



International Microbiota Observatory

L'Observatoire International
des Microbiotes

Third wave

Polish results







A large, light-colored rectangular area on the left side of the slide, containing a dense, overlapping pattern of various bacterial shapes, including rods, cocci, and branching structures, rendered in a light gray or off-white color against a white background.

Methods

Methods


This international survey was conducted online in **11 countries** from January 21st– February 28th, 2025. **7,500 people** were interviewed in the 11 countries, among representative samples of the population aged 18 y.o. and more in each country.



6 countries had already been surveyed in 2024 and in 2023:

-  United States of America (n=1,000)
-  Brazil (n=500)
-  Mexico (n=1,000)
-  France (n=1,000)
-  Portugal (n=500)
-  China (n=1,000)

3 countries had been added to the survey in 2024:

-  Poland (n=500)
-  Finland (n=500)
-  Vietnam (n=500)

 *2 countries have been added to the scope this year:*

-  Germany (n=500)
-  Italy (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



ALL COUNTRIES

(n=7,500)



= Average response for all 11 countries.

= 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

+Xpts/-Xpts

Significant changes since the last wave (2024)

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.

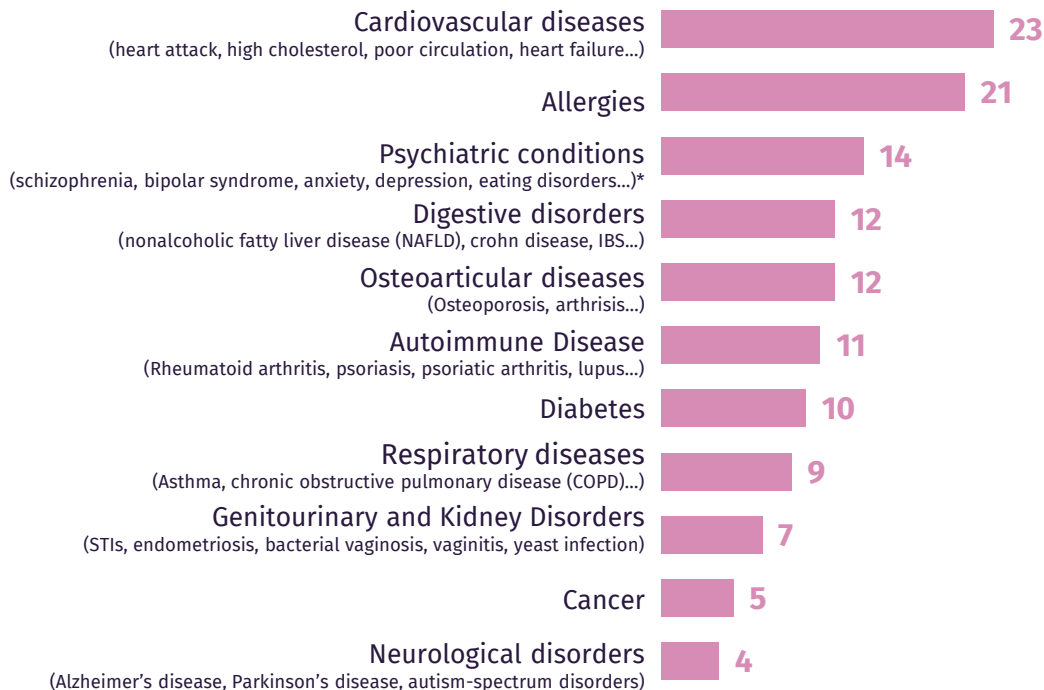


People with current conditions A focus detailed throughout the report



RS10. Among the following health problems, indicate those you suffer from.

Base: All respondents



*This item has been detailed compared to last year



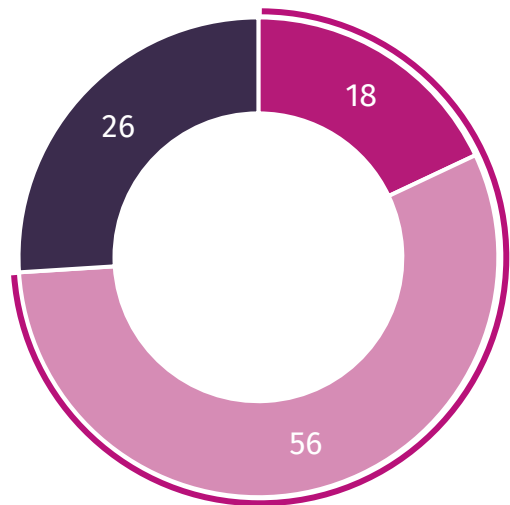
Polish awareness of the microbiome aligns with global trends, but shows no signs of progression in 1 year.



Almost 4 out of 5 people have already heard of the term 'microbiome', but still less than 1/5 know exactly what it is, no evolution observed.

Question 2. Have you ever heard of the "microbiome"?

Base: All respondents

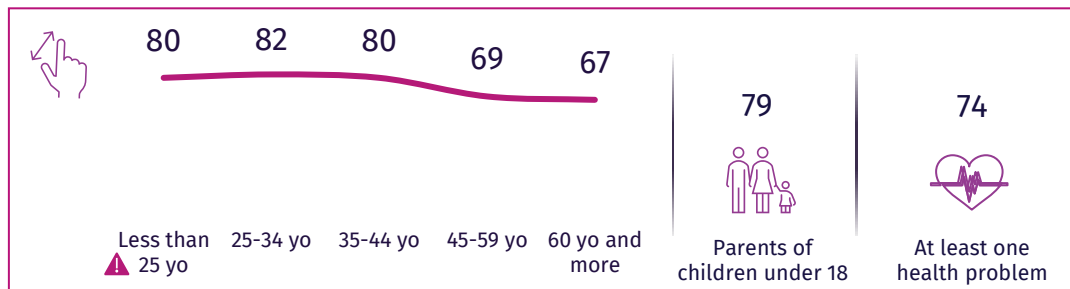


- Yes, and I know exactly what it is
- Yes, but I don't know exactly what it is
- No, I never heard about it

74% have already heard about the term microbiome
2024 : 75% -1pt vs 2024



71%



- Significant differences vs total - superior
- Significant differences vs total - inferior
- ▲ Low basis, results must be interpreted with caution

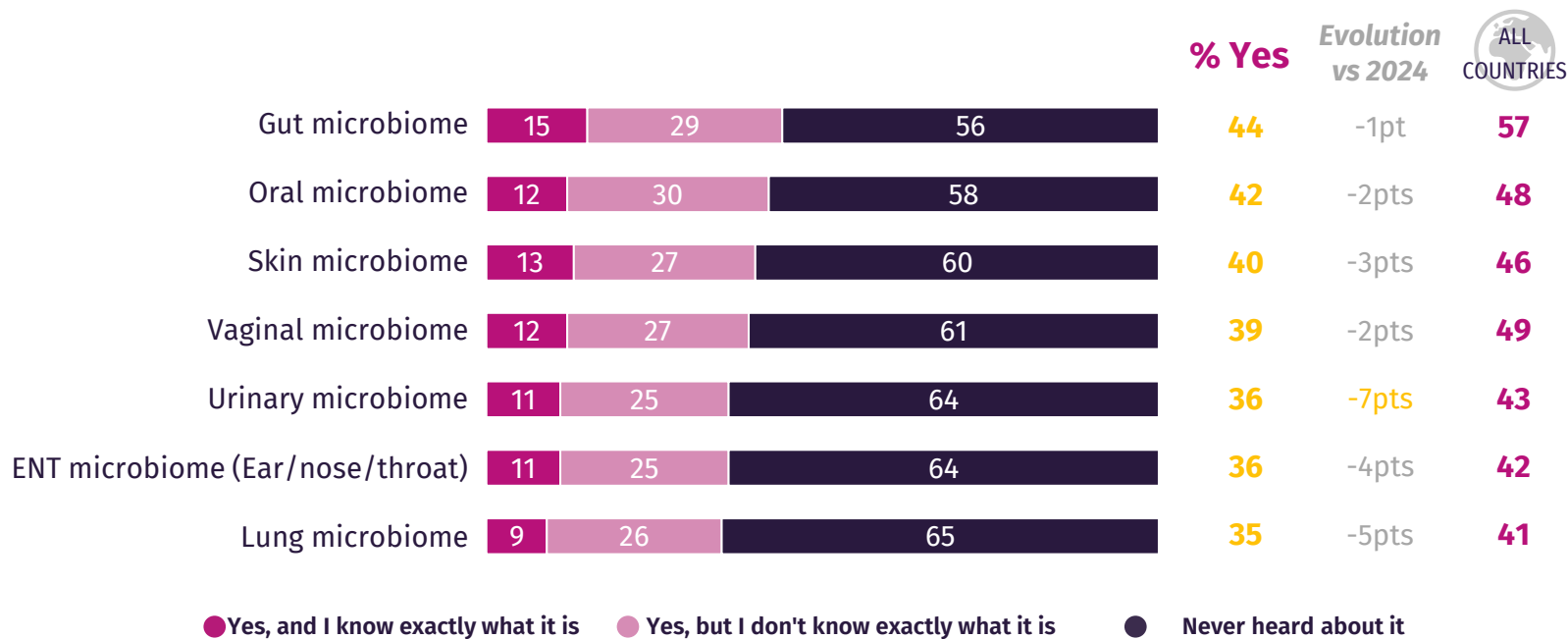


In detail, awareness of different microbiome types remains limited, lagging behind global results and showing no progress. Only a small proportion of respondents know exactly what they are.



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

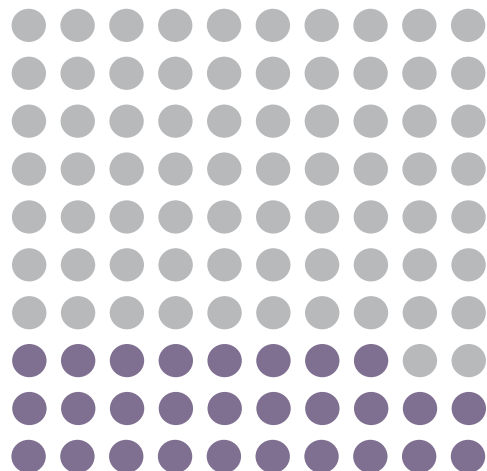
Base: All respondents



In fact, approximately one-quarter of respondents have heard about each microbiome type, mirroring global trends but demonstrating no advancement in public Polish awareness.

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

Base: All respondents



28% have already heard of each microbiome:
Gut, vaginal, skin, lung, urinary, oral and ENT microbiome

2024 : **31%** -3pts vs 2024



31%



But only 6% know precisely all of them

2024 : **6%** = vs 2024



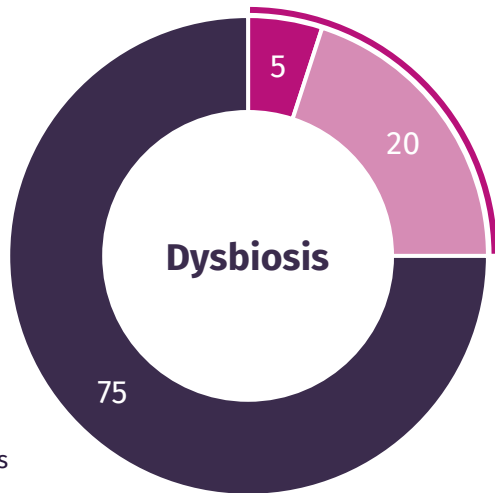
7%



Dysbiosis is not a popular term among Polish people, even slightly lower compared to last year and to global average. The 35-44 yo are those more aware about it.

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

Base: All respondents



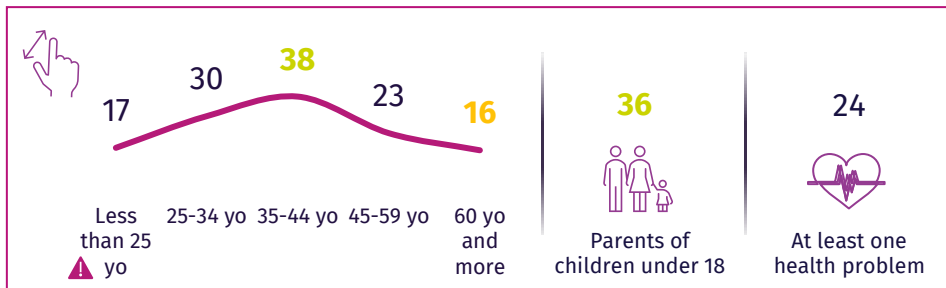
- Yes, and I know exactly what it is
- Yes, but I don't know exactly what it is
- Never heard about it

25% have already heard about the term 'dysbiosis'

2024 : 27% -2pts vs 2024



33%



Significant differences vs total - superior Significant differences vs total - inferior

Low basis, results must be interpreted with caution



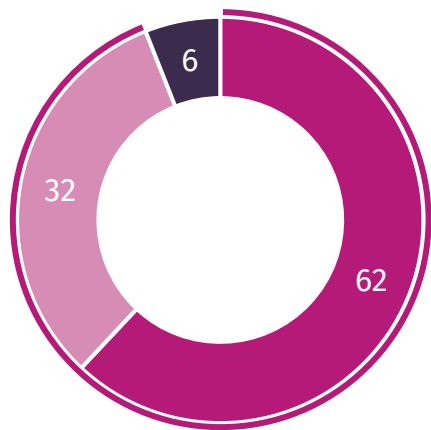
As observed in the previous year, the term 'flora' remains more widely recognized than 'microbiome' in Poland.



