

International Microbiota Observatory

L'Observatoire International des Microbiotes

Second wave

Portuguese results







Methods



Methods

This international survey was conducted online in **11 countries** from January 26th – February 26th, 2024. **7,500 people** were interviewed in the 11 countries, among representative samples of the population aged 18 y.o. and more in each country.

7 countries had already been surveyed in 2023.



4 countries have been added to the scope this year:



United States of America (n=1,000)







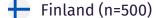
Portugal (n=500)

Spain (n=500)

China (n=1,000)







Vietnam (n=500)

An automated selection from the Ipsos Panel ensured representative samples in each country (gender, age, employment status and country region) based on quota method.

Comments



= Average response for all 7 countries.

(n=7,500)



= Focus on detailed results according to different criteria such as gender, age, presence of children under 3yo, individuals with health conditions.

Significant differences vs total - superior

Significant differences vs total - inferior

These coloured indications show results that are statistically different (above or below) the average for all respondents.

All results are presented in %.

Some results have a low basis, results must be interpreted with cautious.

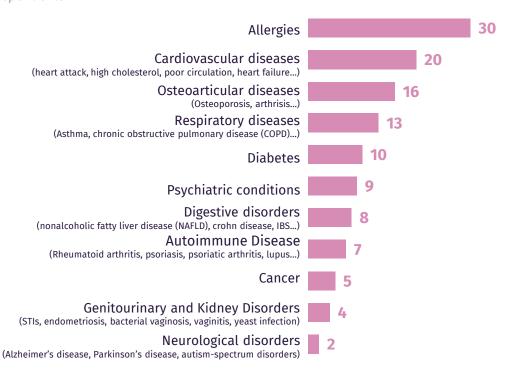


Thy

People with current conditions A focus detailed throughout the report

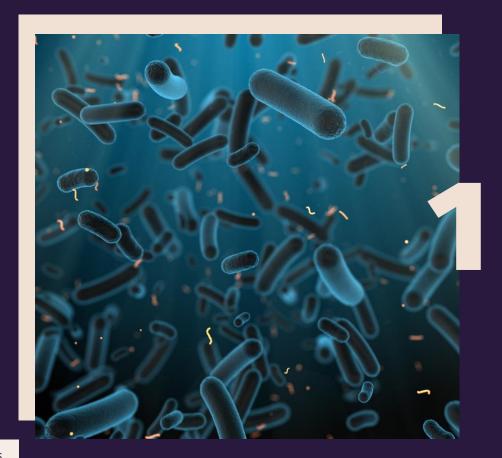
NEW QUESTION

RS10. Among the following health problems, indicate those you suffer from. Base: All respondents









Awareness of the microbiome is lower in Portugal than in other countries, and has not improved since last year

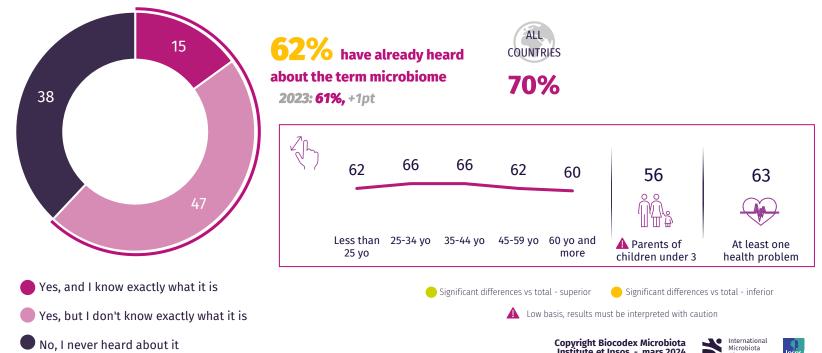




Awareness of the microbiome is lower in Portugal compared to other countries: 3 out of 5 people have already heard of it, and only 15% know exactly what it is.



Question 2. Have you ever heard of the "microbiome"? Base: All respondents





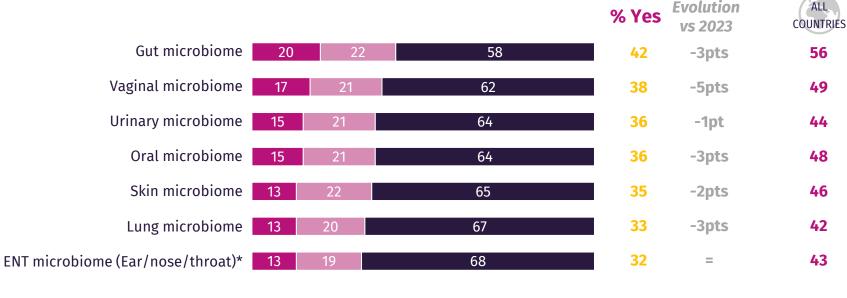




Compared to other countries, Portuguese appear to know significantly less about each microbiome, and few have precise knowledge.



Question 3. And more specifically, have you ever heard of the following terms? Base: All respondents





Yes, but I don't know exactly what it is

Never heard about it



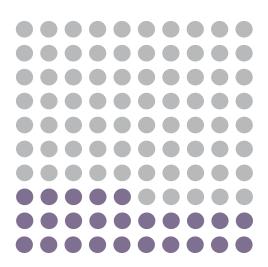




Only 1 in 4 people know about the diversity of microbiome, which is less compared to the average.



Question 3. And more specifically, have you ever heard of the following terms? Base: All respondents



25% have already heard of each microbiome: Gut, vaginal, skin, lung, urinary, oral and ENT microbiome



32%

2023: 26%, -1pt



But only **8%** know <u>precisely</u> all of them 2023: 7%. +1pt



8%





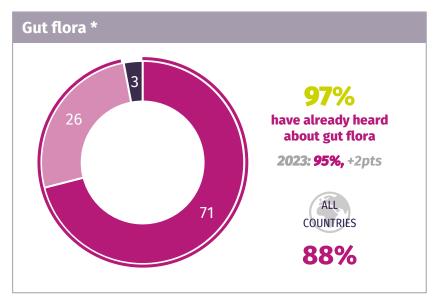


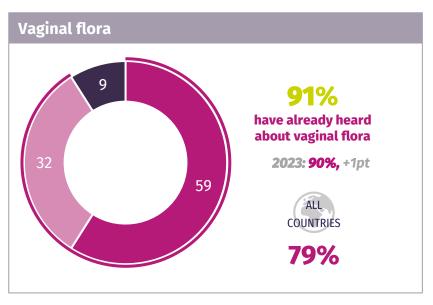


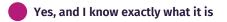
Portuguese appear more aware of the term "flora", even more than in the other countries.

