



International Microbiota Observatory

L'Observatoire International
des Microbiotes

Second wave

Spanish results

A large, light-colored rectangular area on the left side of the slide, containing a dense, abstract pattern of grey, branching, and elongated shapes that resemble a complex network or a microbiome visualization. The shapes are interconnected and vary in size and orientation, creating a textured, organic appearance.

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)



Brazil (n=500)



Mexico (n=1,000)



France (n=1,000)



Portugal (n=500)



Spain (n=500)



China (n=1,000)



Morocco (n=500)



Poland (n=500)



Finland (n=500)



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



ALL COUNTRIES

(n=7,500)

= Average response for all 7 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

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

All results are presented in %.

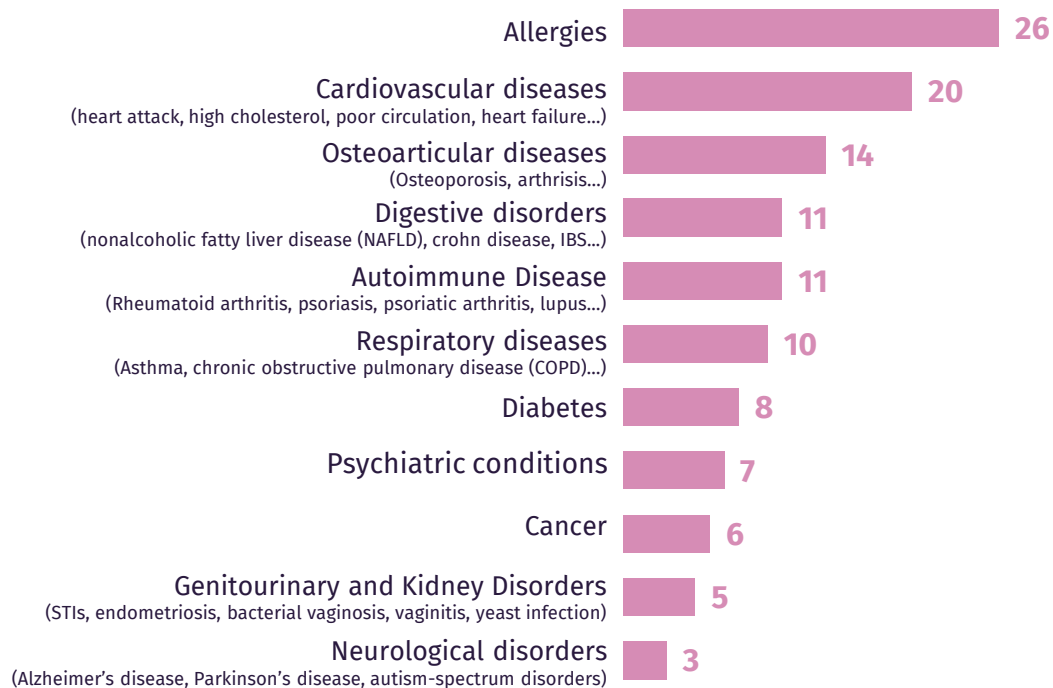


Some results have a low basis, results must be interpreted with cautious.



People with current conditions A focus detailed throughout the report

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





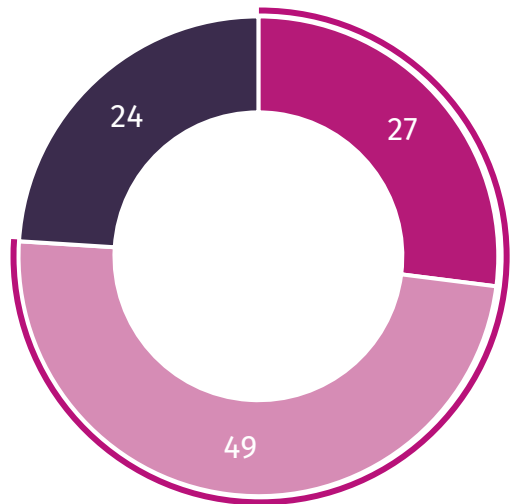
A growing awareness of the microbiome in Spain this year, although it remains very moderate and is mainly driven by the gut microbiome awareness.



With 3 out of 4 people having heard of the microbiome, awareness in Spain has increased since last year. Awareness now needs to be reinforced, as only 1/4 know exactly what it is.