Question 2bis. And have you ever heard of these terms?

Base: All respondents

Gut flora



94%

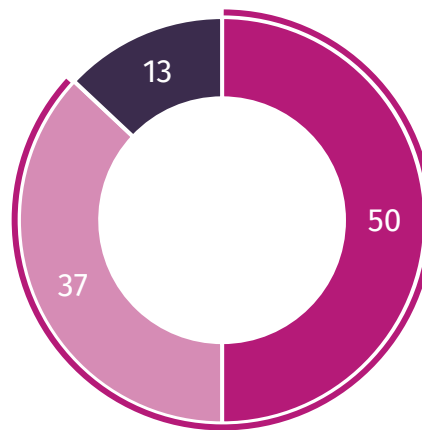
have already heard
about gut flora

2024 : 95% -1pt vs 2024



91%

Vaginal flora



87%

have already heard
about vaginal flora

2024 : 87% = vs 2024



81%



Yes, and I know exactly what it is



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



No, I never heard about it



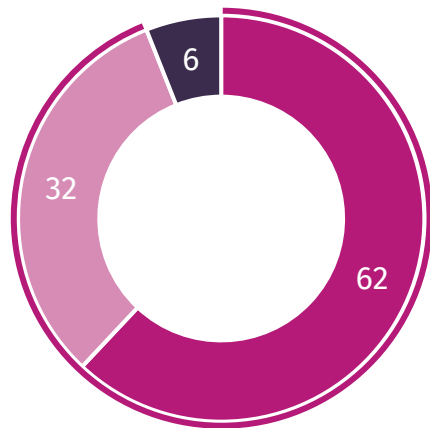
Consistent with previous findings, knowledge of gut flora continues to be widespread, showing no significant variation across gender, age, or health status.



Question 2bis. And have you ever heard of these terms?

Base: All respondents

Gut flora



94%

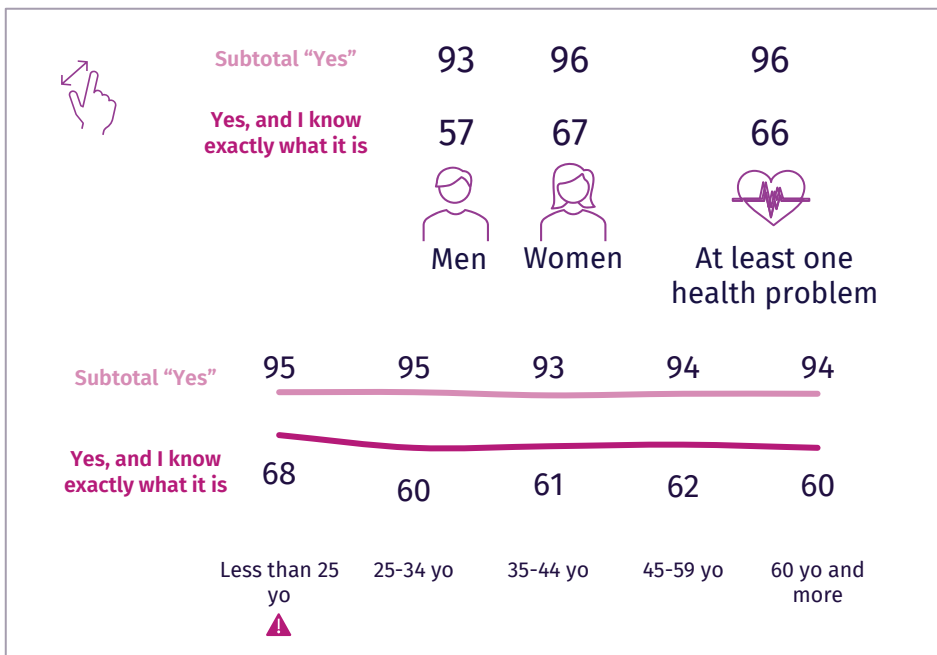
have already heard about gut flora

2024 : 95% -1pt vs 2024



91%

- Yes, and I know exactly what it is
- Yes, but I don't know exactly what it is
- No, I never heard about it



▲ Low basis, results must be interpreted with caution

Copyright Biocodex Microbiota
Institute et Ipsos - mars 2025

International
Microbiota
Observatory

Ipsos



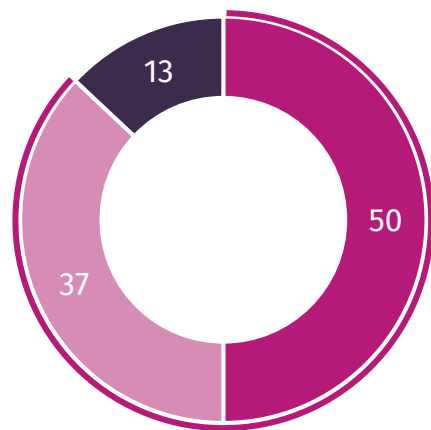
Once again, women groups appear more aware of vaginal flora.



Question 2bis. And have you ever heard of these terms?

Base: All respondents

Vaginal flora



87%

have already heard
about vaginal flora

2024 : 87% = vs 2024



81%

- Yes, and I know exactly what it is
- Yes, but I don't know exactly what it is
- No, I never heard about it



Subtotal "Yes"

80

93

90

Yes, and I know
exactly what it is

38

61

56



Men



Women



At least one
health problem

Subtotal "Yes"

71

91

87

87

89

Yes, and I know
exactly what it is

40

50

50

51

52

Less than 25
yo



25-34 yo

35-44 yo

45-59 yo

60 yo and
more



Low basis, results must be interpreted with caution

Copyright Biocodex Microbiota
Institute et Ipsos - mars 2025

International
Microbiota
Observatory





Polish microbiome knowledge has slightly improved since last year and exceeds global averages in some areas, but lags behind in understanding gut-brain communication and microbiome composition



Most Poles maintain a good understanding of the microbiome's role and functions, with this knowledge showing a tendency to increase.



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 don't really know.

Base: All respondents



Good answer

Wrong answers/
don't know

Good answer
Evolution
vs 2024
+4pts

Antibiotics have an impact on our microbiome

84 ✓

2

14

16

Our diet has significant consequences on the balance of our microbiome

83 ✓

2

15

17

+1pt

In some cases, an imbalance in the microbiome may have significant health consequences

81 ✓

2

17

19

+5pts

The microbiome plays an important role in immune defense mechanisms

81 ✓

3

16

19

+5pts

In the field of vaginal health, the microbiome plays an important role in women's health

75 ✓

3

22

25

=

Many diseases such as irritable bowel syndrome (IBS), obesity, vaginosis could be linked to the microbiome

68 ✓

3

29

32

-2pts

Your microbiome is located exclusively in the gut

12

56 ✓

32

44

+6pts

The microbiome enables the gut to deliver essential information to the brain for our health

50 ✓

8

42

50

+3pts

The microbiome is only made up of bacteria

23

24 ✓

53

76

=



True



False



Don't really know



While Poles demonstrate better understanding of certain microbiome aspects, they lag behind global averages in comprehending the microbiome's role in gut-brain communication and its 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 don't really know.

Base: All respondents



% good answer

	Total	ALL COUNTRIES
Antibiotics have an impact on our microbiome	84	73
Our diet has significant consequences on the balance of our microbiome	83	80
In some cases, an imbalance in the microbiome may have significant health consequences	81	79
The microbiome plays an important role in immune defense mechanisms	81	76
In the field of vaginal health, the microbiome plays an important role in women's health	75	70
Many diseases such as irritable bowel syndrome (IBS), obesity, vaginosis could be linked to the microbiome	68	68
Your microbiome is located exclusively in the gut	56	53
The microbiome enables the gut to deliver essential information to the brain for our health	50	56
The microbiome is only made up of bacteria	24	32





Poles aged 60 and above, women, and people with health conditions demonstrate a more comprehensive understanding of 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 don't really know.

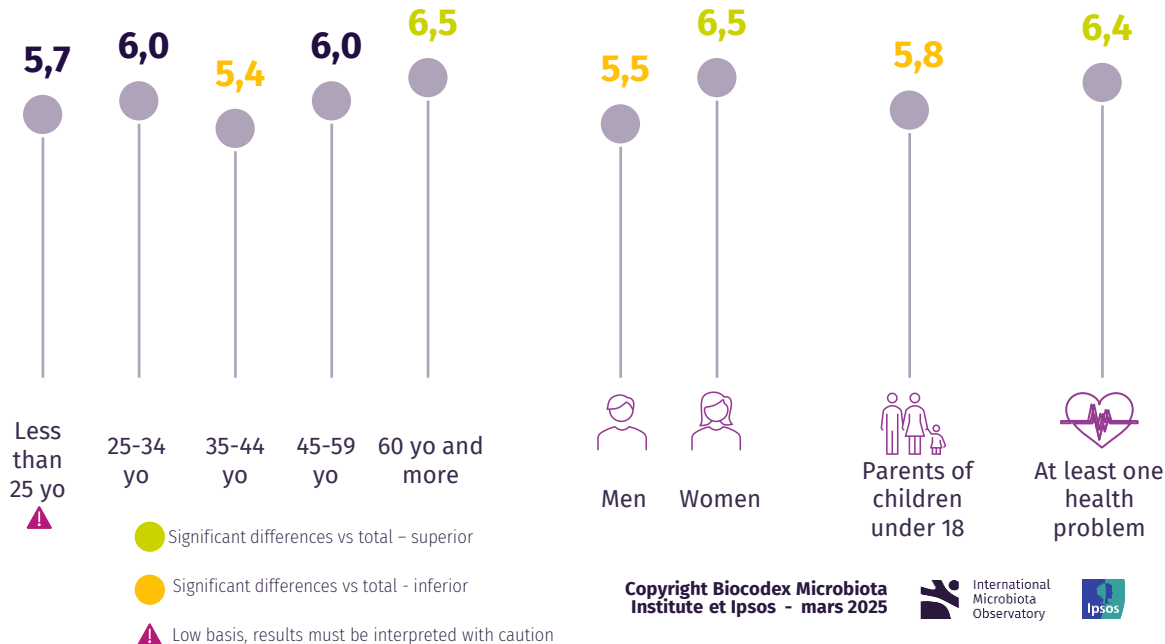
Base: All respondents



5,9

6,0/9

Number of good responses on average





3

When faced with a microbiome-related health problem, some people actually link it to their microbiome

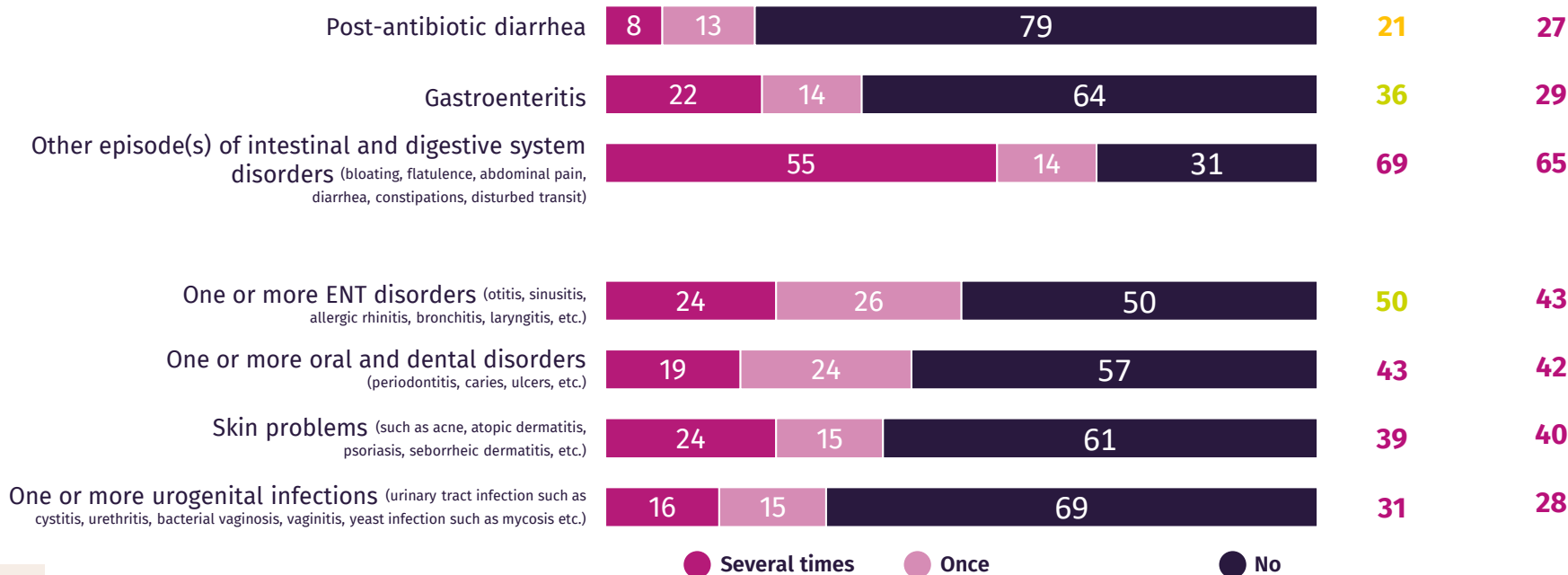
Over the past 12 months, post-antibiotic diarrhea affected 1 in 5 individuals and gastroenteritis impacted 1 out of 3 people. 2 out of 3 people experienced other intestinal and digestive system disorders.