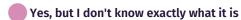


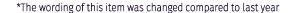
Question 2bis. And have you ever heard of these terms? Base: All respondents















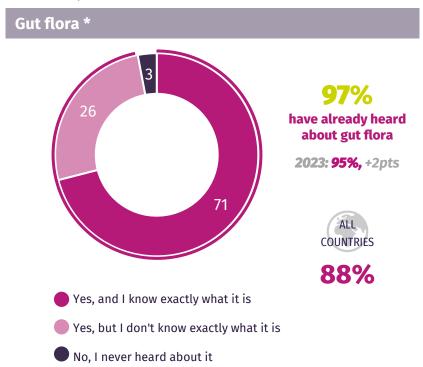
No. I never heard about it

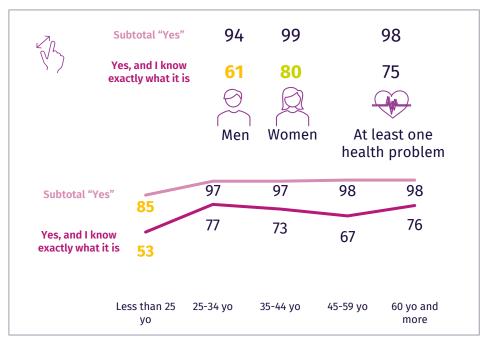


Men and the youngest are less aware of the gut flora.



Question 2bis. And have you ever heard of these terms? Base: All respondents





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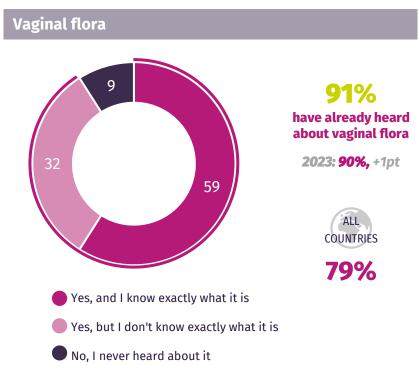
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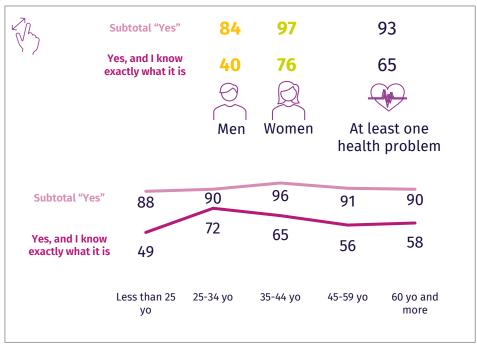


Regarding vaginal flora, women appear to be more aware of it than men.



Question 2bis. And have you ever heard of these terms? Base: All respondents









Knowledge of the role and functions of the microbiome remains low, leaving room for improvement

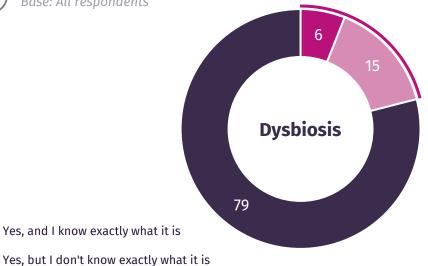




Dysbiosis is not a popular term among Portuguese: only 1 out of 5 are aware of the term, a lower proportion compared to other countries.

Question 3. And more specifically, have you ever heard of the following terms?

Base: All respondents



21% have already heard about the term 'dysbiosis'

2023: 23%, -2pts

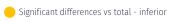


34%



At least one health problem

Significant differences vs total - superior



Low basis, results must be interpreted with caution







Never heard about it



Portuguese knowledge about the microbiome appear moderate, especially about its diversity and composition.



Question 4. For each of the following statements, tell us if you think it is TRUE or FALSE. If you are unsure about your answer, answer I do not really know.

Base: All respondents	V	Good answer				Wrong answers/ don't know
Our diet has significant consequences on the balance of our microbiome		82 🗸			1 17	18
In some cases, an imbalance in the microbiome may have significant health consequences		81 🗸			1 18	19
The microbiome plays an important role in immune defense mechanisms		76 🗸		2	22	24
Antibiotics have an impact on our microbiome		73 🗸		2	25	27
In the field of vaginal health , the microbiome plays an important role in women's health		69 🗸		3	28	31
Many diseases such as irritable bowel syndrome (IBS), obesity, vaginose could be linked to the microbiome		63 🗸		2	35	37
The microbiome enables the gut to deliver essential information to the brain for our health		53 🗸	5	4	2	47
Your microbiome is located exclusively in the gut	14	47 🗸		3	39	53
The microbiome is only made up of bacteria	18	3 26 ♥		56	74	
	True	False	!	Don't	really know	V









% good answe

Compared to other countries, Portuguese know more about the impact of diet on the microbiome and the health consequences of an imbalanced microbiome. Knowledge is quite steady compared to last year.

Question 4. For each of the following statements, tell us if you think it is TRUE or FALSE. If you are unsure about your answer, answer I do not really know.

Base: All respondents

er	Total	Evolution vs 2023	ALL COUNTRIES
Our diet has significant consequences on the balance of our microbiome	82	-1pt	78
In some cases, an imbalance in the microbiome may have significant health consequences	81	-4pts	77
The microbiome plays an important role in immune defense mechanisms	76	=	74
Antibiotics have an impact on our microbiome	73	+1pt	70
In the field of vaginal health, the microbiome plays an important role in women's health	69	-4pts	68
Many diseases such as irritable bowel syndrome (IBS), obesity, vaginose could be linked to the microbiome	63	New item	64
The microbiome enables the gut to deliver essential information to the brain for our health	53	-3pts	53
Your microbiome is located exclusively in the gut	47	-2pts	46
The microbiome is only made up of bacteria	26	New item	28

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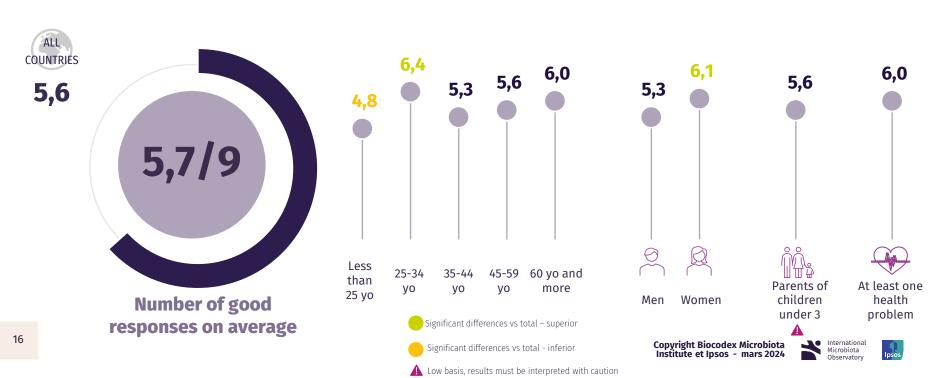


Woman and people aged 25-34yo have a better knowledge about the microbiome.



Question 4. For each of the following statements, tell us if you think it is TRUE or FALSE. If you are unsure about your answer, answer I do not really know.

