





#### MICROBIOME: NATIONAL SURVEY OF IRISH CONSUMER UNDERSTANDING

















# Research Findings Compiled by



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### **Objectives**

#### To gauge the general population's understanding of the microbiome.

- Microbiome science has advanced rapidly and reached a scale at which basic biology, clinical translation and population health are increasingly integrated.
- The microbiome is something that the public and the media are interested in and our objective is to share accurate, evidence-based, accessible information about APC research.
- APC would like to conduct a study to assess the the awareness of the public on the role of the microbiome in human, animal and planetary health, but more specifically, the gut microbiome.
- APC would also like to gauge the readiness of the public to change their lifestyle/behaviour to benefit their health and wellbeing.

#### **Outcomes**

- 1. The data collected will represent a unique and previously unavailable snapshot of the public's perception of the microbiome and APC's research.
- 2. APC can create a story and relevant content around the data that emerges.
- 3. Future planning for EPE/Comms programme will be informed by public perception and the understanding of microbiome science.
- Data collected to be a catalyst for future APC research and a baseline for awareness monitoring going forward.

# Research Methodology

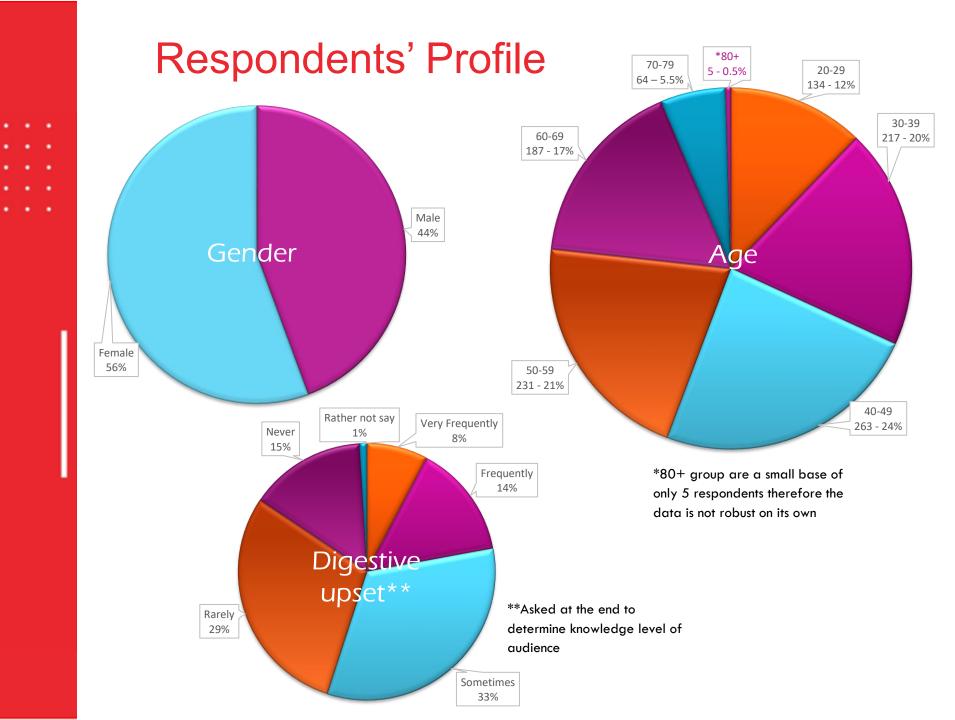
#### Planned:

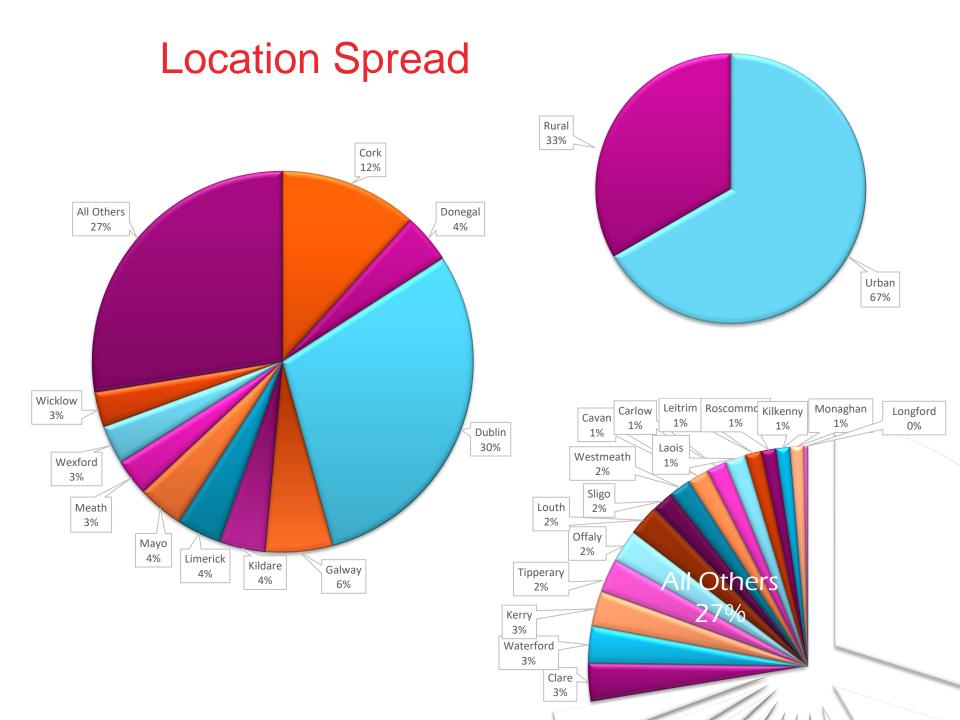
- Quantitative survey with 1,000 respondents.
- National representative sample.
- Spanning 7 age groups from 20 80+.

#### Delivered:

- Fielded from 25<sup>th</sup> September 11<sup>th</sup> October 2023.
- 1,101 responses.
- 44% male/56% female split.
- Good regional spread reflective of population spread within Ireland.
- 67% urban/33% rural split.
- Only 22% claimed to have frequent or very frequent upset digestive system – therefore any elevated knowledge or awareness did not affect the findings.





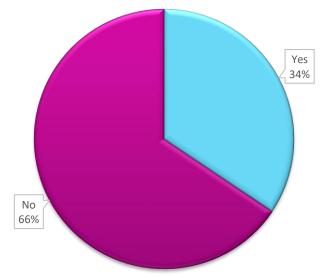


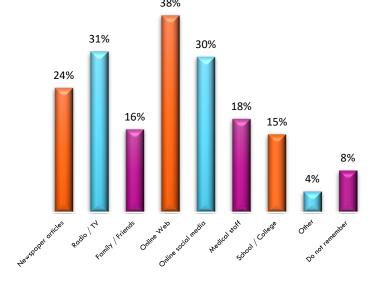
# Microbiome: National Survey of Irish Consumer Understanding

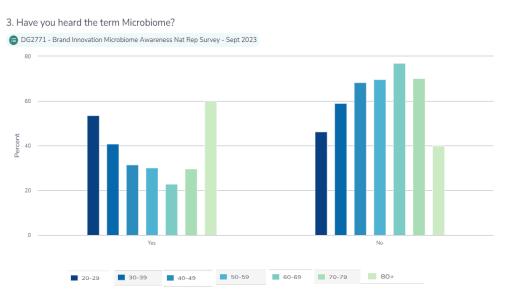
# Research Findings

#### Microbiome Awareness

- 34% awareness of the microbiome nationally.
- Younger (and older\*) audiences have higher awareness levels at 54% for 20-29yrs.
- Lowest awareness is 23% amongst 60-69 age group.
- Those that are aware have learnt about it from online web sources (38%), radio & TV, (31%), social media (30%) or newspaper articles (24%).







# Understanding of the Microbiome

- Of those that are aware of the microbiome there is an (unprompted) general understanding that the microbiome is a collection of microorganisms and bacteria in your body.
- It is most associated with gut health, a healthy digestive system, immunity protection and general wellbeing.
- They are also aware of good and bad bacteria existing in the body and the need for that to be in balance.
- The 66% that were unaware of the microbiome had either never heard of it, or it had negative associations for some of them.
- Those that are less knowledgeable words like fungi, technology, foreign bodies or virus are used indicating a lot of confusion but mainly a total lack of awareness exists.



#### What Contributes to a Healthy Microbiome?

 For those that are microbiome aware they are are advocates of a having a healthy balanced diet and taking exercise to maintain a healthy microbiome.

 They believe in eating "good food" which for them is enjoying lots of fresh fruit and vegetables, having diversity, and less processed foods.

