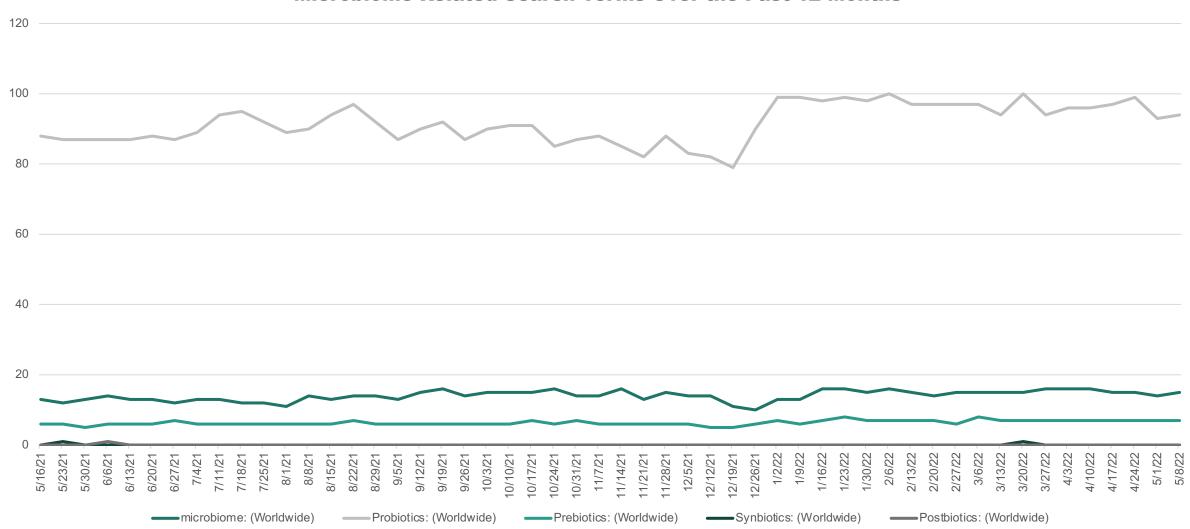


Source: Google Trends

## WHAT ARE PEOPLE SEARCHING?



#### **Microbiome-Related Search Terms Over the Past 12 Months**



Source: Google Trends

## WHAT ARE PEOPLE SEARCHING?



#### Microbiome-Related Search Terms without Probiotics (past 12 months)



Source: Google Trends





# BUT DO CONSUMERS REALLY UNDERSTAND?

# CONSUMERS WERE ASKED HOW MANY MAJOR MICROBIOMES DO WE HAVE?





# WHAT ABOUT MICROBIOME ASSOCIATED TERMS?



- ITC Insights fielded a survey in the US, UK and Australia to help determine if consumers really understand microbiome terms.
- They were given a list of possible definitions and had to identify the correct one.

Probiotics	Prebiotics	Synbiotics	Postbiotics
Live microorganisms in your gut	<ul> <li>Building block ingredient for bacteria</li> </ul>	<ul> <li>Mix of bacteria and gut nourishing sources</li> </ul>	Dead cell material from bacteria
<ul> <li>Bad bacteria living in the gut</li> </ul>	Imbalanced microbiome	Imbalanced microbiome	<ul> <li>Drugs to kill fungus</li> </ul>
Imbalanced microbiome	Nourishing source for bacteria	Bacteria feeding on each other	Live cell material from bacteria
<ul> <li>Prescribed medication to kill bacteria</li> </ul>	Research on bacteria	Balanced microbiome	<ul> <li>Partially digested material in the gut</li> </ul>

# DO CONSUMERS UNDERSTAND MICROBIOME TERMS?



<b>Probiotics</b>		Prebiotics	S	ynbiotics	P	ostbiotics
<ul> <li>Live microorg</li> </ul>	<mark>anisms in your gut</mark>	<ul> <li>Building block ingredient for bacteria</li> </ul>	•	Imbalanced microbiome	•	Live cell material from bacteria
Bad bacteria	living in the gut	Imbalanced microbiome	•	Mix of bacteria and gut nourishing sources	•	Drugs to kill fungus
<ul> <li>Imbalanced n</li> </ul>	nicrobiome	<ul> <li>Nourishing source for bacteria</li> </ul>	•	Bacteria feeding on each other	•	Partially digested material in the gut
<ul> <li>Prescribed m bacteria</li> </ul>	edication to kill	Research on bacteria	•	Balanced microbiome	•	Dead cell material from bacteria