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

Base: All respondents

% Yes



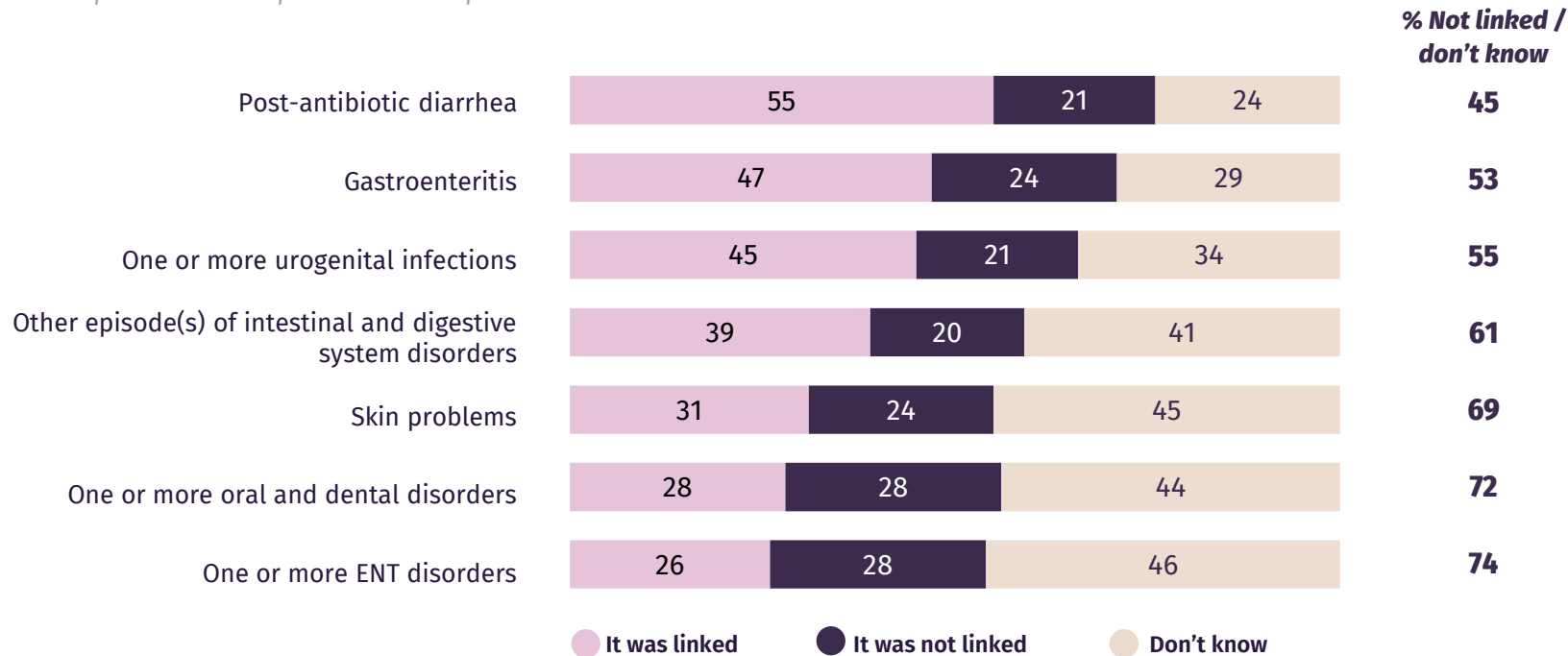


While many individuals struggle to connect their health problems with the microbiome, a majority of Poles associate post-antibiotic diarrhea with their microbiome.



Question 11b. And do you think this or these problems are linked to your microbiome?

Base: People who have experienced these problems



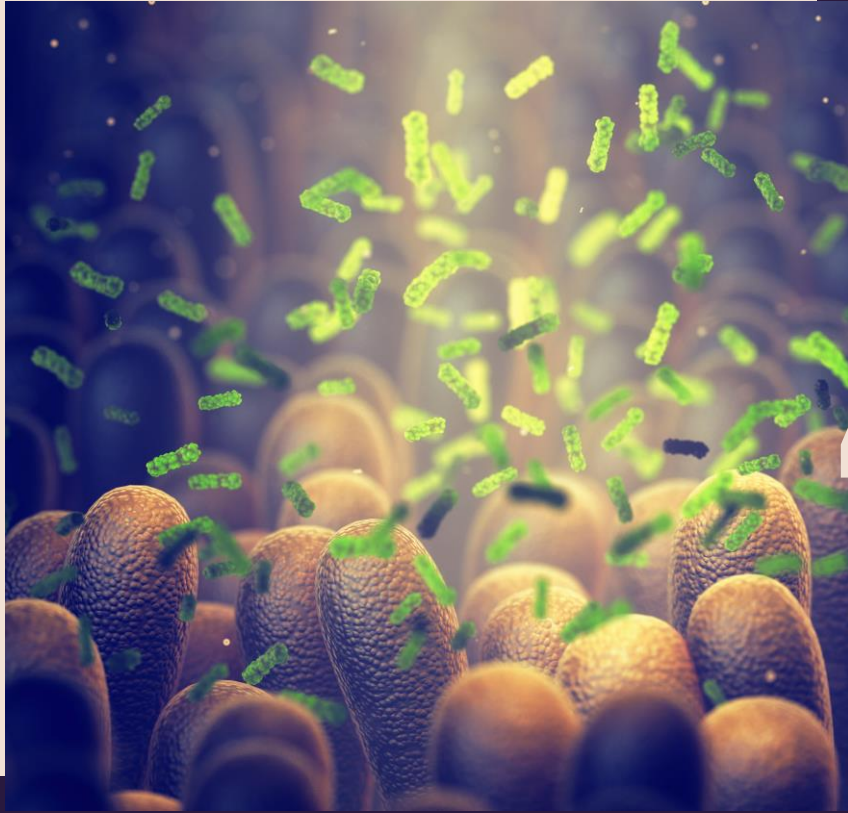
Awareness of the link between microbiome and health problems among Poles shows no significant year-over-year change, remaining rather consistent with global norms.



Question 11b. And do you think this or these problems are linked to your microbiome?

Base: People who have experienced these problems

% linked	Total	Evolution vs 2024	ALL COUNTRIES
Post-antibiotic diarrhea	55	-3pts	59
Gastroenteritis	47	+3pts	48
One or more urogenital infections	45	-10pts	52
Other episode(s) of intestinal and digestive system disorders	39	-4pts	48
Skin problems	31	-3pts	37
One or more oral and dental disorders	28	-4pts	34
One or more ENT disorders	26	-6pts	31



4

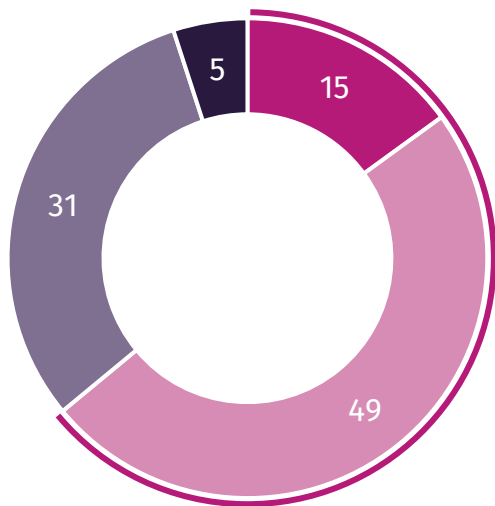
To maintain a balanced microbiome, Poles are more likely to modify their behaviors, with still a higher propensity for consuming probiotics and prebiotics compared to the average.



Nearly 2/3 of Poles report modifying their behaviors to maintain microbiome balance and optimal function, exceeding global averages but showing no year-over-year progression.

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



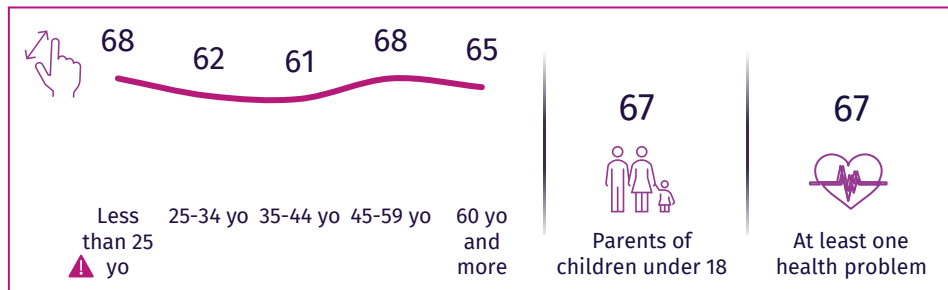
- Yes, a lot
- Yes, a little
- No, not really
- No, not at all

64% have changed their behaviors

2024 : 65% -1pt vs 2024



56%



Significant differences vs total - superior Significant differences vs total - inferior

Low basis, results must be interpreted with caution

Copyright Biocodex Microbiota
Institute et Ipsos - mars 2025

International
Microbiota
Observatory

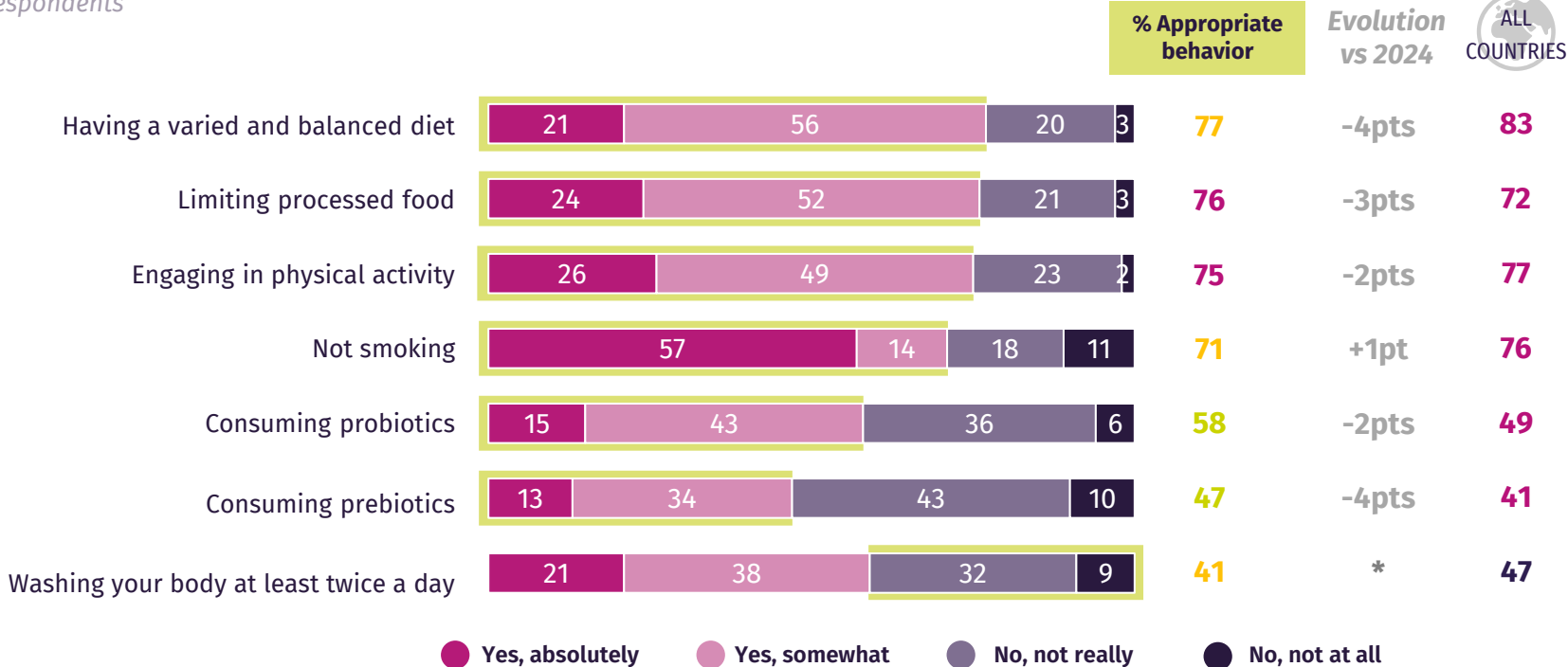
Ipsos



"Standard" healthy behaviors are mostly adopted by people. Consumption regarding probiotics and prebiotics is higher than global results.

