



International
Microbiota
Observatory



Press release

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International Microbiota Observatory – 3rd Edition - 2025

A survey conducted among 7,500 individuals in 11 countries

Microbiota Momentum: Bridging Awareness and Action

Microbiota is made up of trillions of microorganisms such as bacteria, viruses, fungi, archaea, etc. It lives in our digestive tract, our skin, our mouth, our nose and our lungs. These organisms play a crucial role in our wellbeing by helping digestion, stimulating our immune system, and protecting us from infectious diseases. But beyond these functions, microbiota also influences our mood, our metabolism and even our longevity. An imbalance of microbiota, often caused by factors such as diet, lifestyle or medication, could lead to major health problems, from digestive disorders to cardiovascular problems and depression. Maintaining a healthy microbiota throughout our bodies is therefore essential for our general health and well-being.

*For the **third year running**, the Biocodex Microbiota Institute has commissioned Ipsos to conduct a major international survey on microbiota: the **International Microbiota Observatory**. What are the trends in microbiota awareness? Have individuals adopted more behaviors to protect and preserve their microbiota this year? What role do healthcare professionals play in educating their patients? What are people's thoughts on microbiota testing?*

*This large survey was conducted by Ipsos among **7,500 people in 11 countries** (the USA, Brazil, Mexico, France, Germany, Italy, Portugal, Poland, Finland, China and Vietnam). Within each country, a **representative sample of the population aged 18 y.o. and over was interviewed**. Representativeness was ensured by the quota method applied to the respondent's gender, age, region and occupation. The survey was conducted online, from January 21 to February 28, 2025.*



1. An overall increase in the awareness of microbiota-related terms and its importance...

- **Accurate awareness of the microbiota has increased since 2023** (+3 points vs 2023). **However, still a minority of people know exactly what the word microbiota means** (23%). Overall, more than 7 out of 10 people are aware of microbiota (71%, +8 points vs 2023).
- **Knowledge of microbiota diversity remains under-recognized, despite some progress.** Gut microbiota is still the best-known microbiota: 26% know exactly what it is (+4 points vs 2023). Then, 1 in 5 people know exactly about the vaginal microbiota (20%, +3 points vs 2023) and about the oral microbiota (20%, +3 points vs 2023). 18% know exactly what skin microbiota is (+1 point vs 2023), 16% for urinary microbiota (+2 points vs 2023).
- **Knowledge of the role, capabilities and importance of microbiota is increasing year after year:** 4 in 5 are aware that the diet has significant consequences on the microbiota balance (80%), a 6 points increase since 2023; 79% are aware that in some cases, an imbalance in the microbiota may have significant health consequences, a 4 points increase since 2023; and 76% are aware that the microbiota plays an important role in immune defense mechanisms, a 4 points increase since 2023.
- **When suffering from microbiota-health related issues, a majority of people show their microbiota awareness by accurately linking these problems to their microbiota:** 59% of people who have suffered from a post-antibiotic diarrhea correctly linked it to their microbiota. More than half of people who have suffered from a urogenital infection correctly linked it to their microbiota (52%).
- **Some lack of understanding persists, although knowledge has improved compared to previous waves.** 56% of people know that the microbiota enables the gut to deliver essential information to the brain for our health (+3 points vs 2023); only half of people know that microbiota is not located exclusively in the gut (53%, +6 points vs 2023); and one third of people know that the microbiota is only made up of bacteria (32%, +3 points vs 2024).

2. Although microbiota awareness has increased, translating this into concrete actions remains a challenge

- **The majority of people declare they have already changed their behaviors to keep their microbiota balanced** (56%), a stable result compared to last year (-1 point). **However, very few people have changed “a lot” their behaviors** to protect their microbiota (16%, -1 point vs 2024). 2 out of 5 people have changed “a little” their behaviors for the sake of their microbiota (40%, unchanged from 2024).
- **Only a minority of people have really incorporated behaviors into their daily lives to maintain a balanced microbiota.** A third of the population regularly engage in physical activity (32%, -1 point vs 2024), 31% consistently maintain a varied and balanced diet (-1 point vs 2024), and 23% actively limit their consumption of processed food (-2 points vs 2024).