Base: All respondents





To maintain a balanced microbiome,
Portuguese are less likely to change their behaviors



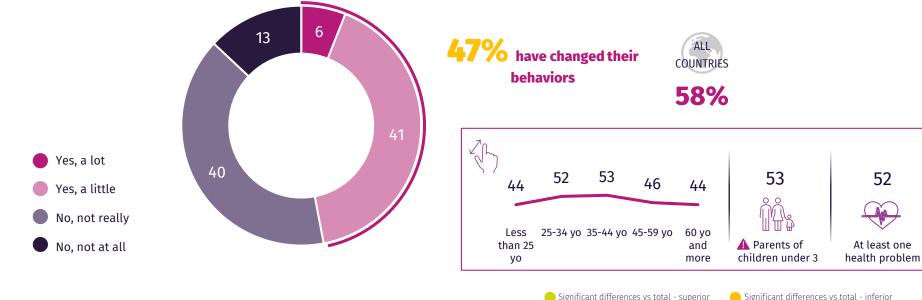


Less than half of people have changed their behaviors to keep their microbiome balanced and functioning as smoothly as possible, a lower proportion than in other countries.



Question 10. And in your daily life, have you changed your behaviors to keep your microbiome as balanced and functioning as smoothly as possible?

Base: All respondents







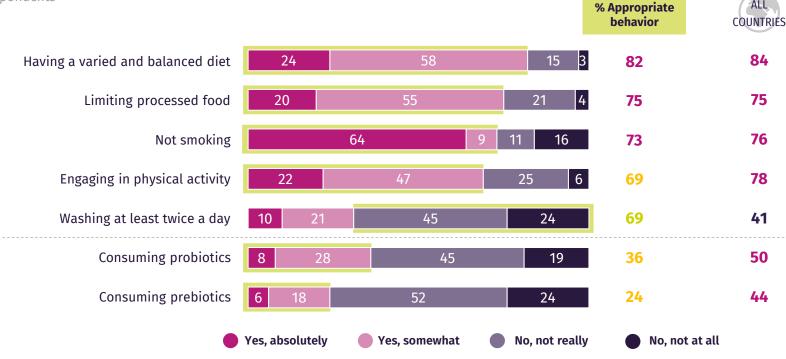


ALL

"Standard" healthy behaviors are mostly adopted by people. However, the use of probiotics and prebiotics is not yet part of their daily life.

QUESTION

Question 11. In your daily life, do you regularly adopt the following behaviors? Base: All respondents



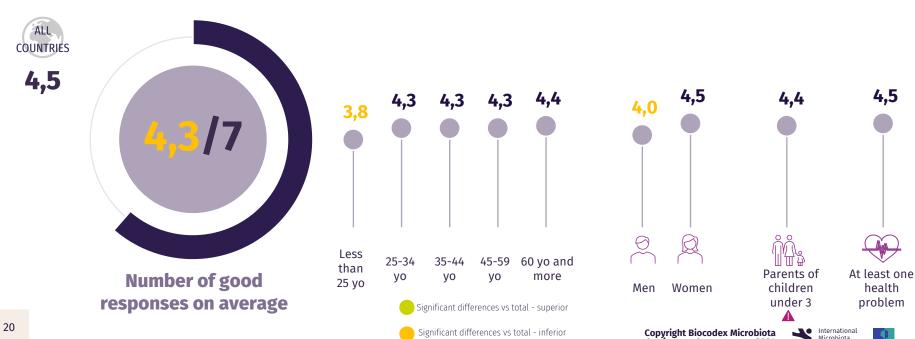




People aged less than 25 yo and men have adopted fewer appropriate behaviors for their microbiome than the average.

QUESTION

Question 11. In your daily life, do you regularly adopt the following behaviors? Base: All respondents



Low basis, results must be interpreted with caution

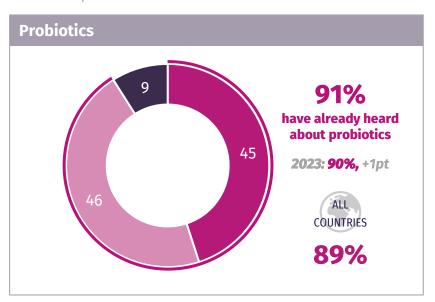
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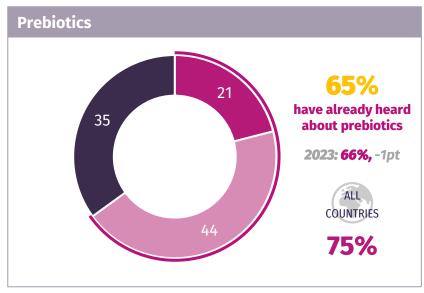


While Portuguese are well aware of probiotics, they appear to know less about prebiotics.



Question 2bis. And have you ever heard of these terms? Base: All respondents





Yes, and I know exactly what it is Yes, but I don't know exactly what it is



No. I never heard about it



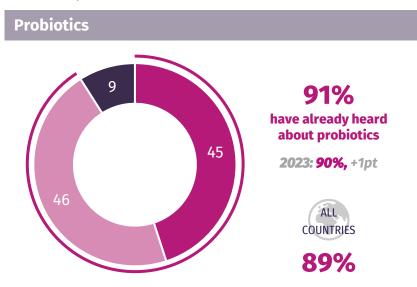


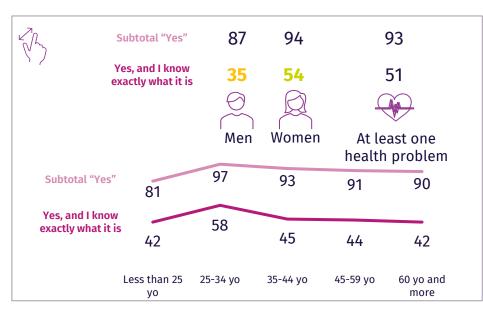


Women have a better knowledge of probiotics than men.



Question 2bis. And have you ever heard of these terms? Base: All respondents





Yes,

Yes, and I know exactly what it is

Yes, but I don't know exactly what it is

No. I never heard about it





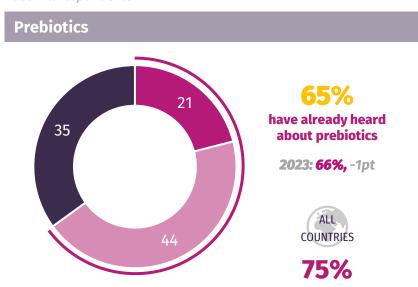


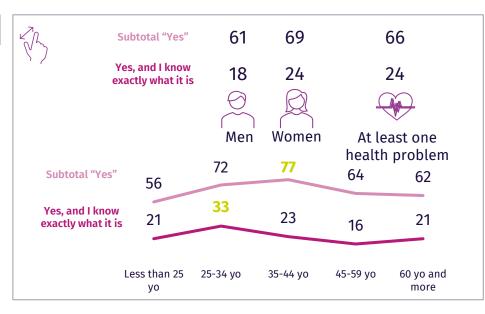


People aged 25 to 44 yo are more aware of prebiotics.