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

Base: All respondents



*This item has been detailed in this third wave, preventing comparison with last year

Copyright Biocodex Microbiota
Institute et Ipsos - mars 2025

International
Microbiota
Observatory

Ipsos



The adoption of positive behaviors related to microbiome health among Poles remains consistent across age groups, gender, and health status.



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

Base: All respondents



4,5

4,5/7

Number of good responses on average

4,4



Less than 25 yo



4,5



25-34 yo

4,5



35-44 yo

4,5



45-59 yo

4,4



60 yo and more

4,3



Men

4,6



Women

4,6



Parents of children under 18

4,6



At least one health problem



Significant differences vs total - superior



Significant differences vs total - inferior



Low basis, results must be interpreted with caution

Copyright Biocodex Microbiota
Institute et Ipsos - mars 2025

International
Microbiota
Observatory





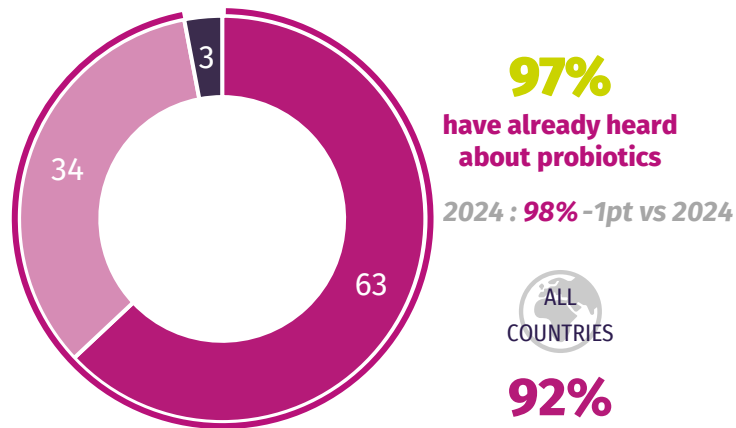
Same as last year, probiotics and prebiotics are known by the majority, even at higher levels compared to global results.



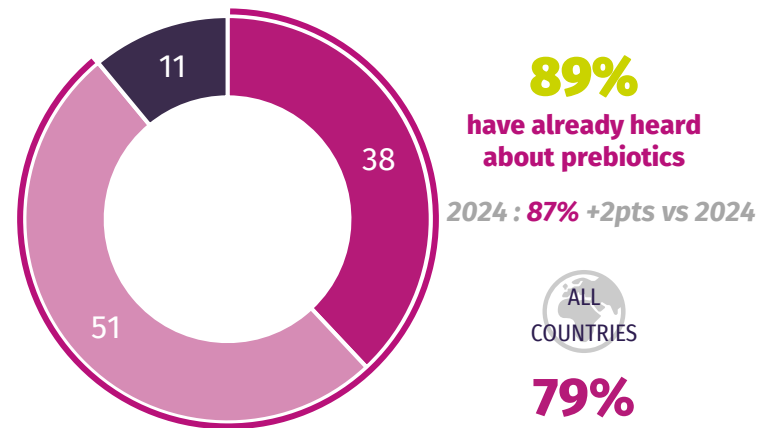
Question 2bis. And have you ever heard of these terms?

Base: All respondents

Probiotics



Prebiotics



● Yes, and I know exactly what it is ● Yes, but I don't know exactly what it is ● No, I never heard about it

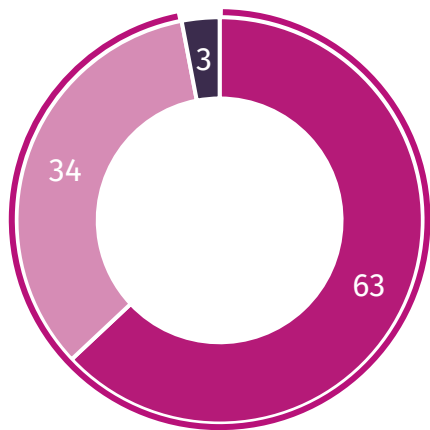


Once again, almost everyone know about probiotics regardless their gender, age or health problems.



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

Probiotics

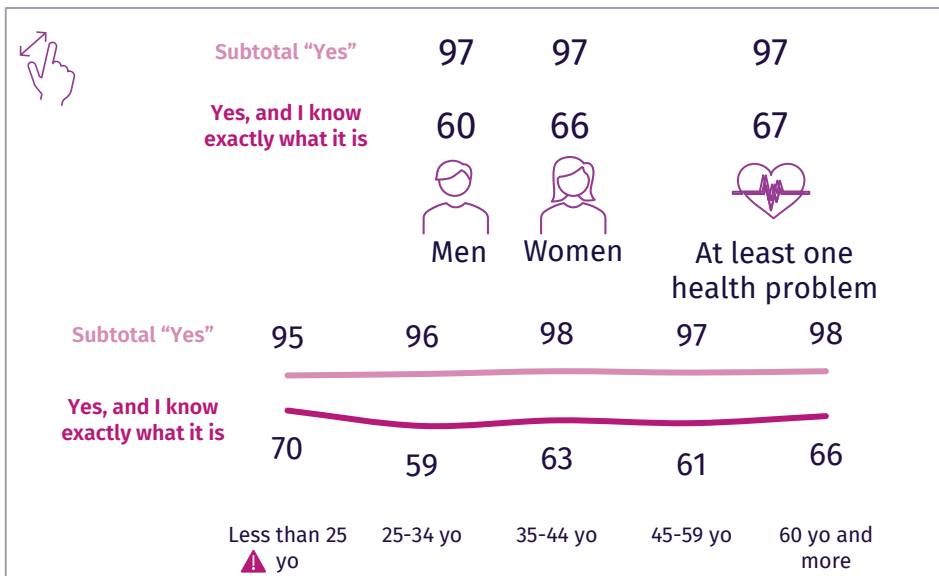


97%
have already heard
about probiotics
2024 : 98% -1pt vs 2024



92%

● Yes, and I know exactly what it is
 ● Yes, but I don't know exactly what it is
 ● No, I never heard about it



Low basis, results must be interpreted with caution

Copyright Biocodex Microbiota
Institute et Ipsos - mars 2025





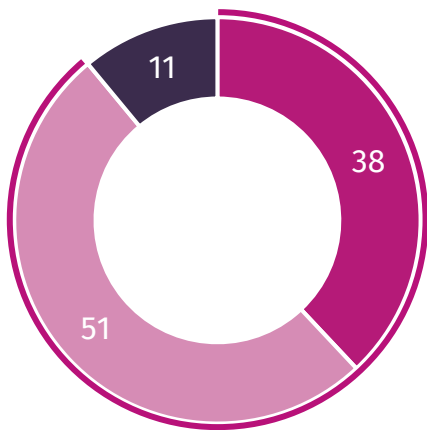
Women are also more aware of prebiotics.



Question 2bis. And have you ever heard of these terms?

Base: All respondents

Prebiotics



89%

have already heard
about prebiotics

2024 : 87% +2pts vs 2024



79%



Yes, and I know exactly what it is



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



No, I never heard about it



Subtotal "Yes"

85

94

90

Yes, and I know
exactly what it is

34

42

40



Men



Women



At least one
health problem

Subtotal "Yes"

82

90

86

93

91

Yes, and I know
exactly what it is

33

34

42

36

40

Less than 25
yo

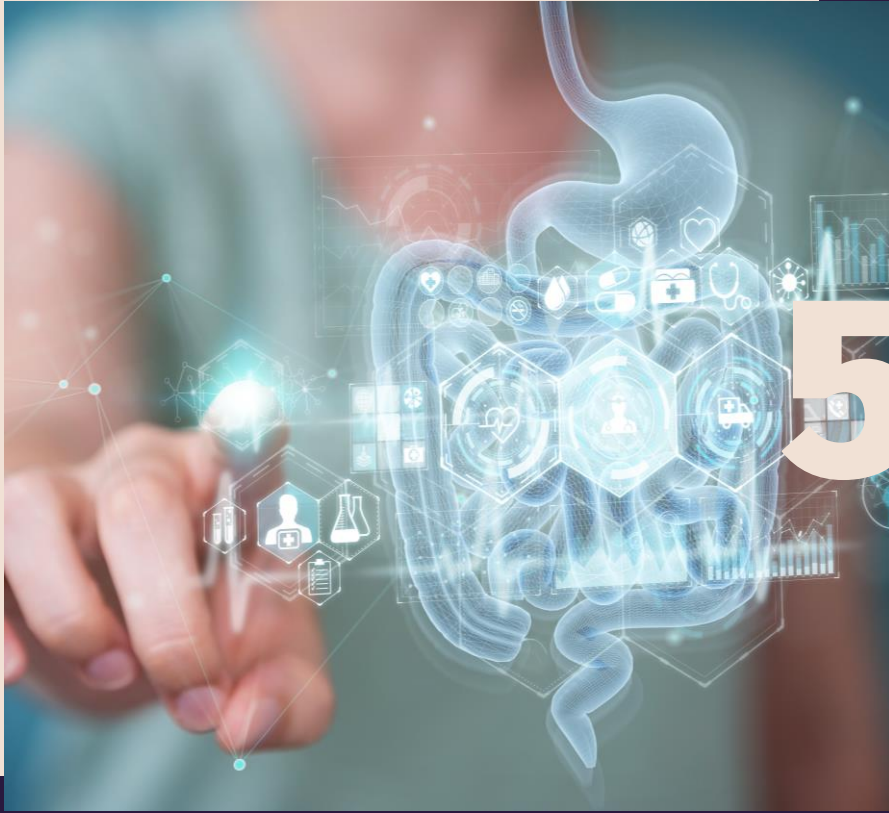
25-34 yo

35-44 yo

45-59 yo

60 yo and
more





From Prescriptions to Education: Expanding the Role of Healthcare Professionals in Poland's Microbiome Awareness

1 in 4 people discover the microbiome answering the survey. School emerges as the second most significant source of microbiome awareness.



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

Base: All respondents

Evolution
vs 2024

ALL
COUNTRIES



Poles aged 60 and over first heard about the microbiome through the questionnaire.



Question 1V2. The microbiome, you first heard about it...
Base: All respondents

	Total	Less than 25 yo	25-34 yo	35-44 yo	45-59 yo	60 yo and more	Men	Women	At least one health problem
		n=39 ▲	n=76	n=101	n=118	n=166	n=238	n=262	n=309
While answering this questionnaire	24	18	14	21	22	33	24	24	23
School/studies	14	14	21	18	14	8	12	16	15
By a healthcare professional	7	5	6	5	10	7	7	8	9
On a blog, an online article	6	8	7	5	7	6	5	7	5
Your family, friends, acquaintances	6	15	8	8	3	3	6	6	6
Advertisements (TV, press, street ads...)	5	10	10	5	4	3	5	6	6
In a booklet/brochure at your healthcare professional's office	4	3	6	1	3	6	3	4	4
On television during the news	4	0	6	5	3	3	5	2	3
On television, in health-related programs	4	0	1	3	10	3	4	4	3
On social media (influencers...)	4	3	6	6	3	4	4	4	4
In specialized press (wellness, health magazines)	3	0	3	1	4	4	3	3	4
Occupational doctor / workplace nurse	3	4	1	3	2	5	3	4	4
Scientific podcast	2	7	1	1	1	1	2	1	2
On the radio	1	0	0	0	1	1	1	0	1
In national press (general, mainstream media)	1	3	0	1	1	3	2	1	1
From your colleagues	1	0	3	1	0	0	2	0	0
During a sports activity	1	0	0	1	2	0	1	0	1
In regional daily press	0	0	1	1	0	0	1	0	0
Other	10	10	6	14	10	10	10	10	9