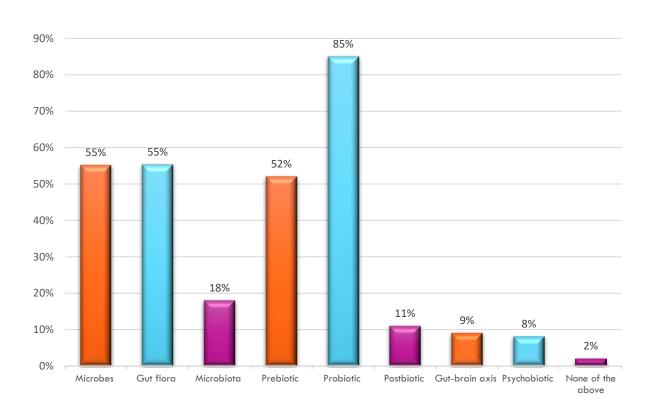
- They are also aware of fermented foods, probiotics in food such as live yoghurt or kefir, and high fibre foods are good additions in the diet for their microbiome.
- Plant based diets were mentioned by some given there has been some "noise" in that area in recent years.
- Finally sleep (positive) and stress (negative) also had some mentions and were believed to affect the health of their microbiome.



Note: This was an open question giving unprompted verbatim responses.

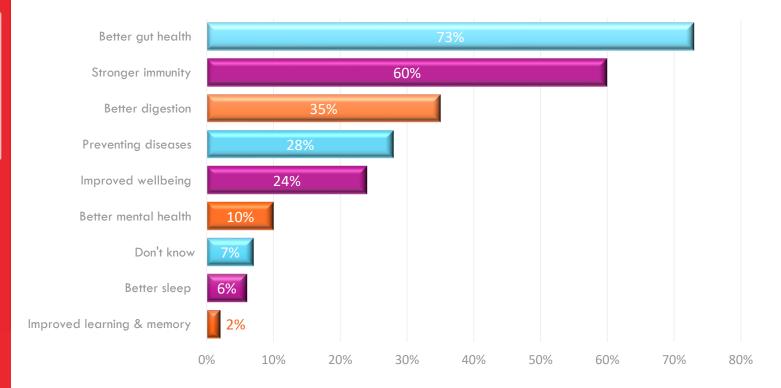
#### Awareness of Other Terms (prompted)

- There was very high awareness of probiotics (85%) amongst all respondents.
- Over half were aware of terms such as prebiotic (52%), microbes and gut flora (55%).
- There was little awareness of gut brain-axis (9%), despite it being in the media, this will be interesting to monitor over time.
- Postbiotic had a slightly higher awareness at 11%, this is potentially to do with its association with probiotic rather than an understanding of the term.
- Only 2% of respondents stated they had no awareness of these terms.



#### Benefits of a Healthy Microbiome? (prompted)

- Better gut health and stronger immunity were by far the biggest benefits associated with having a healthy microbiome with 73% and 60% association, respectively.
- Better digestion (35%) and prevention of diseases (28%), together with improved wellbeing (24%) were seen as the secondary benefits.
- More cognitive and mental health related associations were low, as was the association with better sleep.
- 7% stated they did not know of any benefit.

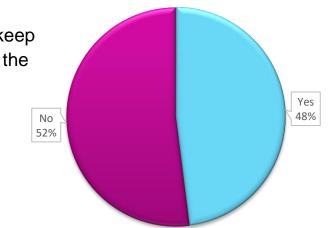


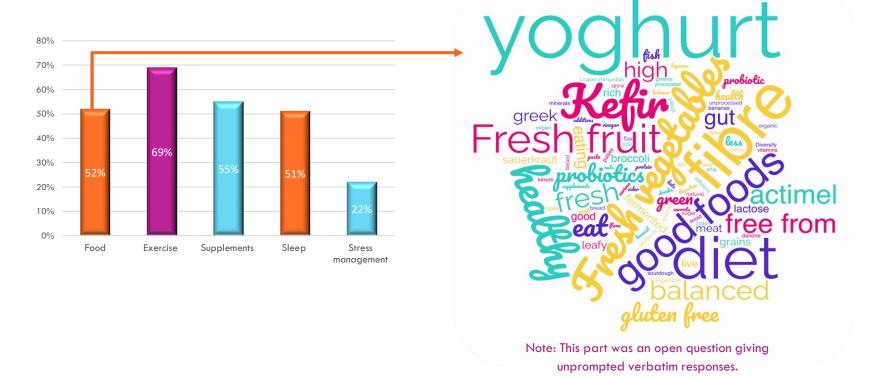
## Steps to a Healthy Microbiome

 48% of all respondents stated they were taking steps to keep their microbiome healthy, despite just 34% awareness of the microbiome.

Exercise, food, supplements and sleep were the (prompted) steps they agreed would promote a healthy microbiome.

 The foods they stated (unprompted) they were consuming for their microbiome there was good awareness of microbiome "enhancing" foods such as yoghurt, fibre, and kefir.





Steps to a Healthy Microbiome Why this Approach?