Question 2bis. And have you ever heard of these terms? Base: All respondents





Yes, and I know exactly what it is

Yes, but I don't know exactly what it is

No. I never heard about it







When faced with a microbiome-related health problem, some people actually do not link it to their microbiome



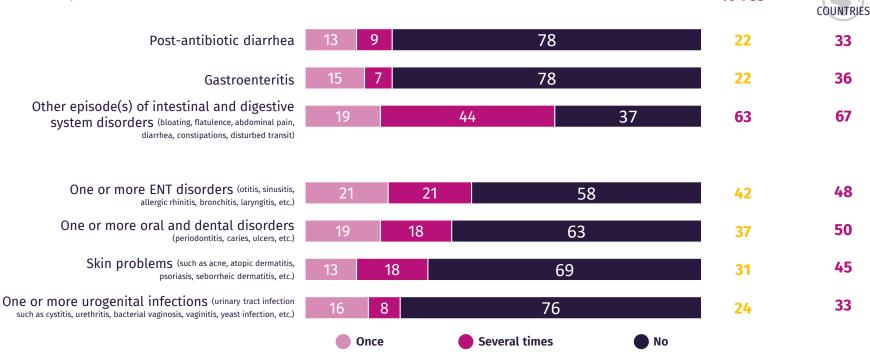
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ALL

In the last 12 months, 1 in 5 people have experienced post-antibiotic diarrhea or gastroenteritis, while 2 out of 3 had other episodes of intestinal and digestive system disorders.



Question 11a. Over the past 12 months, have you ever experienced the following problems? Base: All respondents



% Yes

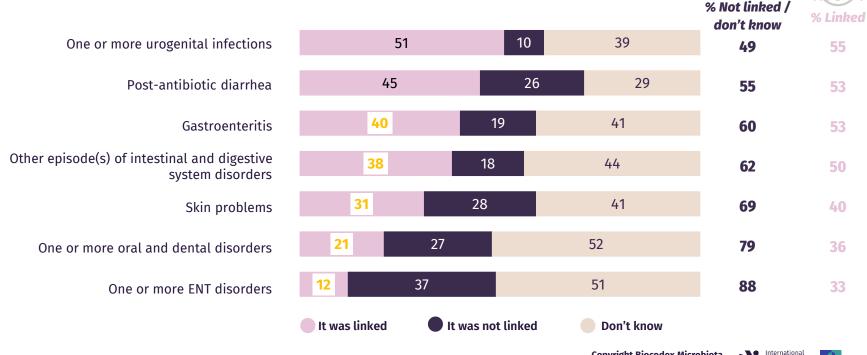


ALL

COUNTRIES

When suffering health problems, most people can't say whether the problem is linked to their microbiome or not.

NEW QUESTION Question 11b. And do you think this or these problems are linked to your microbiome? Base: People who have experienced these problems

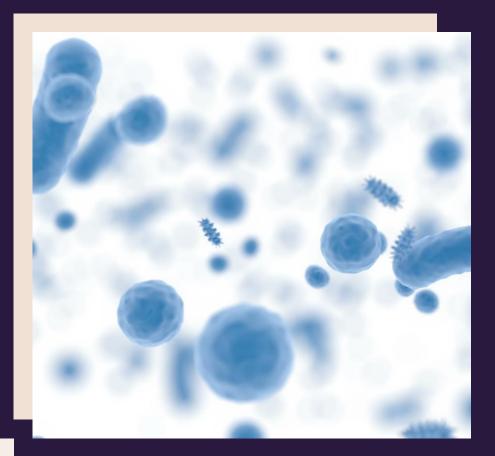






HCPs have a greater role to play in Portugal, even more as they are perceived as the most important and trusted source of information on microbiome





Text displayed to respondents:

The microbiome (or microbial flora) is a group of microorganisms such as bacteria, viruses, fungi and archaea, which live in symbiosis in our body, mainly in our digestive tract but also on the skin, in the lungs, ears, mouth and vagina.

The microbiome has many consequences for our health because it fulfils essential functions such as digesting foods, synthesis of vitamins and stimulating our immune system.

An unbalanced microbiome could be involved in certain diseases such as allergies, obesity and chronic inflammatory bowel diseases.

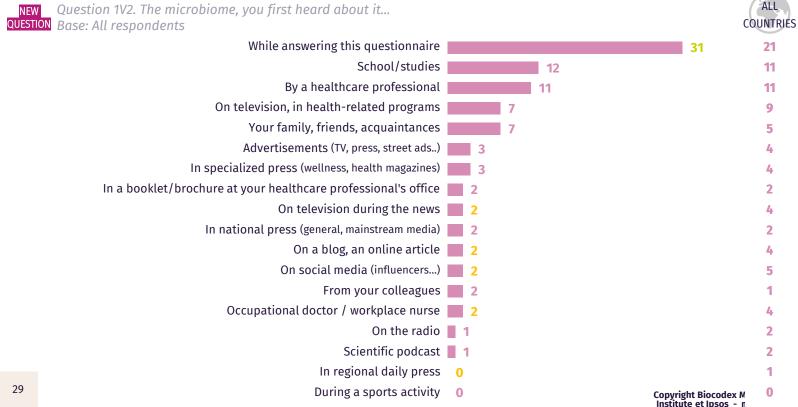
Recent studies also suggest that the microbiome can have an impact on our mental health and behavior, influencing our mood, cognition and motivation.







Almost 1 in 3 people discover the microbiome answering the survey. Otherwise, the main sources are schools and healthcare professionals.



Other







Respondents aged less than 34 yo first heard about the microbiome through school or studies.

Question 1V2. The microbiome, you first heard about it...

UESTION Base: All respondents	Total	Less than 25 yo	25-34 yo	35-44 yo	45-59 yo	60 yo and more	Men	Women	Parents of children under 3	At least one health problem
		n=47	n=67	n=88	n=144	n=154	n=232	n=268	▲ n=29	n=317
While answering this questionnaire	31	23	19	24	31	41	30	32	21	34
School/studies	12	26	26	17	10	2	9	15	22	11
By a healthcare professional	11	2	8	6	14	14	11	12	10	11
On television, in health-related programs	7	2	3	9	10	7	8	6	10	7
Your family, friends, acquaintances	7	11	6	10	3	6	7	6	7	6
Advertisements (TV, press, street ads)	3	2	6	2	6	1	4	3	0	3
In specialized press (wellness, health magazines)	3	3	0	1	4	3	3	2	0	3
In a booklet/brochure at your healthcare professional's office	2	3	1	5	1	2	2	2	0	2
On television during the news	2	2	6	1	1	3	3	2	0	2
In national press (general, mainstream media)	2	5	3	2	0	2	2	2	0	2
On a blog, an online article		4	4	2	1	3	1	3	0	3
On social media (influencers)		1	6	1	1	1	1	2	6	2
From your colleagues	2	0	1	4	3	2	4	1	0	2
Occupational doctor / workplace nurse	2	1	3	1	0	3	2	1	0	2
On the radio	1	0	1	1	1	0	1	0	4	0
Scientific podcast	1	2	2	2	1	0	1	1	0	1
In regional daily press	0	0	0	0	1	1	1	0	0	1
During a sports activity	0	0	0	0	0	0	0	0	0	0
0 Other	10	13	5	12	12	9	10	10	20	8

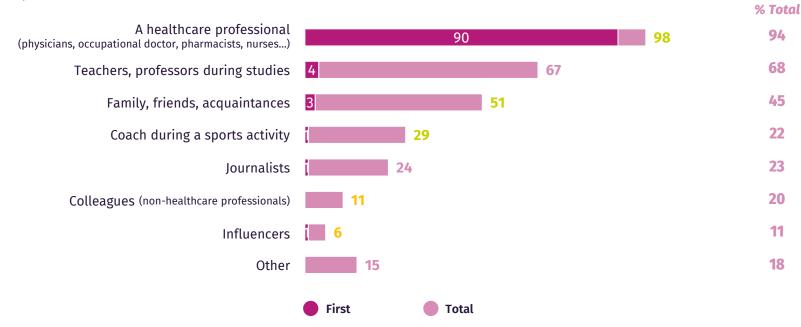


COUNTRIES

NEW QUESTION

Healthcare professionals stand out as the most trusted source of information about the microbiome, even more than in other countries.