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

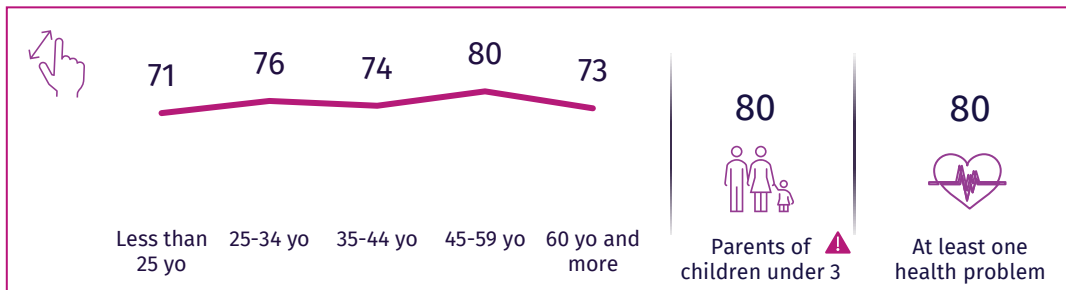


- Yes, and I know exactly what it is
- Yes, but I don't know exactly what it is
- No, I never heard about it

76% have already heard about the term microbiome
2023: 69%, +7pts



70%



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

▲ Low basis, results must be interpreted with caution

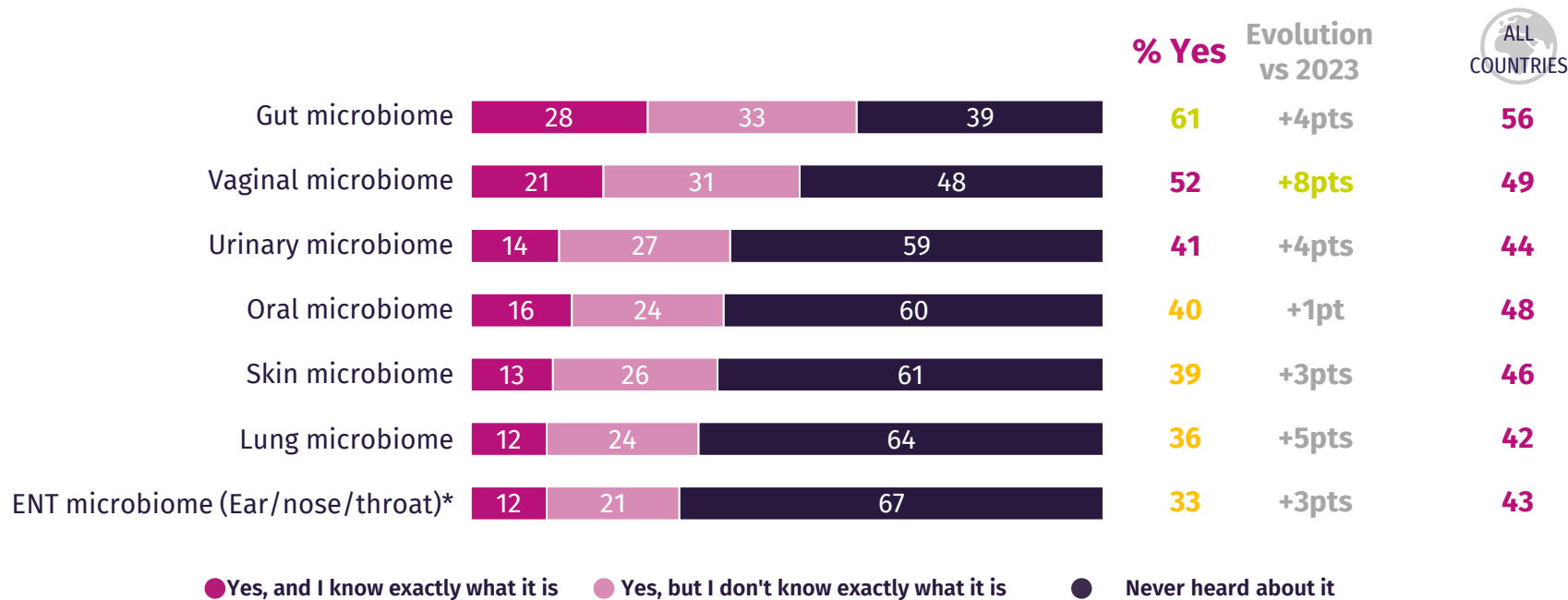


In terms of awareness, the gut microbiome stands out as the best-known microbiome. Others are less known compared to the global average, such as oral, skin, lung or ENT microbiome.