● Significant differences vs total - superior

● Significant differences vs total - inferior

● First source by profile

▲ Low basis, results must be interpreted with caution

Copyright Biocodex Microbiota
Institute et Ipsos - mars 2025

International
Microbiota
Observatory



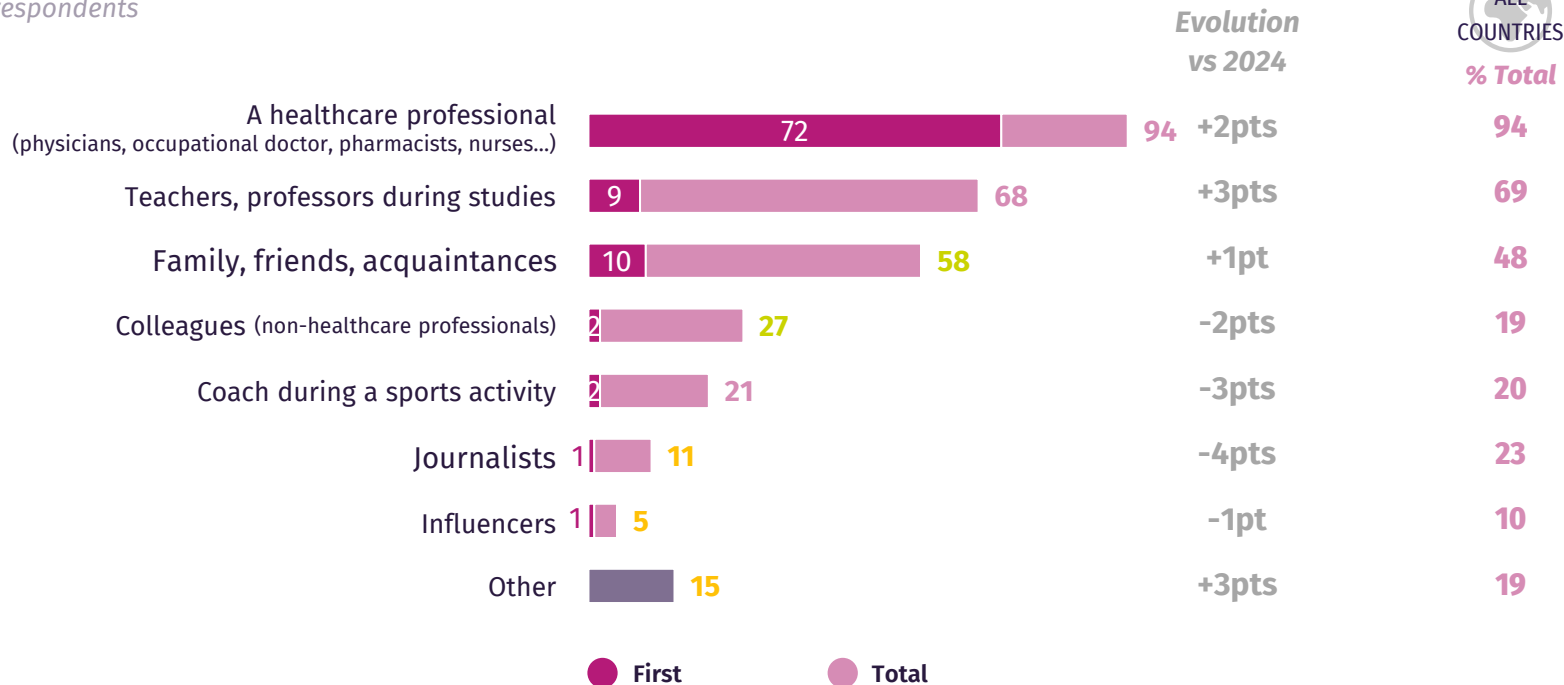
Healthcare professionals stand out again this year as the most trusted source of information about the microbiome, with almost 3 in 4 people saying they would first trust them.



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



And among all demographics, healthcare professionals remain as the most reliable source of 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 n=39 ▲	25-34 yo n=76	35-44 yo n=101	45-59 yo n=118	60 yo and more n=166	Men n=238	Women n=262	At least one health problem n=309
A healthcare professional (physicians, occupational doctor, pharmacists, nurses...)	94	97	93	96	90	96	90	98	96
Teachers, professors during studies	68	69	77	68	55	71	70	65	66
Family, friends, acquaintances	58	59	48	61	54	64	61	56	57
Colleagues (non-healthcare professionals)	27	27	16	29	41	22	28	27	27
Coach during a sports activity	21	17	36	20	23	14	17	25	23
Journalists	11	2	10	9	13	14	14	9	13
Influencers	5	9	7	7	4	3	6	5	4
Other	15	20	13	10	19	16	14	16	15

While a quarter of Poles report having received all microbiome-related information, closer examination reveals that this 'information' often consists primarily of probiotic or prebiotic prescriptions rather than comprehensive education about the microbiome itself.



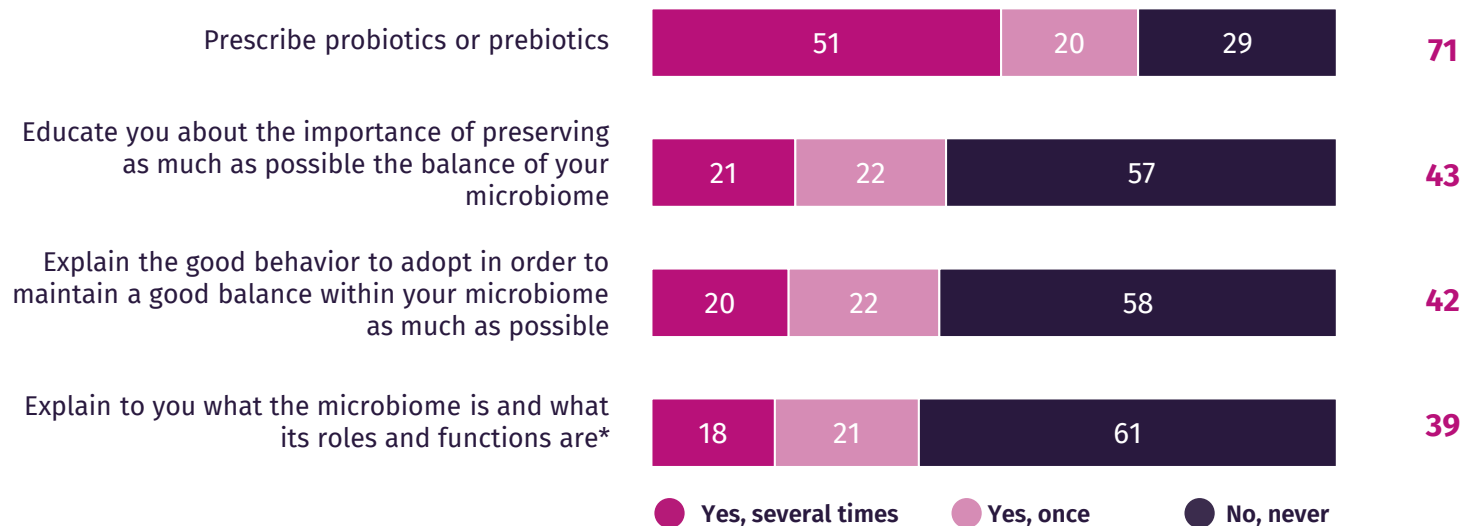
Question 5. Have any of the healthcare professionals you have seen ever done any of the following?

Base: All respondents

Only **27%** received **ALL THESE INFORMATION**, at least one time
10% received all these information several times

2024: **29%** -2pts vs 2024
10% = vs 2024

% Yes



indeed, Poles are more likely to have received probiotics and prebiotics prescription compared to global average.



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

Base: All respondents

% Yes	Total	Evolution vs 2024	ALL COUNTRIES
% Received ALL THESE INFORMATION, at least one time	27	-2pts	29
% Received ALL THESE INFORMATION, <u>several times</u>	10	=	8
Prescribe probiotics or prebiotics	71	+3pts	49
Educate you about the importance of preserving as much as possible the balance of your microbiome	43	=	47
Explain the good behavior to adopt in order to maintain a good balance within your microbiome as much as possible	42	=	46
Explain to you what the microbiome is and what its roles and functions are*	39	=	42

*The wording of this item was changed compared to last year



Significant differences vs total - superior



Significant differences vs total - inferior





People with health problems are more likely to have received such prescriptions.



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

% Yes	Total	Less than 25 yo	25-34 yo	35-44 yo	45-59 yo	60 yo and more	Men	Women	At least one health problem
	base n=500	n=39	n=76	n=101	n=118	n=166	n=238	n=262	n=309
Prescribe probiotics or prebiotics	71	70	76	70	72	68	65	76	78
Educate you about the importance of preserving as much as possible the balance of your microbiome	43	48	39	46	50	37	43	43	47
Explain the good behavior to adopt in order to maintain a good balance within your microbiome as much as possible	42	36	37	50	50	37	43	42	46
Explain to you what the microbiome is and what its roles and functions are*	39	36	36	39	50	34	40	38	43

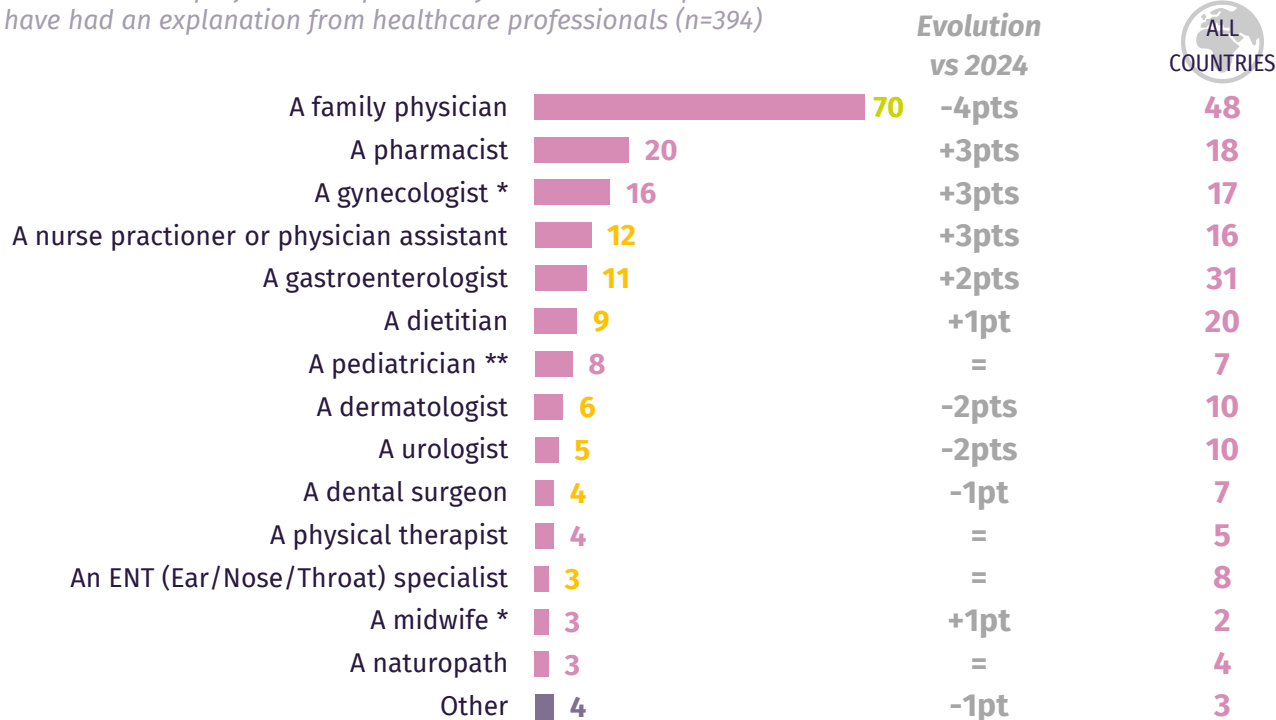
*The wording of this item was changed compared to last year

Family physicians emerge as the primary professional source of information about the microbiome in Poland, reaching even higher levels than observed in global results.



Question 6. And which healthcare professionals provided you with these explanations?

Base: People who have had an explanation from healthcare professionals (n=394)



* Item displayed to women

** Item displayed to parents



Regardless their age, gender or personal situation, family physicians remain the first source of information.

Question 6. And which healthcare professionals provided you with these explanations?

Base: People who've received some information from HCPs (n=394)

	Total	Less than 25 yo	25-34 yo	35-44 yo	45-59 yo	60 yo and more	Men	Women	At least one health problem
base	n=394	n=30	n=61	n=82	n=99	n=122	n=174	n=220	n=260
A family physician	70	60	72	72	72	71	75	67	71
A pharmacist	20	18	21	20	21	18	20	20	18
A gynecologist	16	28	13	11	23	12	0	28	18
A nurse practitioner or physician assistant	12	23	6	10	11	13	12	11	13
A gastroenterologist	11	4	5	10	12	15	12	9	13
A dietitian	9	17	13	8	7	8	10	9	10
A pediatrician	8	3	8	11	14	1	6	9	6
A dermatologist	6	12	4	5	5	6	7	4	6
A urologist	5	4	1	6	4	7	9	2	7
A dental surgeon	4	0	2	10	3	4	6	2	5
A physical therapist	4	2	1	2	6	5	7	2	5
An ENT (Ear, Nose, Throat) specialist	3	0	2	4	3	5	4	3	4
A midwife	3	4	6	2	3	1	0	5	4
A naturopath	3	0	0	3	5	3	4	2	3
Other	4	7	2	3	5	4	4	4	5

Significant differences vs total - superior

Significant differences vs total - inferior

First source by profile

Low basis, results must be interpreted with caution

Copyright Biocodex Microbiota
Institute et Ipsos - mars 2025

International
Microbiota
Observatory

Ipsos

After being prescribed antibiotics, Poles are more likely to have received related information, with 3 out of 10 patients getting such guidance. This proportion is notably higher than the global average.