- Overwhelmingly the unprompted response to their approach was to be healthier.
- Second to that was to maintain overall gut health.
- That was for a variety of reasons:
  - to prevent illness & disease
  - protect their immunity
  - better digestive system which goes with reduced bloating and regular movements.
  - · to feel good & general wellbeing
  - future health and longevity
  - to manage chronic illness or IBS
  - mental health, often linked to sleep (more sleep = better mental health or poor mental health = less sleep)



Note: This was an open question giving unprompted verbatim responses.

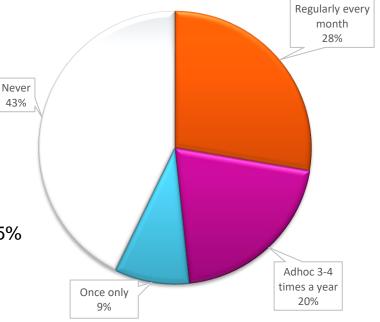
Use of Probiotic Supplements

 57% of the respondents have used probiotics supplements.

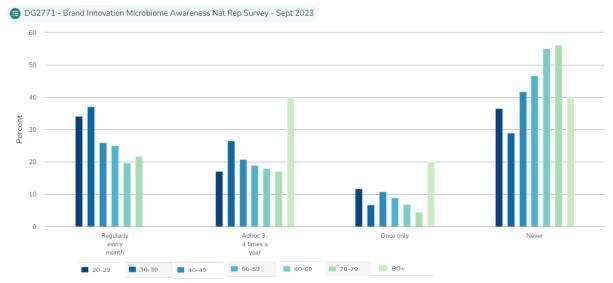
28% are using them monthly.

 Younger age groups are the more regular monthly users, with 38% of 30-39yrs versus only 20% of 60-80yrs+.

Older age groups less likely to use probiotics with 55% of over 60yrs never taking a probiotic supplement.



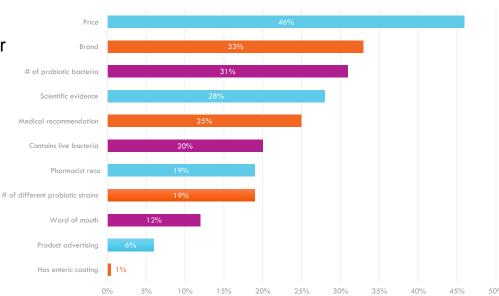
9. If you take probiotic supplements, how often do you take them?



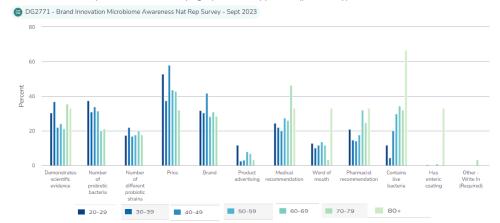
\*80+ group are a small base of only 5 respondents therefore the data is not robust on its own

#### Probiotic Supplements - Purchase Influencers

- Price is the main purchase driver when choosing a probiotic, and a particularly strong consideration for 20-29yrs and 40-49yrs.
- Brand, the number of bacteria, scientific evidence and medical recommendation also play a key role in purchase decisions.
- While number of probiotic bacteria is a key influencer, there is not as much interest in having several different probiotic strains.
- The idea of "live bacteria" is also less of a factor.
- Product advertising, interestingly, is a very low influencing factor on purchase decision in this category, as is word of mouth/peer recommendation.
- The number of bacteria is a strong influencer for younger groups, whereas older audiences go by recommendation from pharmacist or GP,
- Both younger and older groups are influenced by scientific evidence more so than 40-69yrs.