- **Moreover, behaviors more directly related to microbiota protection are not correctly adopted.** More than half wash their body at least twice a day (53%) despite its harmful effect on microbiota. 38% of women take vaginal douches (-4 points vs 2023), a detrimental practice for the vaginal microbiota.
- **These results underscore a significant gap between awareness and resolute action when it comes to microbiota health. While people may be gaining knowledge about the importance of microbiota, this understanding is not yet translating effectively into firm, unwavering lifestyle changes.**

3. Microbiota: a generational divide? Parenthood versus seniors

- **Parenthood: the pathway to microbiota awareness**
- Parents of young children (aged under 3) appear to have a better knowledge of microbiota: more than a third know precisely what microbiota is (34%), which is more than average (23%). Overall, 83% are aware of what microbiota is, a higher awareness compared to the average (71%).
- They are also more likely to have changed their behaviors to protect the balance of their microbiota: 2/3 of parents of young children have done so (67%), which is significantly more than the average (56%).
- This strong connection made by parents of young children between awareness and actions may be explained by the key role played by healthcare professionals in educating parents. In fact, 3 in 5 have received an explanation about microbiota, its roles and functions (59%), compared to only 42% of the general population.
- Due to this high awareness of microbiota, parents of young children express higher interest in microbiota testing: 68% would be interested in taking a microbiota test (vs 61% of the general population).
- **Paradoxically, seniors remain less educated about microbiota, despite higher health risks due to their age**
- Respondents aged 60 y.o. and over have a lower awareness of microbiota: only 17% of them have a precise awareness of microbiota, compared to 23% among the general population. Overall, 63% of seniors know what microbiota is, which is below general results (71%).
- Only half of seniors have changed their behaviors to maintain a balanced microbiota, compared to 56% in global results.
- These low results could be explained by the level of information given to them by healthcare professionals. Indeed, seniors appear to be the population least sensitized to microbiota by healthcare professionals: only a third have received explanations of what microbiota is, its roles and functions (vs 42% overall).
- Moreover, seniors are less likely to be interested in having their microbiota tested: 55% express interest in doing a microbiota test (vs 61% of the general population).



4. A significant interest in microbiota testing: people recognizing its potential health benefits, revealing an increasing awareness and understanding of the subject?

- **A genuine interest in the analysis of microbiota:** more than 3 out of 5 people express interest in taking a microbiota test (61%).
- **People want to test the microbiota they are the most familiar with:** 4 in 5 would be interested in a gut microbiota test (80%), a microbiota known to 57% of respondents. Then, 42% would be interested in an oral microbiota test, a microbiota known to 48% of respondents. Among women, more than half would be interested in a vaginal microbiota test (54%), a microbiota known to 54% of women.
- **Microbiota testing is perceived as useful first and foremost for personal health reasons:** 3 in 5 think microbiota testing is useful to conduct a health check-up (60%), 53% see it as a tool to help rebalance their microbiota, 51% to prevent and/or slow down the onset of pathologies, and 49% to identify the lifestyle factors influencing microbiota and leading to chronic diseases. **It indicates a recognition of microbiota potential health advantages, showing a growing understanding of the issue.**
- **To support scientific research, a significant part of the population would accept donating their stool:** 59% would be willing to donate their stool if it could contribute to advancing scientific knowledge in the fields of microbiota, nutrition and health.

5. The “awakening of the microbiota”, guided by healthcare professionals: a crucial role in moving from knowledge to action and encouraging the adoption of the right behaviors

- **Healthcare professionals are still the most trusted resource for microbiota information:** more than 3 out of 4 people consider healthcare professionals as their primary source for reliable microbiota information (78%, +3 points vs 2024).
- **Information given by healthcare professionals on the microbiota is still limited, but is steadily increasing.** More than 2 in 5 people have received an explanation of what microbiota is, its role and its functions (42%, +7 points vs 2023). Almost half of respondents have been educated about the importance of having a microbiota as balanced as possible (47%, +6 points vs 2023), and 46% have received explanations about the good behaviors to adopt to maintain a balanced microbiota (+4 points vs 2023). **However, only 29% of respondents report having received all these information from their healthcare professionals, and a mere 8% have received this comprehensive information repeatedly.**
- **Receiving professional guidance has been shown to positively influence microbiota awareness and the adoption of good habits.** People who have received repeated and multiple information on microbiota from healthcare professionals have a better understanding of the term microbiota (54% know exactly what it is, vs 23% among all population). They are also more likely to have changed their behaviors to