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

Base: All respondents

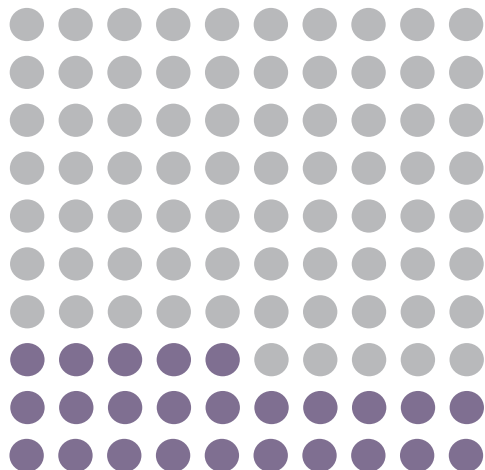


*This item is more precise this year



In fact, only a quarter of Spanish have already heard of each microbiome, a lower awareness compared to the global average.

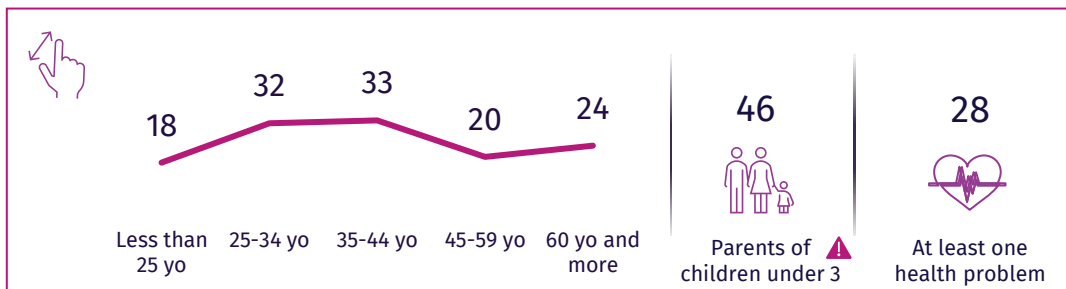
Question 3. And more specifically, have you ever heard of the following terms?
Base: All respondents



25% have already heard of each microbiome:
Gut, vaginal, skin, lung, urinary, oral and ENT microbiome
2023: **22%**, +3pts



32%



But only **5%** know precisely all of them
2023: **5%**, =



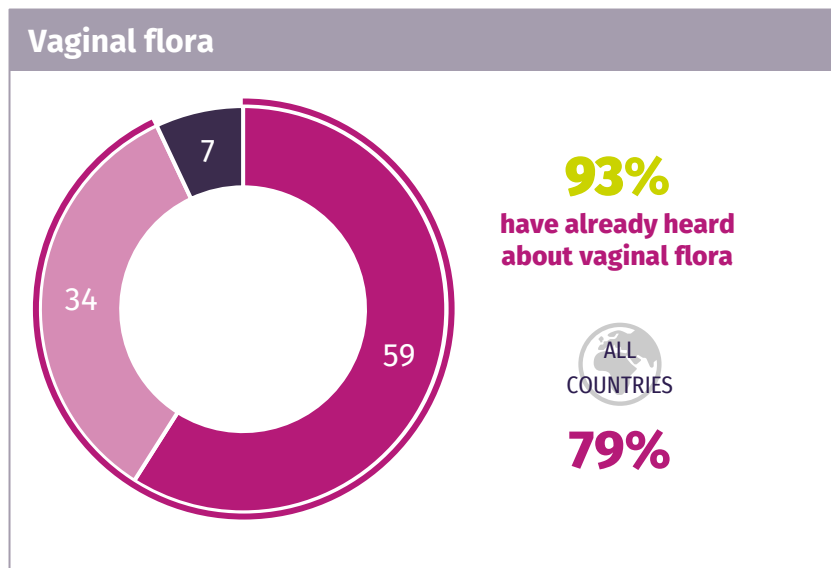
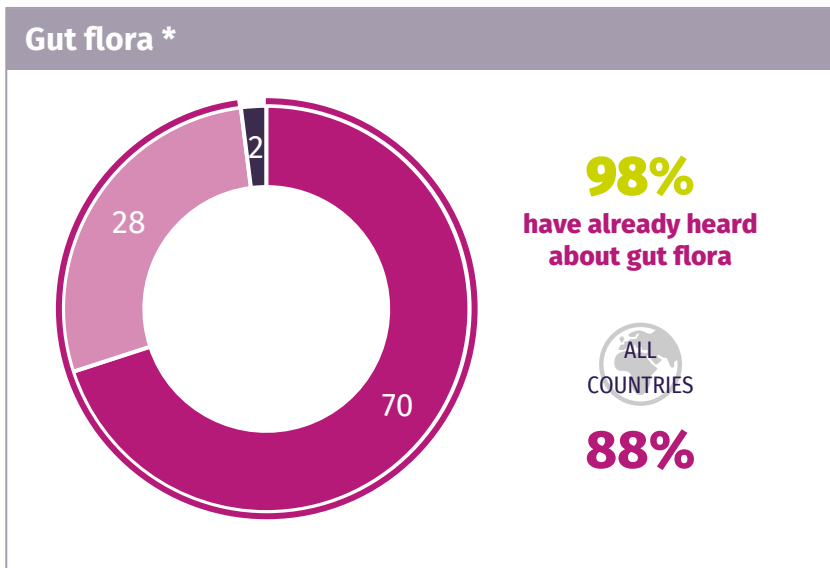
8%