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

Base: All respondents

Only 30% received ALL THESE INFORMATION from their HCPs

2024 : 32% -2pts vs 2024



25%

Evolution
vs 2024



% Yes

Tell you that taking antibiotics could have negative consequences on the balance of your microbiome



+2pts

39

Give you advice on limiting the negative consequences of taking antibiotics on your microbiome as much as possible



+1pt

38

Tell you about any digestive disorders associated with taking antibiotics



-3pts

46

Yes

No

Not applicable

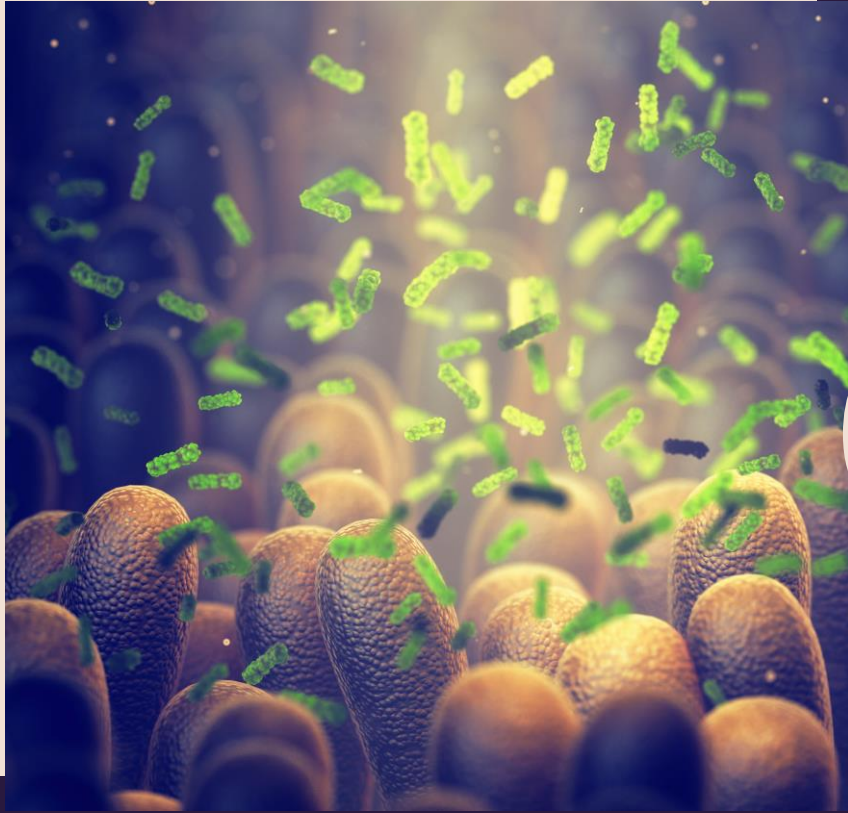


This level of information appears to be similar across all demographics in Poland



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	At least one health problem
	base n=500	n=39	n=76	n=101	n=118	n=166	n=309
% HAVE RECEIVED ALL THESE INFORMATION FROM THEIR HCPS	30	20	26	28	31	35	32
Tell you that taking antibiotics could have negative consequences on the balance of your microbiome	49	49	47	48	49	50	53
Give you advice on limiting the negative consequences of taking antibiotics on your microbiome as much as possible	44	45	41	43	45	47	48
Tell you about any digestive disorders associated with taking antibiotics	42	38	35	41	45	45	46



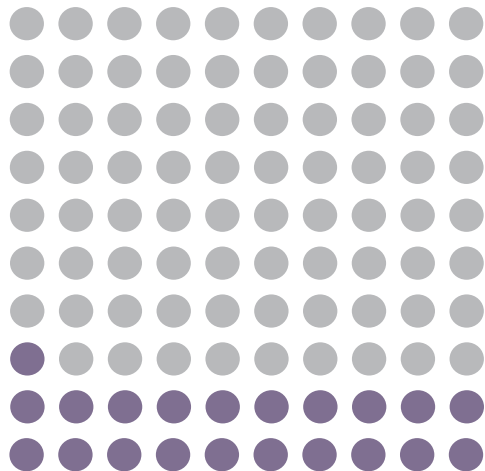
6

Despite lower awareness of microbiome testing, Poles express interest, especially for gut microbiome, and an equal percentage would consider stool donation to further scientific research.

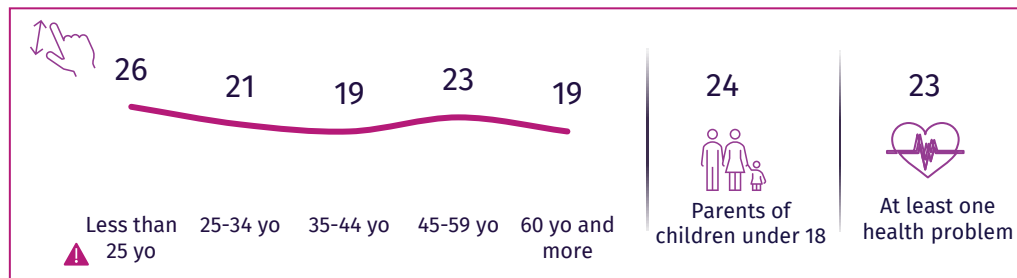


Awareness of microbiome testing in Poland, at one in five individuals, lags slightly behind global average.

NEW QUESTION Question 1-2025. Have you ever heard of testing your microbiome?
Base: All respondents



21% have already heard of testing their microbiome **27%**



● Significant differences vs total - superior ● Significant differences vs total - inferior

⚠ Low basis, results must be interpreted with caution



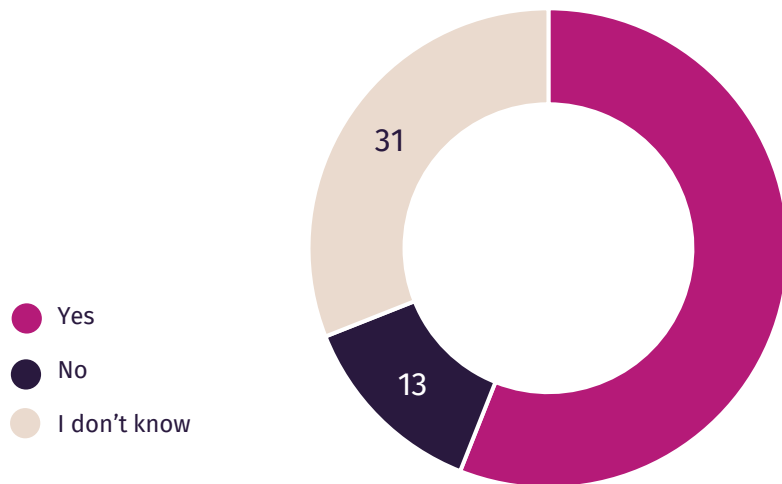
Regardless of age, more than half would be interested in having their microbiome tested.

NEW

QUESTION

Question 2-2025. Would you personally be interested in taking a microbiome test?

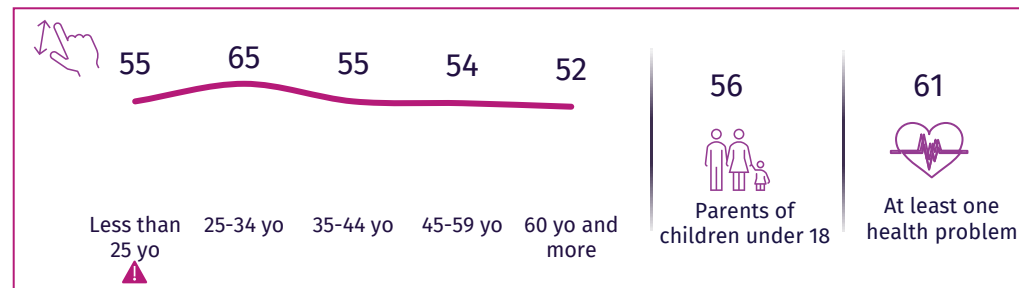
Base: All respondents



56% would be interested in taking a microbiome test



61%



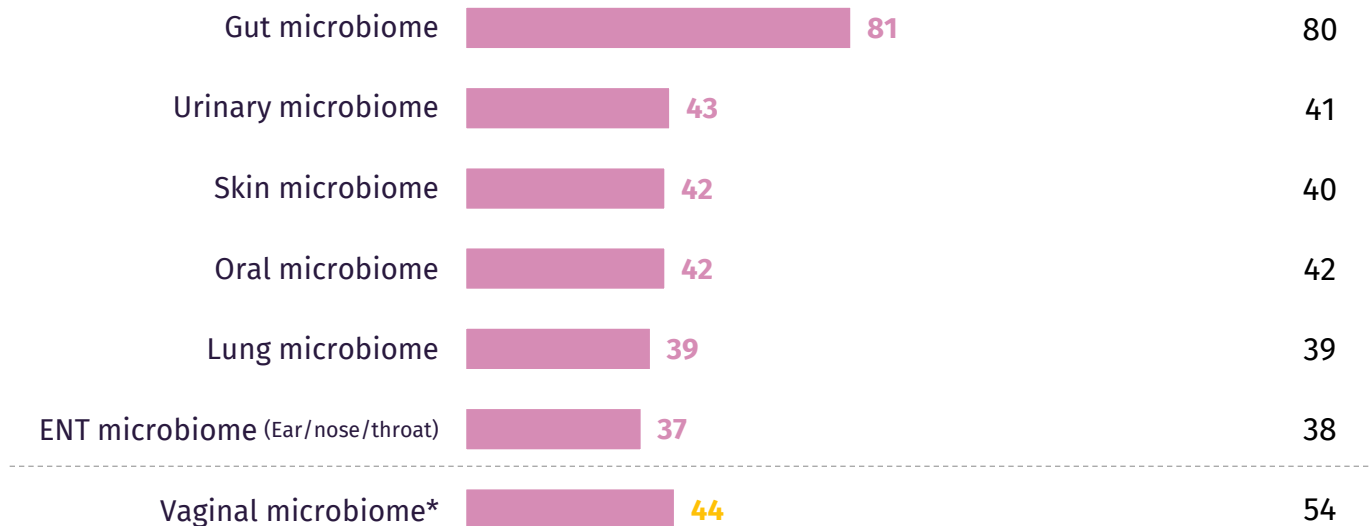
● Significant differences vs total - superior ● Significant differences vs total - inferior

⚠ Low basis, results must be interpreted with caution



Gut microbiome testing rank as the top choice for 4 out of 5 potential testers.

NEW QUESTION Question 3-2025. Which one(s) would you be interested to test?
Base: Would be interested in taking a microbiome test (n=277)



* Item displayed to women

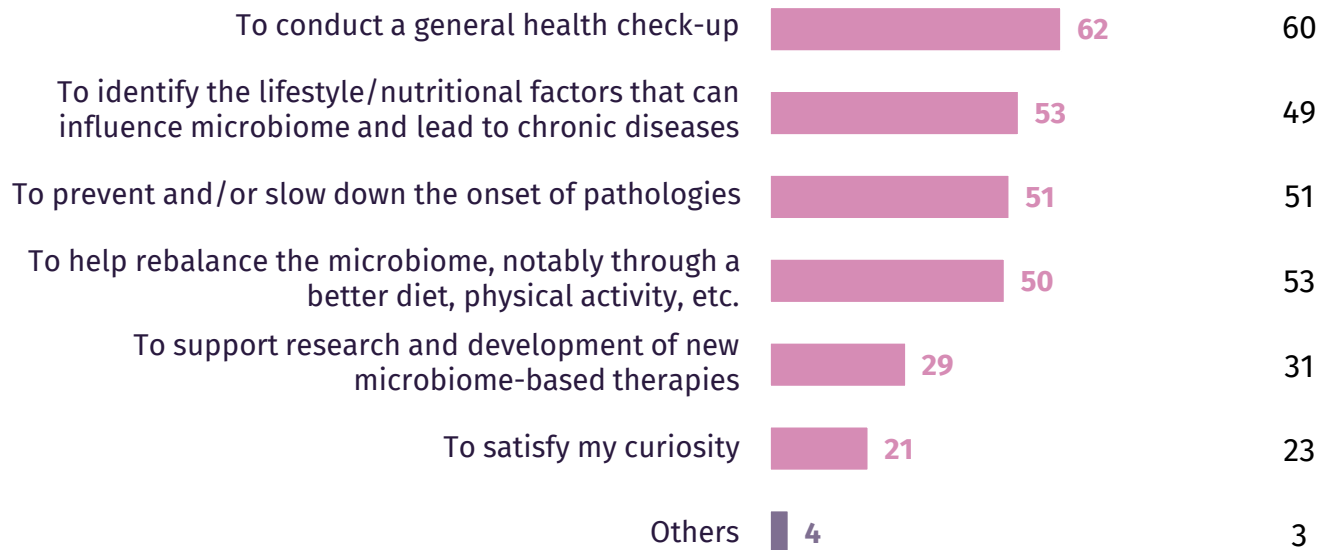


The majority think microbiome testing would be beneficial for a general health check-up, identifying lifestyle/nutritional factors, and for pathology prevention.