Question 2V2. For relevant and trustworthy information about microbiome, who would you trust the most? Select the sources you would trust the most: 1st, 2nd, 3rd Base: All respondents





While the HCP is the most reliable source of information, people aged 60yo and more also rely on relatives to have information.

Question 2V2. For relevant and trustworthy information about microbiome, who would you trust the most? Select the sources you would trust the most: 1st, 2nd, 3rd

Base: All respondents	Total	Less than 25 yo	25-34 yo	35-44 yo	45-59 yo	60 yo and more	Men	Women	Parents of children under 3	At least one health problem
		n=47	n=67	n=88	n=144	n=154	n=232	n=268	▲ n=29	n=317
A healthcare professional (physicians, occupational doctor, pharmacists, nurses)	98	91	93	100	99	99	98	98	97	97
Teachers, professors during studies		77	70	67	63	66	66	68	74	67
Family, friends, acquaintances	51	40	52	46	43	62	52	50	45	49
Coach during a sports activity	29	42	32	23	28	27	27	31	14	32
Journalists	24	21	28	25	33	18	28	21	32	24
Colleagues (non-healthcare professionals)		6	10	11	11	12	11	10	3	12
Influencers	6	10	8	10	8	2	7	5	7	7
Other	15	14	8	19	16	15	12	18	28	12









Only a minority of Portuguese have received information from health professionals, a result that has not improved since last year.



Question 5. Have any of the healthcare professionals you have seen ever done any of the following? Base: All respondents

Only 18% received ALL THE 6% received <u>all these i</u>	% Yes	Evolution vs 2023		
Explain the good behavior to adopt in order to maintain a good balance within your microbiome as much as possible	21 17	62	38	+3pts
Educate you about the importance of preserving as much as possible the balance of your microbiome	21 16	63	37	+1pt
Explain to you what the microbiome is and what its role and function are *	14 17	69	31	+5pts
Prescribe probiotics or prebiotics	14 17	69	31	-1pt
	Yes, several times Yes, one	ce No, never		

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Moreover, Portuguese people seem less informed compared to the other countries: only 18% have received all this information, compared to one third in all countries.

Question 5. Have any of the healthcare professionals you have seen ever done any of the following? Base: All respondents

% Yes

	Total	COUNTRIES
% Received ALL THESE INFORMATION, at least one time	18	30
% Received ALL THESE INFORMATION, several times	6	9
Explain the good behavior to adopt in order to maintain a good balance within your microbiome as much as possible		48
Educate you about the importance of preserving as much as possible the balance of your microbiome	37	48
Explain to you what the microbiome is and what its role and function are	31	45
Prescribe probiotics or prebiotics	31	50

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Results are quite similar across all age groups. People aged 60 yo and over seem to have received fewer prescriptions from healthcare professionals.



Question 5. Have any of the healthcare professionals you have seen ever done any of the following? Base: All respondents

% Yes	To	otal	Less than 25 yo	25-34 yo	35-44 yo	45-59 yo	60 yo and more	Men	Women	Parents of children under 3	At least one health problem
	base n	=500	n=47	n=67	n=88	n=144	n=154	n=232	n=268	▲ n=29	n=317
Explain the good beha adopt in order to mai good balance with microbiome as much as p	ntain a in your	38	41	44	36	43	33	37	39	41	39
Educate you about the importance of preser much as possible the balance your micro	ving as ance of	37	28	38	39	42	33	36	38	38	40
Explain to you w microbiome is and what and funct	its role :	31	25	39	31	33	28	31	31	36	35
Prescribe probiotics or pre	ebiotics :	31	33	37	33	34	25	27	34	39	31







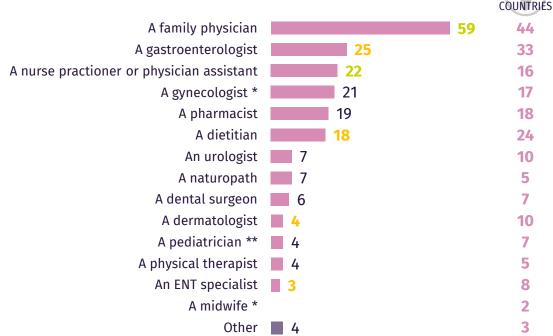






In Portugal, the family physician is the main source of information about the microbiome, ahead of gastroenterologists, nurse practitioners and physician assistants.

NEW Question 6. And which healthcare professionals provided you with these explanations? QUESTION Base: People who've received information from HCPs (n=254)



^{*} Item displayed to women





^{**} Item displayed to parents



For women, the gynecologist appear as an important source of information about the microbiome.

Question 6. And which healthcare professionals provided you with these explanations? Base: People who've received information from HCPs (n=254)

	Total	Less than 25 yo	25-34 yo	35-44 yo	45-59 yo	60 yo and more	Men	Women	Parents of children under 3	At least one health problem
base	n=254	<u> </u>	▲ n=34	n=45	n=80	n=68	n=104	n=150	▲ n=14	n=169
A family physician	59	50	60	53	61	61	67	53	63	52
A gastroenterologist	25	21	22	20	30	26	31	22	18	26
A nurse practioner or physician assistant	22	19	15	18	18	32	19	24	26	23
A gynecologist	21	18	36	24	19	17	0	36	39	19
A pharmacist	19	16	31	18	15	18	23	16	18	19
A dietitian	18	13	16	21	16	22	20	17	37	18
An urologist	7	4	14	2	5	10	8	6	11	5
A naturopath	7	0	4	10	9	8	4	9	18	8
A dental surgeon	6	4	11	2	7	4	6	5	11	4
A dermatologist	4	8	12	2	3	2	4	4	11	3
A pediatrician	4	4	9	5	5	0	4	4	11	3
A physical therapist	4	0	3	8	2	3	5	2	0	3
An ENT specialist	3	2	11	5	2	0	2	4	11	4
A midwife	0	3	0	0	0	0	0	1	0	0
Other	4	0	6	6	5	2	3	4	11	4

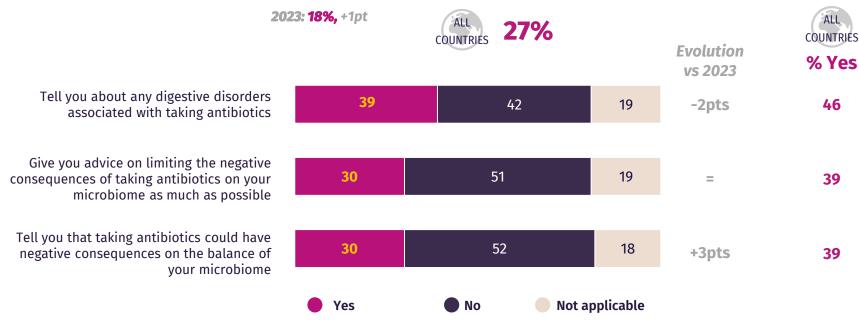


This year again, only a minority of people have received information about microbiome when they were prescribed antibiotics, even fewer than in other countries.