Nearly all Spanish are aware of the gut flora and the vaginal flora.



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

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

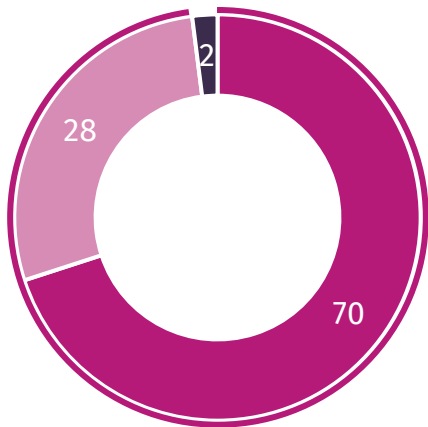


Spanish under 25 yo seem to be 'less' aware of gut flora.



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

Gut flora *

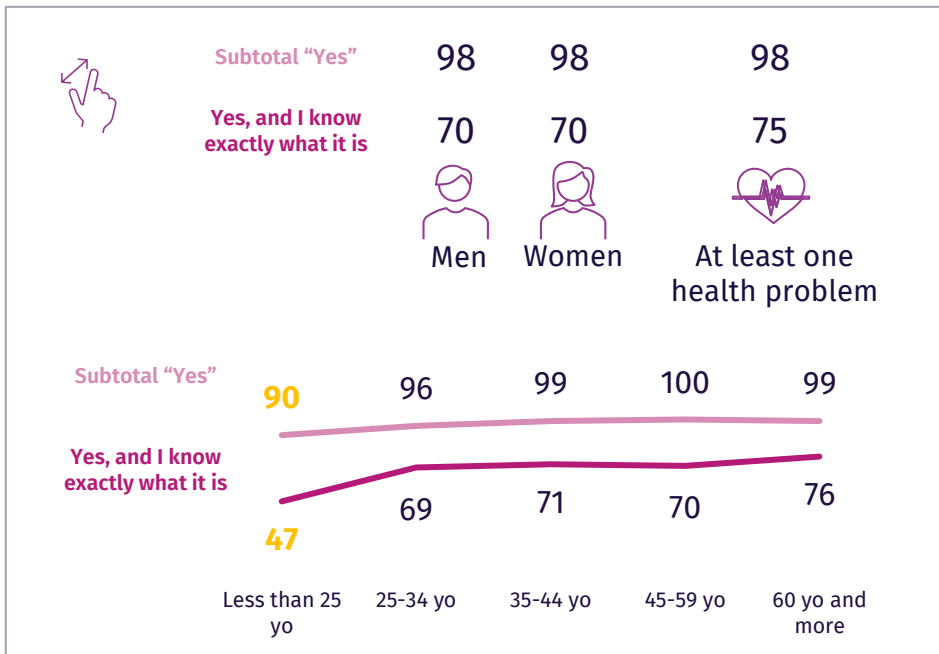


98%
have already heard
about gut flora



88%

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



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