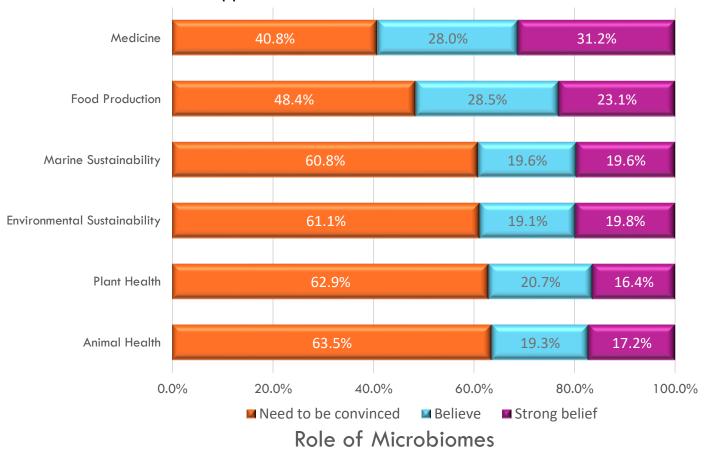






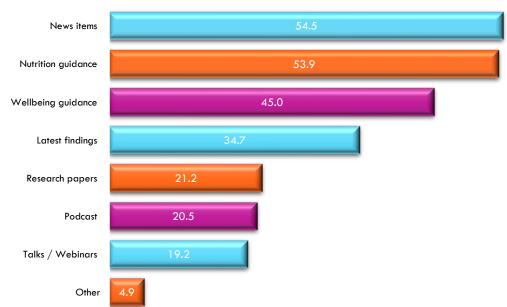
#### Role of Microbiomes

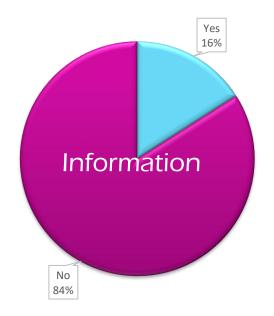
- There is a belief or strong belief that the microbiome plays a role in medicine and in food production.
- 31.2% have a strong belief that microbiome plays a role in medicine.
- There is a consistent result that respondents need to be convinced of its role in other areas such as animal health. This is potentially driven by lack of understanding or awareness of its application or role in these contexts.



#### Information & Sources

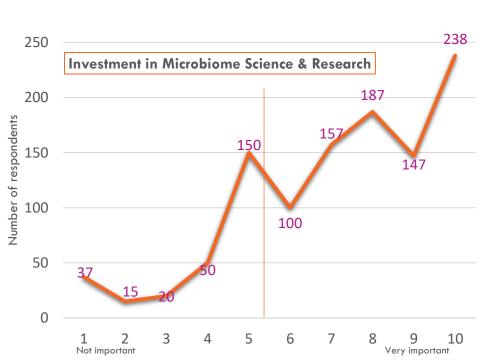
- Not surprising given the awareness levels, 84% feel there is not enough clear information on the microbiome.
- Younger groups do feel more informed with 30% feeling they had enough clear information on it.
- The information that would engage them is news and latest findings the microbiome, but what they deem important is nutrition and wellbeing guidance in relation to the microbiome.
- Given the lack of awareness and confusion around the microbiome there is appetite for good quality information from trusted sources.
- However, it is small steps (based on verbatims) starting with a very simple message about what the microbiome is.





#### APC & Investment in Research

- Just 6% heard of APC (Cork based 4.7%),
- There was higher awareness amongst 20-29yrs (15%) and 30-39yrs (10%).
- Many verbatims were correct in stating it was a research organisation.
- 66% of respondents felt it was important invest in science and research into microbiomes, 35% stating it was very important.
- Only 11% perceived it as not important.





### **Executive Summary**

- There is low awareness (34%) of the microbiome in Ireland, awareness is highest amongst 20-29yr (54%).
- The general understanding of those aware is that the microbiome is a collection of microorganisms and bacteria in your body, and they most associate it with gut health, immunity protection, a healthy digestive system and general wellbeing.
- Benefits of a healthy microbiome: "Better gut health" came out on top at 73%, followed by "stronger immunity".
- Probiotic is the most familiar term with 85% awareness, some science is low on their radar e.g. gut-brain axis (9% awareness).
- 48% said they take steps to keep their microbiome healthy with "Exercise" being the top approach that people take.
- 43% of respondents take probiotic supplements, with 27% taking them monthly, particularly younger age groups, older age groups are less likely to be taking regular probiotic supplements.
- 84% said there is not enough clear information on the microbiome and 94% are not aware of APC Microbiome Ireland.
- 66% of respondents felt it was important invest in science and research into microbiomes.
- 31% have a strong belief that the microbiome plays a role in medicine.
- Younger audiences feel more informed and are actively managing their microbiome health with regular probiotics for example.



#### Recommendations

- APC Microbiome has the potential to own this space and lead consumer understanding & education, if desired.
- The level of knowledge is low with a lot of confusion; therefore, the message needs to be kept simple, starting with a basic explanation of the microbiome.
- Be the expert for the public on nutrition guidance in relation to gut health because they associate it strongly with overall health and wellbeing.
- They also trust scientific evidence and medical opinion (pharmacies & GPs) more so than advertising and peer recommendation – these are potential ways in to engage the general population.
- There is traction to be had with younger age groups as their understanding and awareness is better and they are seeking out regular solutions to manage their gut health.
- For most their source of information is online, news articles and radio/TV if the information can be delivered by trusted experts this would be the idea media & comms strategy.
- Periodic repeat of this survey to see how awareness and attitudes have changed over time now a baseline has been established.



#### Further information...

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