The percent of respondents who identified the correct definition:

	US	UK	Australia
Probiotics	62%	66%	67%
Prebiotics	40%	48%	40%
Synbiotics	32%	35%	26%
Postbiotics	33%	32%	29%

# **BREAKING IT DOWN FURTHER: GENDER**



	MEN			WOMEN			
	US	UK	GERMANY	US	UK	GERMANY	
PROBIOTICS	58%	61%	67%	64%	69%	69%	
PREBIOTICS	35%	44%	37%	46%	52%	43%	
SYNBIOTICS	33%	32%	47%	31%	36%	10%	
POSTBIOTICS	33%	31%	31%	33%	36%	27%	





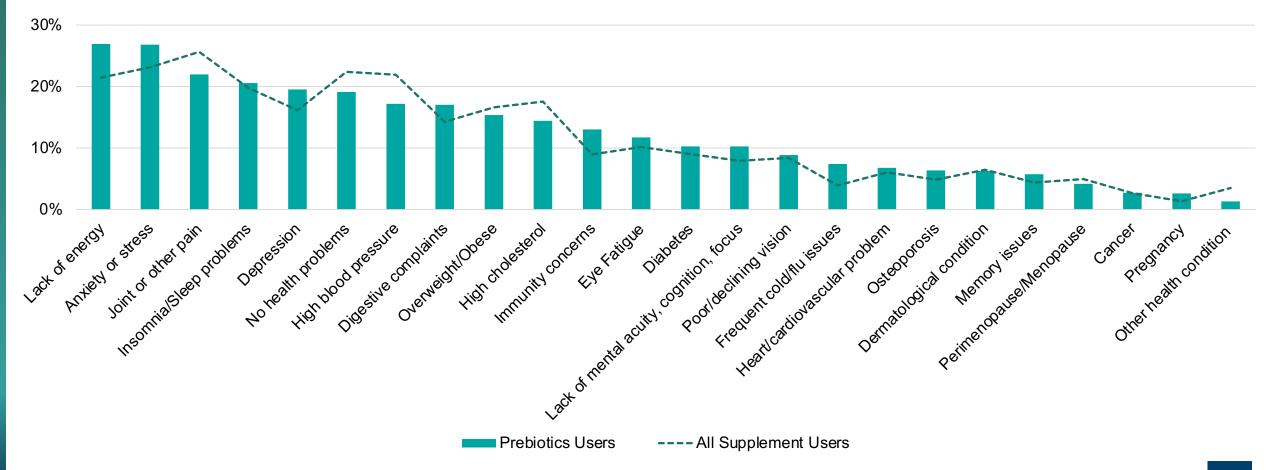
## PREBIOTICS USER HEALTH CONCERNS



# 9

#### **KEY ITC INSIGHTS:**

- Prebiotics users' health concerns show growth of those stating lack of energy, meaning lack of energy has caught up to anxiety as the most prominent concern
- · Other conditions where prebiotic users over-index are depression, digestive complaints and immunity
- Prebiotics users strongly under-index for high blood pressure, and to a slightly lesser degree, joint pain and high cholesterol







#### **KEY ITC INSIGHT:**

 Many of these expressed health concerns for which consumers are seeking a nutrition-oriented solution have an association with the microbiome in some way

	# of people who claim as a condition	% who claimed condition seeking nutritional improvement		
Diabetes	99	79%		
Digestive complaints	108	73%		
High cholesterol	274	62%		
Overweight/Obese	173	62%		
Pregnancy	19	58%		
Lack of energy	181	55%		
Heart/cardiovascular problem	52	54%		
Immunity concerns	53	53%		
High blood pressure	296	53%		
Anxiety or stress	244	45%		
Osteoporosis	44	43%		
Lack of mental acuity, cognition, focus	69	41%		
Cancer	37	41%		
Joint or other pain	216	38%		
Insomnia/Sleep problems	167	38%		
Depression	159	35%		
Dermatological condition	60	30%		
Poor/declining vision	75	27%		
Perimenopause/Menopause	42	24%		