Question 7. The last time a doctor prescribed antibiotics, did they do the following? Base: All respondents

Only 19% received ALL THESE INFORMATION from their HCPs









Results are quite similar across all age groups.



Question 7. The last time a doctor prescribed antibiotics, did they do the following? Base: All respondents

% Yes		Total	Less than 25 yo	25-34 yo	35-44 yo	45-59 yo	60 yo and more	Parents of children under 3	At least one health problem
	base	n=500	n=47	n=67	n=88	n=144	n=154	▲ n=29	n=317
% HAVE <u>RECEIVED</u>	ALL THESE INFORMATION FROM THEIR HCPS	19	15	19	12	21	23	20	21
	ny digestive disorders with taking antibiotics	39	39	43	35	42	38	40	44
negative co	advice on limiting the onsequences of taking n your microbiome as much as possible	30	28	24	22	29	36	20	33
have negative	king antibiotics could consequences on the ce of your microbiome	30	25	33	22	30	35	20	33

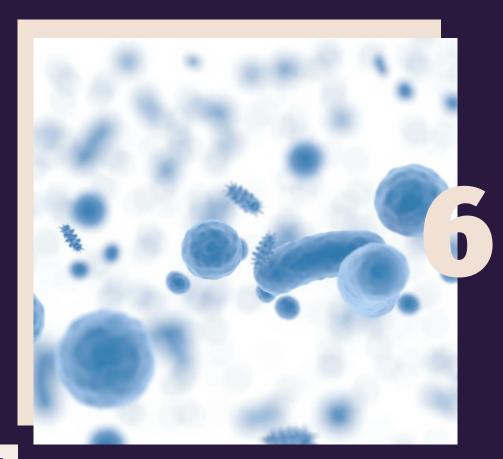








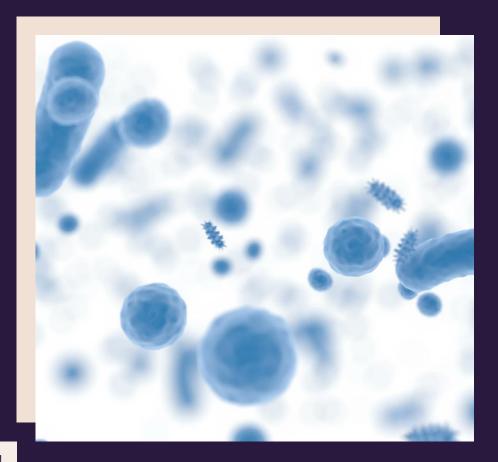




Focus on the vaginal microbiome

In the next questions, we will discuss the vaginal microbiome, also known as vaginal flora.





Text displayed to respondents:

In the next questions, we will discuss the vaginal microbiome, also known as vaginal flora. Please read before answering the next questions.

Many people say "vagina" whereas they usually refer to the vulva. The vulva is the outside, visible part of your genitals — your labia (lips), clitoris, vaginal opening, and the opening to your urethra (the hole you pee out of). The vagina is the inside - the stretchy tube that connects your vulva to your cervix and uterus. The vagina allows for sexual intercourse and birth. It also channels menstrual flow.





Some aspects of the vaginal microbiome are quite well-known, particularly the effects of antibiotics and vaginal dryness on the vaginal microbiome.



Question 13. For each of the following statements, tell us if you think it is TRUE or FALSE. If you are unsure about your answer, answer I do not really know.

Base: <u>Women</u>	Good answer			Wrong answers don't know
Antibiotics can alter the vaginal microbiome		76 🗸	2 22	24
Vaginal dryness/dehydration has consequences on vaginal microbiome		75 🗸	<mark>2</mark> 23	25
The vaginal microbiome acts as a barrier, protecting us from pathogenic microorganisms		72 🗸	<mark>2</mark> 26	28
Every woman has a vaginal microbiome that is different from any other woman's		71 🗸	<mark>3</mark> 26	29
From childhood to menopause, a woman's vaginal microbiome remains the same	3	71 🗸	26	29
Smoking has no consequences on the vaginal microbiome	8	59 🗸	33	41
	True	False Do	on't really know	



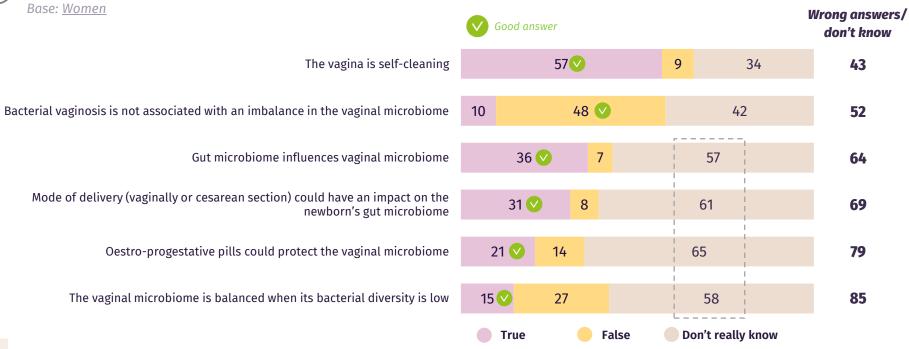




However, other aspects are still unknown by a majority of women such as the influence of the gut microbiome on the vaginal microbiome.



Question 13. For each of the following statements, tell us if you think it is TRUE or FALSE. If you are unsure about your answer, answer I do not really know.









Some aspects are better known in Portugal than in the other countries and others are not. Moreover, compared to last year results, women are more likely to be aware of the connexion between bacterial vaginosis with the vaginal microbiome.