NEW
QUESTION

Question 4-2025. In your opinion, what are the reasons for which these tests might be useful?

Base: All respondents






The #1 reason perceived for microbiome testing is usually to conduct a general health check-up for all demographic groups.

NEW

QUESTION

Question 4-2025. In your opinion, what are the reasons for which these tests might be useful?

Base: All respondents

	TOTAL	Less than 25 yo	25-34 yo	35-44 yo	45-59 yo	60 yo and more	Men	Women	At least one health problem
Base	n=500	 n=39	n=76	n=101	n=118	n=166	n=238	n=262	n=309
To conduct a general health check-up	62	61	57	59	59	68	59	65	65
To identify the lifestyle/nutritional factors that can influence microbiome and lead to chronic diseases	53	67	48	52	43	59	50	56	58
To prevent and/or slow down the onset of pathologies	51	51	46	46	49	59	46	56	52
To help rebalance the microbiome, notably through a better diet, physical activity, etc.	50	47	62	53	43	49	47	53	54
To support research and development of new microbiome-based therapies	29	28	25	30	33	27	30	28	30
To satisfy my curiosity	21	34	31	20	14	19	23	20	21
Others	4	9	3	4	3	3	4	4	1

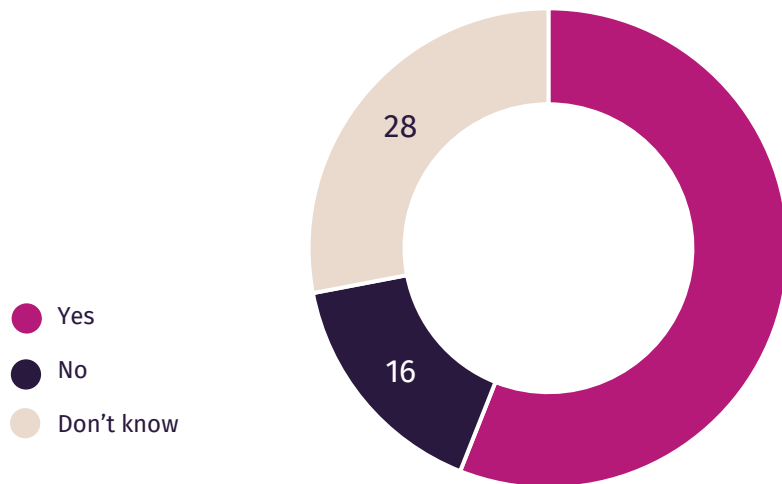


Stool donation acceptance in Poland mirrors the worldwide average, with almost three out of five Poles open to the idea.

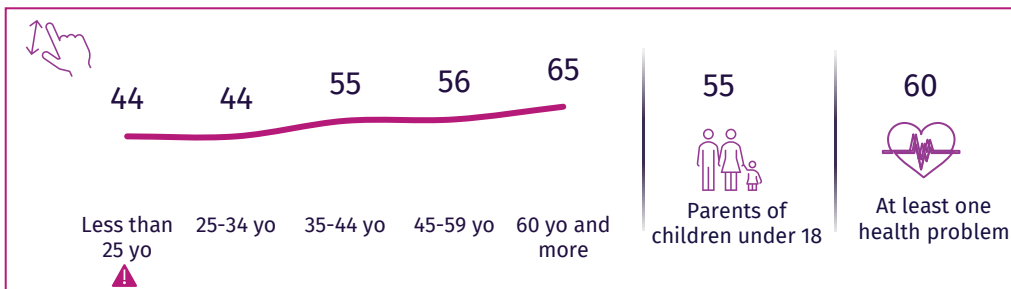
NEW
QUESTION

Question 5-2025. On a voluntary and anonymous basis, would you be willing to donate your stool (faecal sample) if it could contribute to advancing scientific knowledge in the fields of microbiome, nutrition, and health?

Base: All respondents



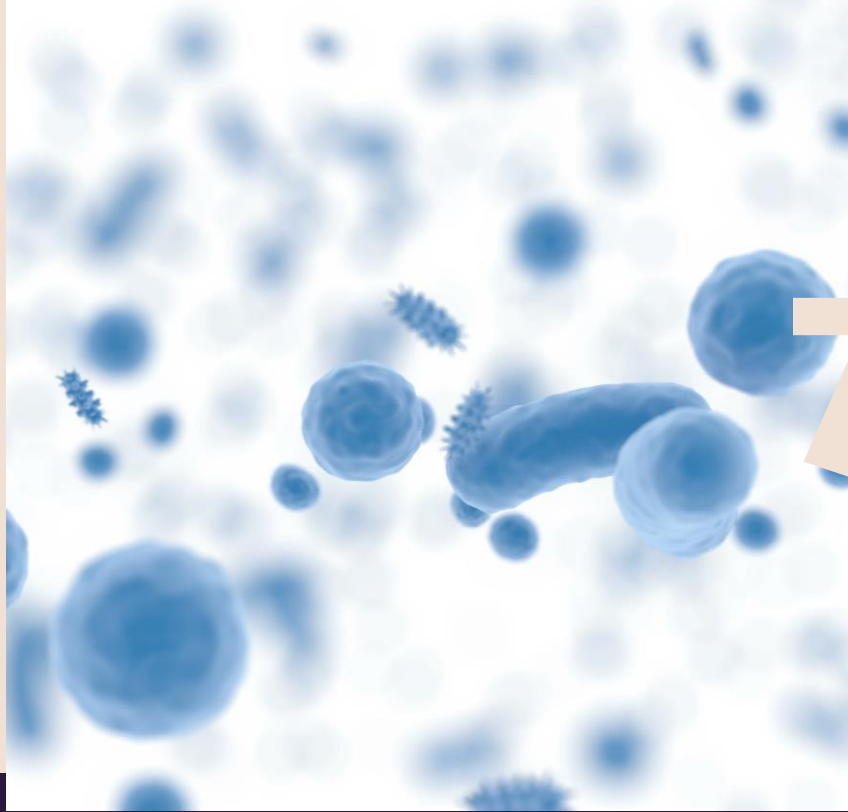
56% would be willing to donate their stool **59%**



● Significant differences vs total - superior

● Significant differences vs total - inferior

⚠ Low basis, results must be interpreted with caution



Focus on the vaginal microbiome

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

Some aspects of the vaginal microbiome are well-known by Polish women, such as the impact of antibiotics and the protective role of the vaginal microbiome.

(1/2)



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 don't really know.

Base: Women

✓ Good answer

Wrong answers/
don't know

Antibiotics can alter the vaginal microbiome

83 ✓ 2 15

17

The vaginal microbiome acts as a barrier, protecting us from pathogenic microorganisms

78 ✓ 3 19

22

Vaginal dryness/dehydration has consequences on vaginal microbiome

76 ✓ 2 22

24

From childhood to menopause, a woman's vaginal microbiome remains the same

6 63 ✓ 31

37

Every woman has a vaginal microbiome that is different from any other woman's

62 ✓ 5 33

38

Smoking has no consequences on the vaginal microbiome

12 58 ✓ 30

42

True

False

Don't really know



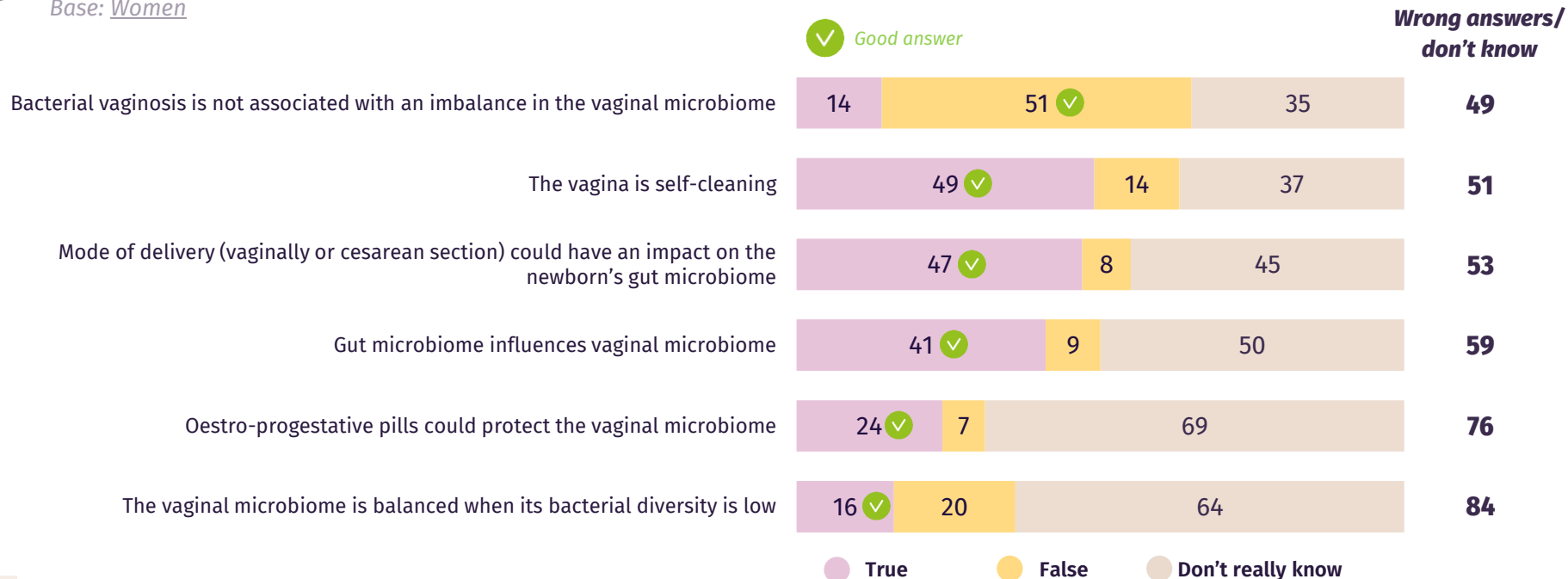
(2/2)

However, more confusion are related to the impact of hormonal pills and the diversity of its composition.



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 don't really know.

Base: Women





Polish women show increased awareness this year that a woman's vaginal microbiome does not remain constant from childhood to menopause

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 don't really know.

Base: Women

% good answer

	Total	Evolution vs 2024	ALL COUNTRIES
Antibiotics can alter the vaginal microbiome	83	+5pts	72
The vaginal microbiome acts as a barrier, protecting us from pathogenic microorganisms	78	+4pts	66
Vaginal dryness/dehydration has consequences on vaginal microbiome	76	-3pts	68
From childhood to menopause, a woman's vaginal microbiome remains the same	63	+11pts	60
Every woman has a vaginal microbiome that is different from any other woman's	62	=	66
Smoking has no consequences on the vaginal microbiome	58	+5pts	55
Bacterial vaginosis is not associated with an imbalance in the vaginal microbiome	51	+3pts	44
The vagina is self-cleaning	49	=	58
Mode of delivery (vaginally or cesarean section) could have an impact on the newborn's gut microbiome	47	+4pts	41
Gut microbiome influences vaginal microbiome	41	-10pts	45
Oestro-progestative pills could protect the vaginal microbiome	24	-6pts	22
The vaginal microbiome is balanced when its bacterial diversity is low	16	-9pts	26



Significant differences vs total - superior



Significant differences vs total - inferior

Copyright Biocodex Microbiota
Institute et Ipsos - mars 2025



International
Microbiota
Observatory



Ipsos



The knowledge of vaginal microbiome roles and functions remains quite similar across age groups



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 don't really know.

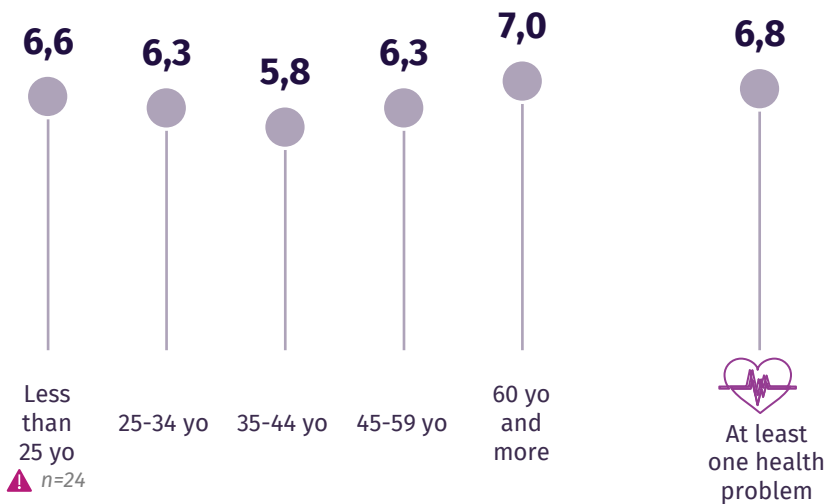
Base: Women



6,2

6,5/12

Number of good responses on average



● Significant differences vs total - superior

● Significant differences vs total - inferior

⚠ Low basis, results must be interpreted with caution

Copyright Biocodex Microbiota
Institute et Ipsos - mars 2025

International
Microbiota
Observatory





Only a quarter of Polish women have received all the information or advice from their HCPs about their vaginal microbiome.