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maintain a balanced microbiota (93%, vs 56% among all population). **Healthcare professionals are key drivers to instigate behavioral changes when it comes to microbiota health.**

6. Impacts of antibiotics on microbiota: reinforcing the link through professional education

- **A great and improving knowledge of antibiotics impact on microbiota:** 3 in 4 people are aware that antibiotics have an impact on their microbiota (73%, +4 points vs 2023).
- **When experiencing post-antibiotic diarrhea, people accurately link it with microbiota:** 3 in 5 people correctly link this microbiota-health related problem they have experienced to their microbiota (59%).
- **Lack of information from healthcare professionals:** Very few people have received information about microbiota when they were prescribed antibiotics. Only 2 in 5 reported that an HCP told them that taking antibiotics could have negative consequences on their microbiota (39%, +2 points vs 2023). And only 38% have received advice on limiting the negative consequences of antibiotics use on their microbiota (+1 point vs 2023).
- **Therefore, even if people are starting to understand the connection between antibiotics and an imbalanced microbiota, they don't receive enough professional advice to help them limit the negative consequences of antibiotics on their microbiota.**

7. In Portugal, awareness and knowledge about the microbiota and behaviors adopted to preserve it are still low, resulting from limited information transmission by healthcare professionals

- **Portugal's microbiota awareness continues to be among the lowest observed, with no improvement noted over time.** Only 17% of Portuguese claim to know exactly what it is, compared to 23% across all surveyed countries. This level of awareness remains unchanged from 2023.
- **Awareness of all microbiota locations is equally limited with no improvement in one year:** only 21% know exactly what the gut microbiota is (+1 point vs 2023, 26% globally), 17% for the vaginal microbiota (unchanged from 2023, 20% globally), 14% for the skin microbiota (-1 point vs 2023, 18% globally) and 14% for the oral microbiota (-2 points vs 2023, 20% globally).
- **Less than half of Portuguese (49%; +2 points vs 2024) have modified their behaviors to preserve their microbiota balance, a proportion lower than the average (56% globally), and only 9% do so significantly (+3 points vs 2024, 16% globally). Behaviors adopted among Portuguese people show slight improvements compared to last year, but remain very limited.** Only 27% of Portuguese regularly engage in physical activity, a 5-point increase from 2024, yet still below the overall average of 32%.



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Similarly, just 26% consistently maintain a varied and balanced diet, up 2 points from 2024, but lagging behind the 31% overall average. In terms of actively limiting processed food consumption, 22% of Portuguese do so, a 2-point improvement from 2024 (23% globally).

- **Despite lower awareness of microbiota, 62% of Portuguese would be interested in taking a microbiota test** (vs 61% globally). They mention several reasons why they would consider such test useful: 64% think this test is useful to conduct a health check-up (vs 60% overall), 64% view it to prevent and/or slow down the onset of pathologies (vs 51% overall) and 51% see it as a tool to help rebalance their microbiota (vs 53% overall). Finally, 62% would be willing to donate their stool if it could contribute to advancing scientific knowledge in the fields of microbiota, nutrition and health (vs 59% overall).
- **Healthcare professionals have a key role to play in microbiota education**, especially since they are considered by 9 out of 10 Portuguese as the primary reliable source of information on the microbiota (89%, +1 point vs 2024, 78% globally).
- **The Portuguese have received less information than in the rest of the world from their healthcare professionals, but it is increasing:** 34% have been informed by their healthcare professional about what the microbiota is and what it does, a 8 point-increase from 2023 (42% globally). Nevertheless, the level of information remains low and isn't improving over time when antibiotics are prescribed: only 30% of Portuguese have received advice from healthcare professionals on limiting the negative consequences of taking antibiotics of their microbiota (unchanged from 2023, 38% globally).
- **Receiving professional guidance has been shown to positively influence microbiota awareness and the adoption of good habits.** People who have received multiple information on microbiota from healthcare professionals have a better understanding of the term microbiota (31% know exactly what it is, vs 17% among all Portuguese population). They are also more likely to have changed their behaviors to maintain a balanced microbiota (82%, vs 49% among all Portuguese population).



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About the Biocodex Microbiota Institute

The Biocodex Microbiota Institute is an international hub of knowledge dedicated to microbiota. The Institute educates the lay public and healthcare professionals on the importance of microbiota on healthcare and well-being.

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