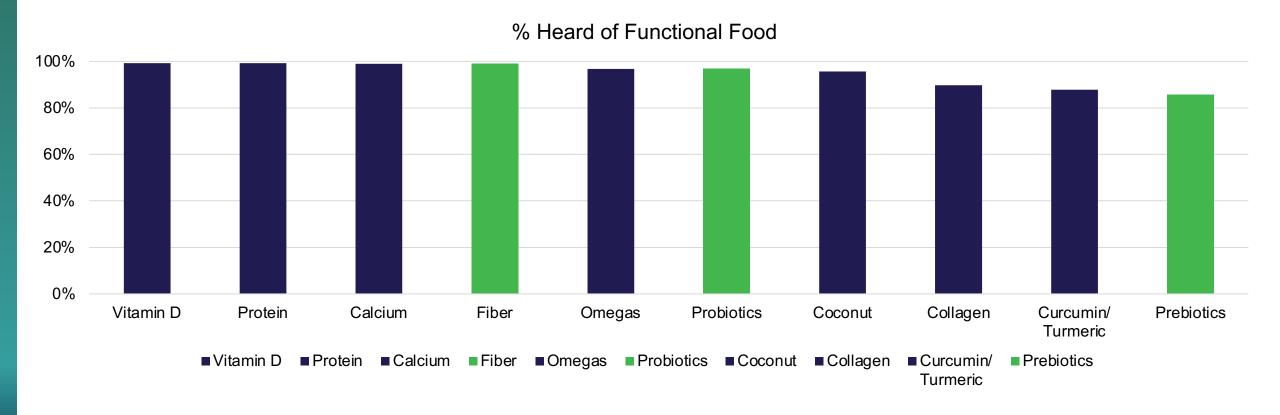
# FAMILIARITY WITH CONSUMPTION: FUNCTIONAL FOODS





#### **KEY ITC INSIGHTS:**

- Most consumers have at least basic familiarity with these functional ingredients with the top four at essentially 100%
- Omega-3s and probiotics have become household familiar terms and even emerging ingredients such as prebiotics are extremely familiar at over 80%



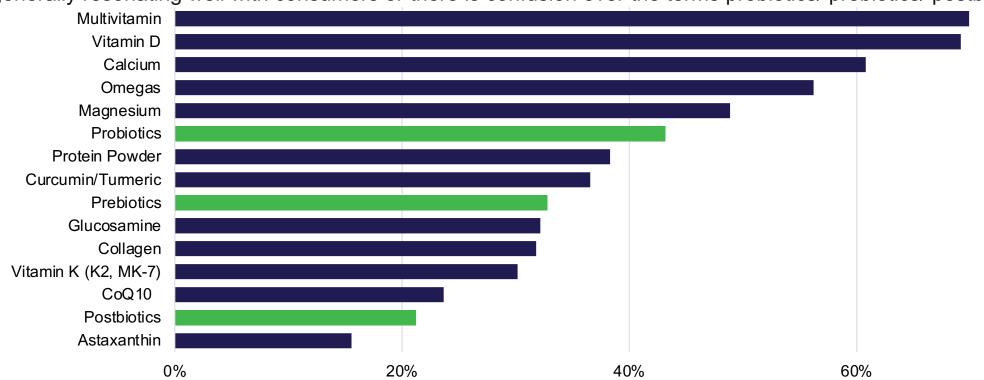
## **FAMILIARITY WITH USE: SUPPLEMENTS**



#### INGREDPENT TRANSPARENCY CENTER

#### **KEY ITC INSIGHTS:**

- Microbiome associated ingredient categories show strong familiarity with supplement users, lagging of course behind core categories such as vitamin D, omega-3s and even magnesium which has shot up in recent years
- These latter categories are good models in establishing broad familiarity
- As a 'younger' category, prebiotics familiarity at well over 30% for all supplement users, not only those using prebiotics is promising
- Familiarity with postbiotics is surprising at already over 20% indicating either that microbiome related solutions are generally resonating well with consumers or there is confusion over the terms probiotics/ prebiotics/ postbiotics