Question 13. For each of the following statements, tell us if you think it is TRUE or FALSE. If you are unsure about your answer, answer I do

not	rea	lly	know.
Dac	0.1/	1/on	200

	Total	Evolution vs 2023	ALL COUNTRIES
Antibiotics can alter the vaginal microbiome	76	New item	69
ss/dehydration has consequences on vaginal microbiome	75	New item	69
crobiome acts as a barrier, protecting us from pathogenic microorganisms	72	+2pts	68
ginal microbiome that is different from any other woman's	71	+7pts	64
opause, a woman's vaginal microbiome remains the same	71	+5pts	55
Smoking has no consequences on the vaginal microbiome	59	New item	55
The vagina is self-cleaning	57	-2pts	56
t associated with an imbalance in the vaginal microbiome	48	<u>+11pts</u>	44
Gut microbiome influences vaginal microbiome	36	New item	43
aginally or cesarean section) could have an impact on the newborn's gut microbiome	31	New item	40
o-progestative pills could protect the vaginal microbiome	21	New item	22
microbiome is balanced when its bacterial diversity is low	15	-11pts	30
	ss/dehydration has consequences on vaginal microbiome crobiome acts as a barrier, protecting us from pathogenic microorganisms ginal microbiome that is different from any other woman's opause, a woman's vaginal microbiome remains the same Smoking has no consequences on the vaginal microbiome The vagina is self-cleaning t associated with an imbalance in the vaginal microbiome Gut microbiome influences vaginal microbiome aginally or cesarean section) could have an impact on the newborn's gut microbiome o-progestative pills could protect the vaginal microbiome	Antibiotics can alter the vaginal microbiome ss/dehydration has consequences on vaginal microbiome crobiome acts as a barrier, protecting us from pathogenic microorganisms final microbiome that is different from any other woman's opause, a woman's vaginal microbiome remains the same Smoking has no consequences on the vaginal microbiome The vagina is self-cleaning transcriptions associated with an imbalance in the vaginal microbiome Gut microbiome influences vaginal microbiome againally or cesarean section) could have an impact on the newborn's gut microbiome o-progestative pills could protect the vaginal microbiome 21	Antibiotics can alter the vaginal microbiome ss/dehydration has consequences on vaginal microbiome crobiome acts as a barrier, protecting us from pathogenic microorganisms ginal microbiome that is different from any other woman's opause, a woman's vaginal microbiome remains the same Smoking has no consequences on the vaginal microbiome The vagina is self-cleaning the vaginal microbiome T





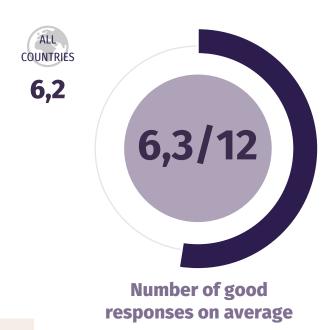


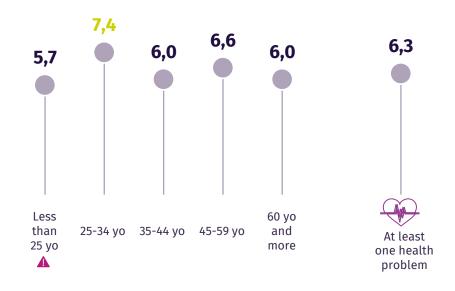
Women aged 25-34yo have a better knowledge about the vaginal microbiome.



Question 13. For each of the following statements, tell us if you think it is TRUE or FALSE. If you are unsure about your answer, answer I do not really know.

Base: Women







Significant differences vs total - inferior

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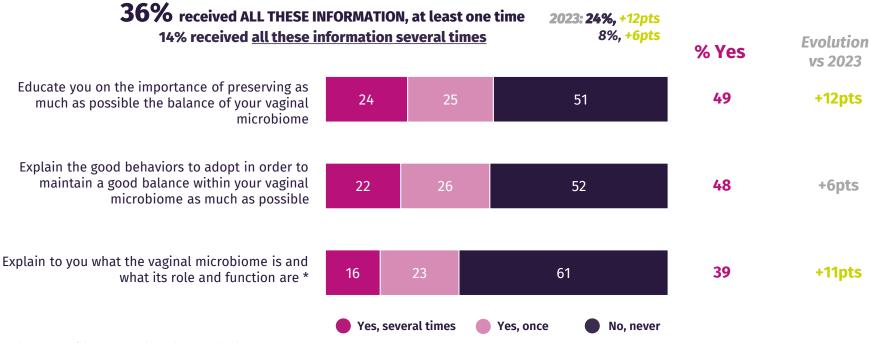




Women have received more advice and information about vaginal microbiome from their HCPs than last year but it remains a minority.



Question 14. Has the healthcare professional following your gynecological health talked to you about the following? Base: Women













The level of information about the vaginal microbiome from a HCP is very similar compared to the global results.

Question 14. Has the healthcare professional following your gynecological health talked to you about the following? Base: Women

% Yes

	Total	ALL COUNTRIES
% Have received ALL THESE INFORMATION, at least one time	36	37
% Received ALL THESE INFORMATION, <u>several</u> <u>times</u>	14	14
Educate you on the importance of preserving as much as possible the balance of your vaginal microbiome	49	48
Explain the good behaviors to adopt in order to maintain a good balance within your vaginal microbiome as much as possible	48	48
Explain to you what the vaginal microbiome is and what its role and function are	39	43





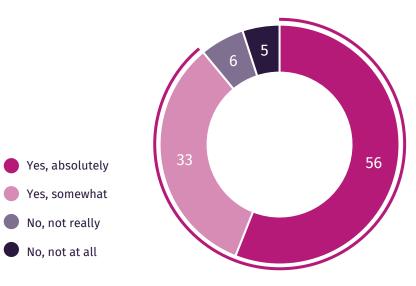


The vast majority of women would like to have more information about the importance of the vaginal microbiome and its impact on health.



Question 15. And would you like the healthcare professional monitoring your gynecological health to tell you more about the importance of your vaginal microbiome and its impact on your health?

Base: Women

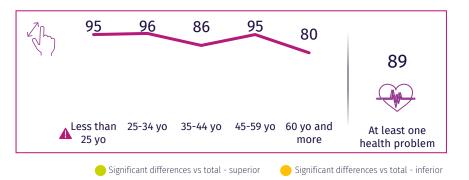


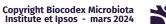
89% would like to have more information about the importance of the vaginal microbiome and its impact on health



88%

2023: 92%, -3pts





Low basis, results must be interpreted with caution.





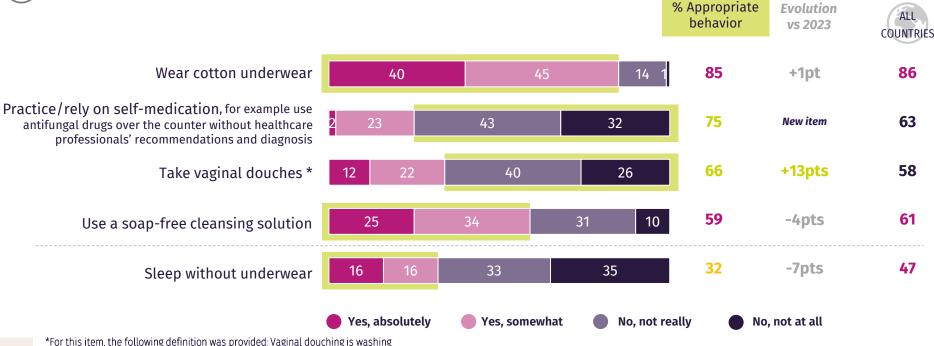


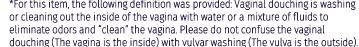
This year, Portuguese women are more likely to avoid vaginal douches. However, only a third is sleeping without underwear, less compared to all countries.



Question 16. In your daily life, do you regularly adopt the following behaviors?