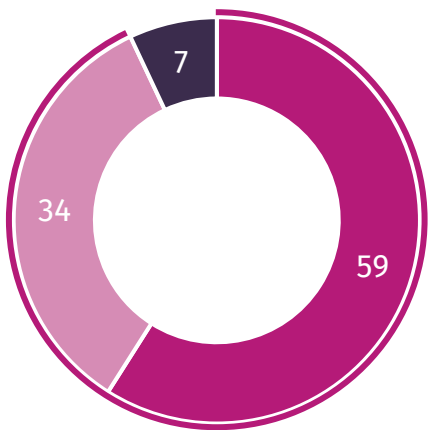


And Spanish women appear more aware of vaginal flora.



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

Vaginal flora

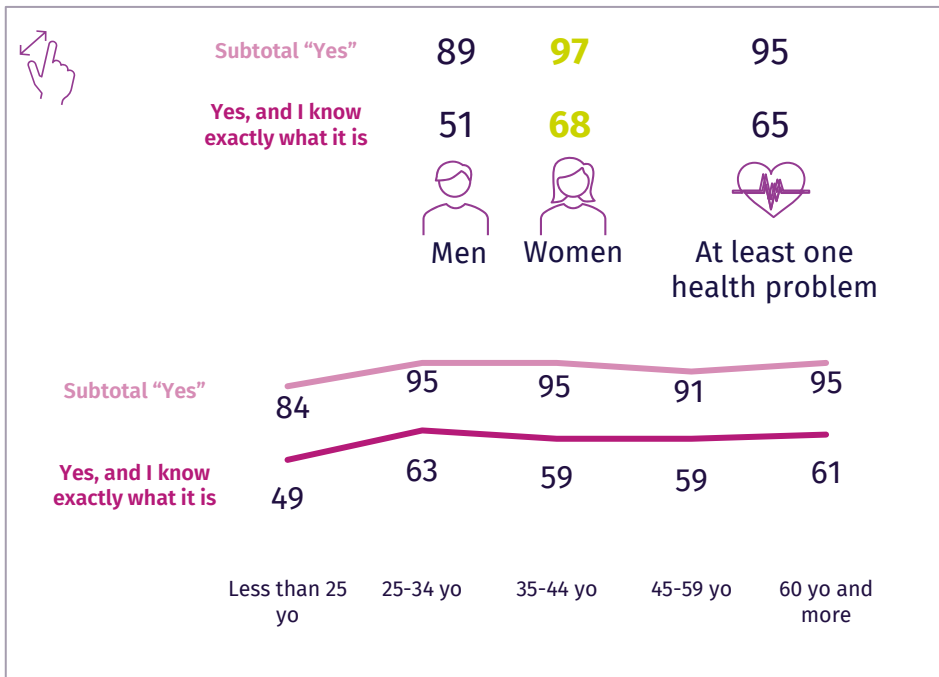


93%
have already heard
about vaginal flora



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





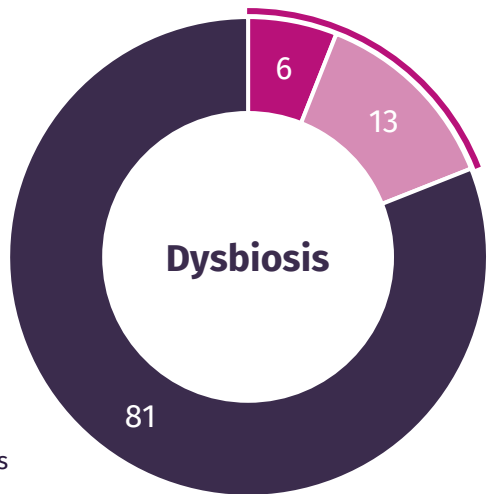
2

In Spain, knowledge of the role and functions of the microbiome has not really improved.

Dysbiosis is not a popular term among Spanish: only 1 out of 5 respondents know the term, which is lower than average.