80%

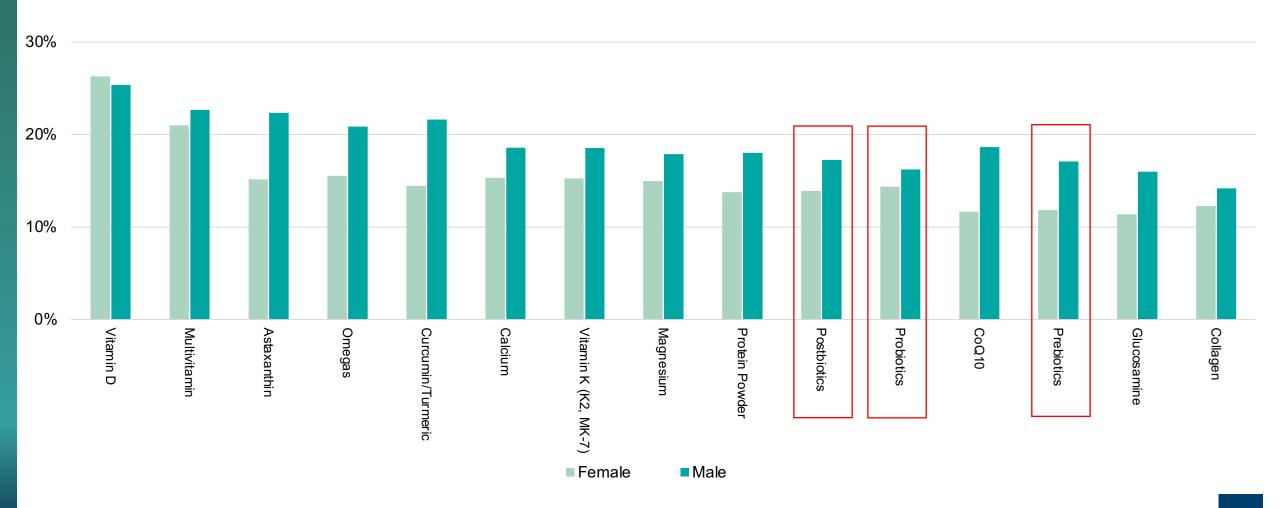
## **INCREASE IN USAGE LEVELS: GENDER**





#### **KEY ITC INSIGHTS:**

Males over-index in usage for supplements in most cases, but especially related to the microbiome



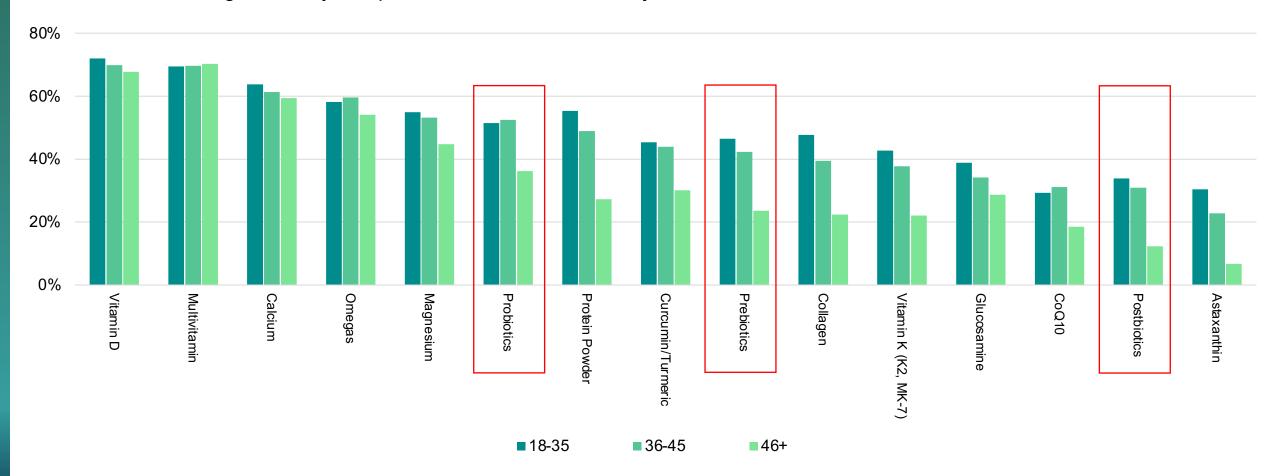
# **FAMILIARITY WITH USE: AGE**





#### **KEY ITC INSIGHT:**

- Younger consumers are inevitably the most familiar, and this phenomenon is most significant in microbiomerelated ingredient categories
- Translating familiarity into purchase is therefore the objective



# IN THE LAST 10 YEARS, OVER 108K STUDIES RELATED TO THE MICROBIOME ARE AVAILABLE ON PUBMED