Base: Women













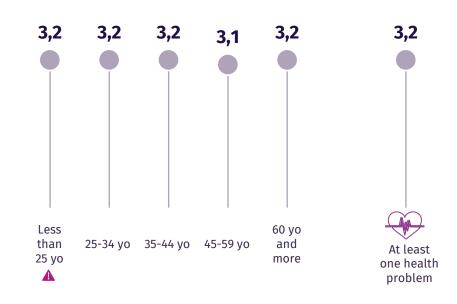
Overall, Portuguese women, regardless of age, have adopted the same level of behaviours appropriate for their vaginal microbiome.



Question 16. In your daily life, do you regularly adopt the following behaviors? Base: Women

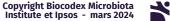


Number of appropriate behaviors adopted on average















Main results



Learnings on Portuguese results



11%

50%

Awareness of the microbiome & its diversity	
Know exactly what is « microbiome »	15%
Subtotal « Aware »	62%
Subtotal Aware of the gut microbiome	42%
Subtotal Aware of all microbiome	25%

Level of knowledge around the microbiota	
Mean of good answers	5,7/9

Level of knowledge around the solutions which can maintain the	microbiota balanced
Know exactly what are probiotics	45% /
Know exactly what are prebiotics	21%

Have changed their behaviors	47%
------------------------------	-----

Have heard about the microbiome from healthcare professional

Received at least one piece of information at least once

Key learnings

Awareness of the microbiome is lower in Portugal than in other countries and hasn't improved. As last year, the Portuguese are more familiar with the term "flora", which they know more than the average.

In terms of knowledge of the role and functions of the microbiome, Portuguese results are close to the global results, but no improvement can be noticed compared to last year results, meaning there is room for improvement

Almost one in two have changed their behaviour to keep their microbiome in balance, less than the average. More specifically, the Portuguese are the least likely to consume probiotics and prebiotics. This can be explained by the lack of information received by the Portuguese: only a minority of them already have information about the microbiome, which is less compared to other countries.

In Portugal, HCPs are considered as the most trusted source of information on the microbiome. For those who had information, it was mainly from their GP, gastroenterologist or nurse.







ANNEXES



FIABILITÉ DES RÉSULTATS

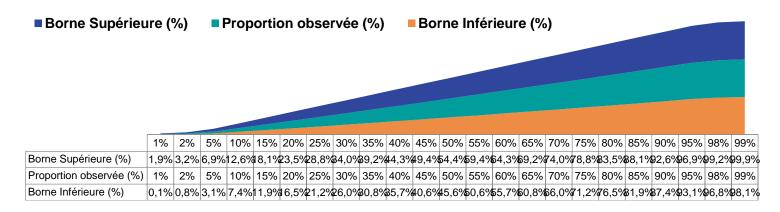
Feuille de calcul

En l'occurrence s'agissant de cette étude :

Intervalle de confiance : 95%

■ Taille d'échantillon : 500

Les proportions observées sont comprises entre :





SURVEY OVERVIEW

CAWI survey – Online panel



SAMPLE

- Target : Male/female 18 and more in each country
- Selection of the respondent : participant selection using quotas
- Sample representativeness: criteria and sources: gender, age, active/inactive status, regions



DATA COLLECTION

- Fieldwork dates : January 26th February 26th 2024
- Sample achieved: 7,500 interviews (1000 for France, Mexico, US and China, 500 in other countries)
- Data collection : on line
- Loyalty program with points- based award system for panelists
- Response quality control methods: monitoring of participants' response behavior (identification of responses that are too quick or careless, e.g. ticked in a straight or zigzag line)
- Checking of IP and consistency of demographic data.



DATA PROCESSING

- Weighted sample
- Method used: Rim Weighting Method
- Weighting criteria: criteria and sources: gender, age, active/inactive status, regions

SURVEY MATERIAL THE QUESTIONNAIRE



Document Microsoft Word





RELIABILITY OF RESULTS: SELF COMPLETION ONLINE SURVEYS IIS

To ensure the overall reliability of a survey, all possible error components must be taken into account. That is why Ipsos imposes strict controls and procedures at each stage of the survey process.

UPSTREAM OF THE DATA COLLECTION

- **Sample:** structure and representativeness
- Questionnaire: the questionnaire is worded by following an editing process with 12 compulsory standards. It is proofread and approved at a senior level and then sent to the client for final validation. The programming (or questionnaire script) is tested by at least 2 people and validated.
- Data collection: the interviewers are trained in survey techniques through a dedicated training module prior to any participation in a survey. In addition, they receive or attend a detailed briefing at the start of each survey.

DURING THE DATA COLLECTION

Sampling: Ipsos imposes very strict operating rules for its selection frame in order to maximize the random nature of the sample selection: random selection from telephone listings, quota method, etc. Fieldwork monitoring: collection is monitored and checked (exclusive link, IP validation, panelists' behavior monitoring penetration, interview length, consistency of responses, participation rate, number of reminders, etc.)

DOWNSTREAM OF THE DATA COLLECTION

- The results are analyzed in accordance with the statistical analysis methods (confidence interval versus sample size, significance tests). The first results are systematically checked against the raw results from the data collection. The consistency of results is also checked (particularly the results observed versus comparison sources in our possession).
- In cases where sample weighting is used (margin calibration method), this is checked by the processing teams (DP) and then validated by the survey teams.





SURVEY OVERVIEW

Organization (CAWI survey - Online panel)



ACTIVITIES CARRIED OUT OR COORDINATED BY IPSOS TEAMS IN FRANCE

- Design and methodology
- Validation of scripting
- Coordination and validation of translation
- Coordination of data collection
- Data processing
- Validation of the statistical analyses
- Creation of survey report
- Results presentation design
- Oral presentation Analyses



ACTIVITIES CARRIED OUT BY IPSOS EXPERT LOCAL TEAMS

- Translation
- Scripting
- Sampling (IIS panel)
- Emailing
- Data collection
- Data Map





ABOUT IPSOS

lpsos is the third largest market research company in the world, present in 90 markets and employing more than 18,000 people.

Our research professionals, analysts and scientists have built unique multi-specialist capabilities that provide powerful insights into the actions, opinions and motivations of citizens, consumers, patients, customers or employees. Our 75 business solutions are based on primary data coming from our surveys, social media monitoring, and qualitative or observational techniques.

"Game Changers" – our tagline – summarises our ambition to help our 5,000 clients to navigate more easily our deeply changing world.

Founded in France in 1975, Ipsos is listed on the Euronext Paris since July 1st, 1999. The company is part of the SBF 120 and the Mid-60 index and is eligible for the Deferred Settlement Service (SRD).

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GAME CHANGERS

In our world of rapid change, the need for reliable information to make confident decisions has never been greater.

At losos we believe our clients need more than a data supplier, they need a partner who can produce accurate and relevant information and turn it into actionable truth.

This is why our passionately curious experts not only provide the most precise measurement, but shape it to provide True Understanding of Society, Markets and People.

To do this we use the best of science, technology and know-how and apply the principles of security, simplicity, speed and substance to everything we do.

So that our clients can act faster, smarter and bolder. Ultimately, success comes down to a simple truth: You act better when you are sure.