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

Base: Women

26% received **ALL THESE INFORMATION**, at least one time
9% received all these information several times

2024: 29% -3pts vs 2024
14% -5pts vs 2024

% Yes

Explain to you what the vaginal microbiome is and what its roles and functions are*

14

18

68

32

Educate you on the importance of preserving as much as possible the balance of your vaginal microbiome

14

18

68

32

Explain the good behaviors to adopt in order to maintain a good balance within your vaginal microbiome as much as possible

14

18

68

32



Yes, several times

Yes, once



No, never



They are less likely to have received information regarding the importance of preserving vaginal microbiome and the behaviors to adopt compared to the global average.



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

% Yes

	Total	Evolution vs 2024	ALL COUNTRIES
% Have received ALL THESE INFORMATION, at least one time	26	-3pts	32
% Received ALL THESE INFORMATION, <u>several times</u>	9	-5pts	11
Explain to you what the vaginal microbiome is and what its roles and functions are*	32	-3pts	37
Educate you on the importance of preserving as much as possible the balance of your vaginal microbiome	32	-4pts	42
Explain the good behaviors to adopt in order to maintain a good balance within your vaginal microbiome as much as possible	32	-4pts	42

*The wording of this item was changed compared to last year



Significant differences vs total - superior



Significant differences vs total - inferior



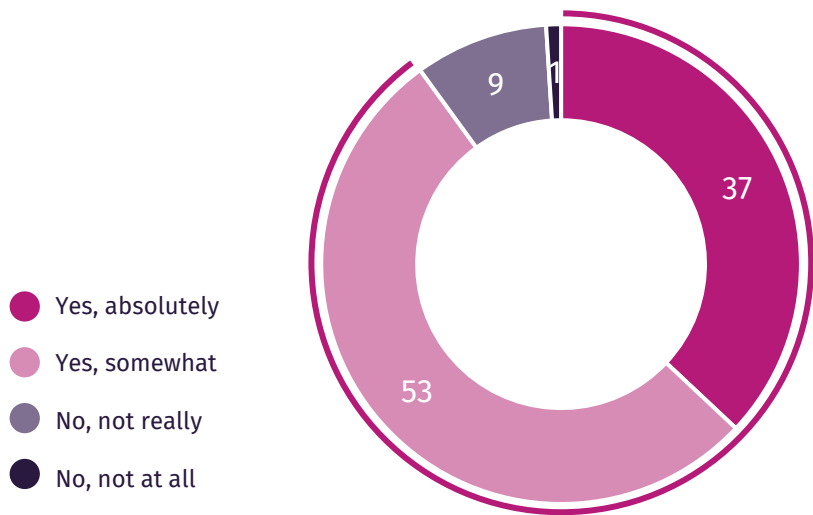


Most of women would like to have more information about the importance of the vaginal microbiome and its impact on health, even more than observed globally.



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

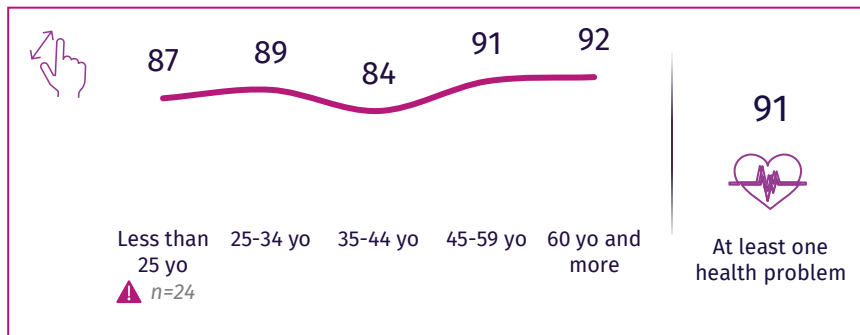


90% would like to have more information about the importance of the vaginal microbiome and its impact on health

2024 : 86% +4pts vs 2024



85%



Significant differences vs total - superior Significant differences vs total - inferior

Low basis, results must be interpreted with caution

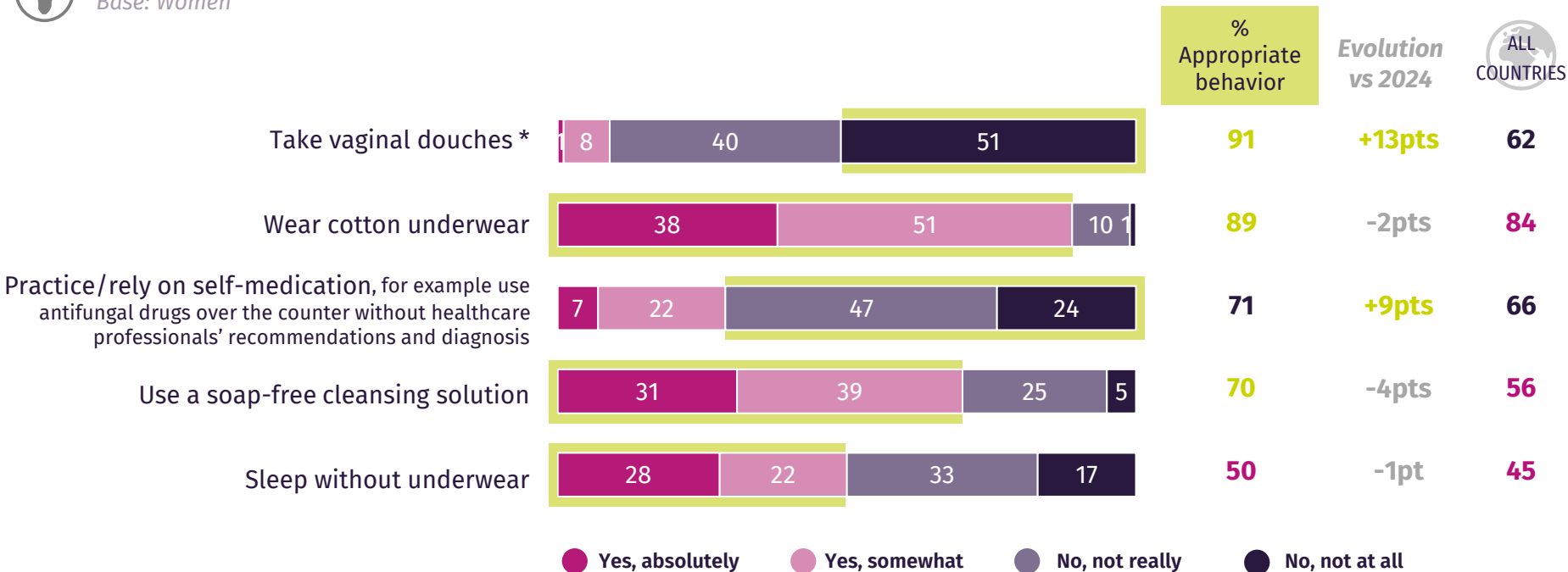


Polish women are more likely to adopt specific behaviors to protect their vaginal microbiome compared to global average.



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

Base: Women



*For this item, the following definition was provided: Vaginal douching is washing or cleaning out the inside of the vagina with water or a mixture of fluids to eliminate odors and "clean" the vagina. Please do not confuse the vaginal douching (The vagina is the inside) with vulvar washing (The vulva is the outside).



Regardless of age, Polish women adopt appropriate behaviors for maintaining their vaginal microbiome health.



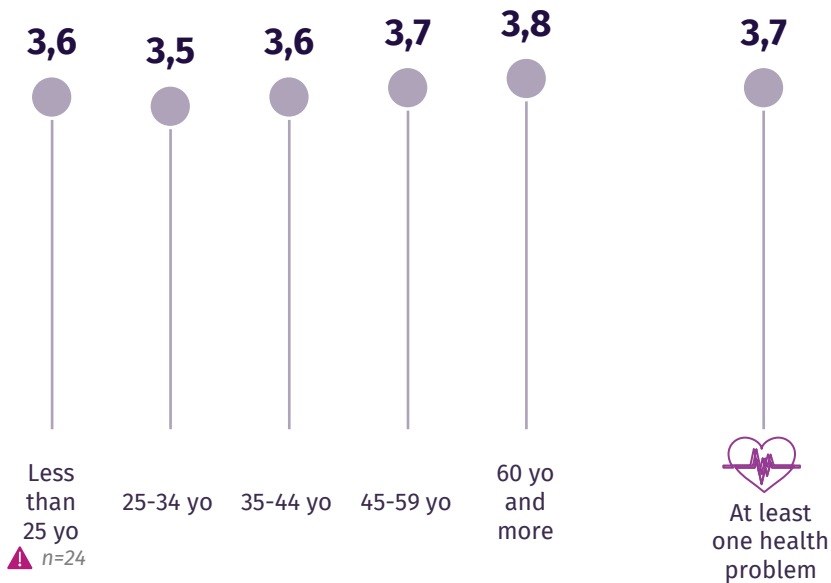
Question 16. In your daily life, do you regularly adopt the following behaviors?
Base: Women

ALL
COUNTRIES

3,1

3,7/5

Number of appropriate behaviors
adopted on average



- Significant differences vs total - superior
- Significant differences vs total - inferior
- Low basis, results must be interpreted with caution

Copyright Biocodex Microbiota
Institute et Ipsos - mars 2025

International
Microbiota
Observatory

Ipsos

A large, light purple illustration of various bacterial shapes, including rods, cocci, and branching structures, set against a white background. This illustration is positioned on the left side of the slide, partially overlapping a dark purple background.

Main results per country

Learnings on Polish results



Awareness of the microbiome & its diversity	
Know exactly what is « microbiome »	18% ↘
Subtotal « Aware »	74%
Subtotal Aware of the gut microbiome	44%
Subtotal Aware of all microbiome	28%
Level of knowledge around the microbiota	
Mean of good answers	6,0/9
Level of knowledge around the solutions which can maintain the microbiota balanced	
Know exactly what are probiotics	63%
Know exactly what are prebiotics	38%
Adoption and identification of appropriate behaviors to maintain a balanced microbiota	
Have changed their behaviors	64%
Level of information provided by healthcare professionals	
Received at least one piece of information at least once	79%
Microbiome testing	
Interested in taking a microbiome test	56%

Key learnings

Polish awareness of the microbiome aligns with global trends, but shows no signs of progression in 1 year. But, awareness of each microbiome type remains limited lagging behind global average. is quite limited. Polish microbiome knowledge has slightly improved since last year and exceeds global averages in some areas, but lags behind in understanding gut-brain communication and microbiome composition. To maintain a balanced microbiome, Poles are more likely to modify their behaviors, with still a higher propensity for consuming probiotics and prebiotics compared to the average. When it's come to HCPs, only a minority of Polish have received explanation on microbiome. While a quarter of Poles report having received all microbiome-related information, closer examination reveals that this 'information' often consists primarily of probiotic or prebiotic prescriptions rather than comprehensive education about the microbiome itself. Indeed, Poles are more likely to be aware of prebiotics and probiotics compared to global average. Despite lower awareness of microbiome testing, Poles express interest, especially for gut microbiome, and an equal percentage would consider stool donation to further scientific research.

A large, light-colored rectangular area on the left side of the slide, containing a dense, overlapping pattern of various bacterial shapes, including rods, cocci, and branching structures, rendered in a light gray or off-white color against a white background.

ANNEXES

ABOUT IPSOS

Ipsos is one of the largest market research and polling companies globally, operating in 90 markets and employing nearly 20,000 people.

Our passionately curious research professionals, analysts and scientists have built unique multi-specialist capabilities that provide true understanding and powerful insights into the actions, opinions and motivations of citizens, consumers, patients, customers or employees.

Our 75 business solutions are based on primary data from our surveys, social media monitoring, and qualitative or observational techniques.

“Game Changers” – our tagline – summarizes our ambition to help our 5,000 clients navigate with confidence our rapidly changing world.

Founded in France in 1975, Ipsos has been listed on the Euronext Paris since July 1, 1999. The company is part of the SBF 120, Mid-60 indices, STOXX Europe 600 and is eligible for the Deferred Settlement Service (SRD).
ISIN code FR0000073298, Reuters ISOS.PA, Bloomberg, IPS:FP

www.ipsos.com

35 rue du Val de Marne 75 628 Paris,
Cedex 13 France
Tel. +33 1 41 98 90 00

GAME CHANGERS

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

At Ipsos 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.