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

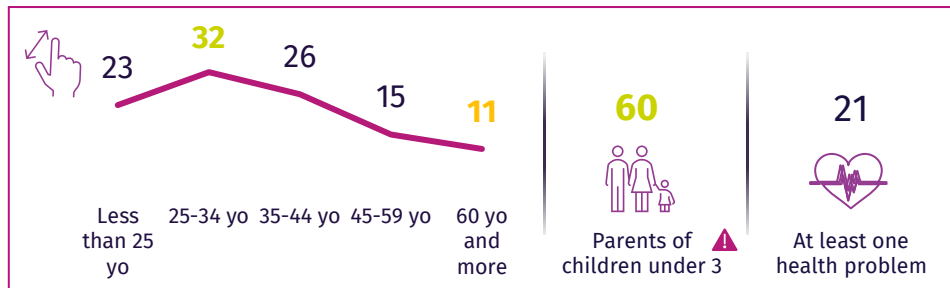


- Yes, and I know exactly what it is
- Yes, but I don't know exactly what it is
- Never heard about it

19% have already heard about the term 'dysbiosis'
2023: 21%, -2pts



34%



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

▲ Low basis, results must be interpreted with caution



Knowledge about the microbiome location, function and composition is quite limited.



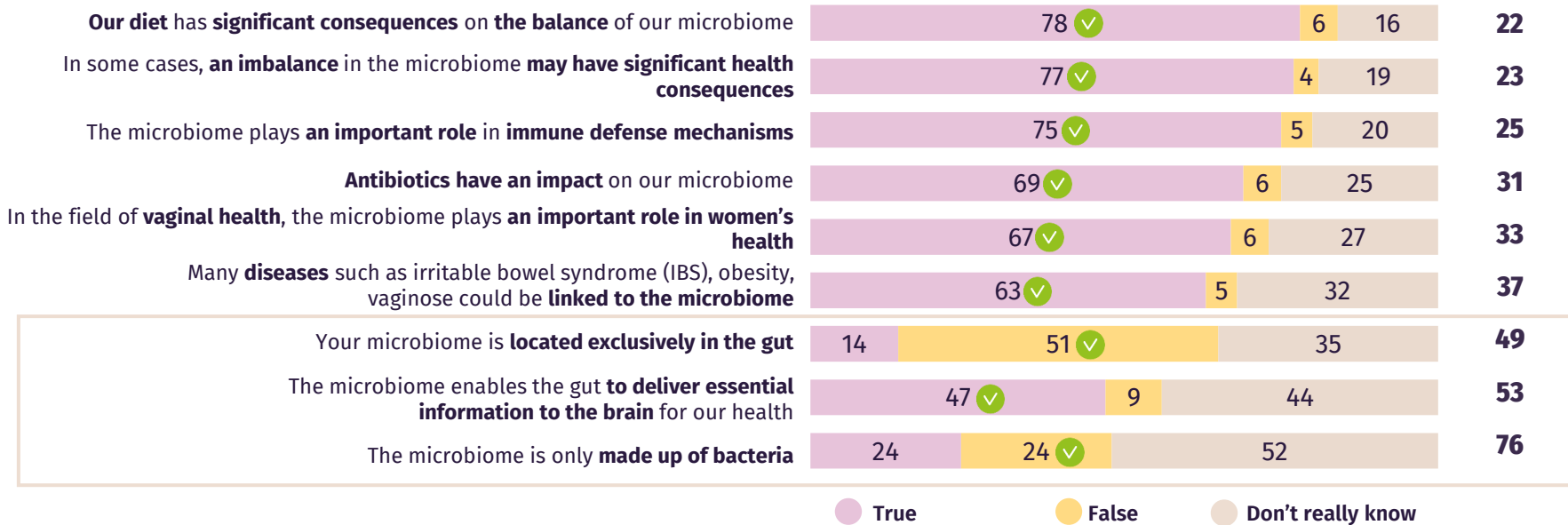
Question 4. For each of the following statements, tell us if you think it is TRUE or FALSE. If you are unsure about your answer, answer I do not really know.

Base: All respondents



Good answer

Wrong answers/
don't know



True

False

Don't really know

Definition displayed to respondents before this question: In the past, the term most commonly used was "flora" or "microflora", this term has now been renamed "microbiome".



And, there is no real improvement compared to last year results.

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

% good answer

	Total	Evolution vs 2023	ALL COUNTRIES
Our diet has significant consequences on the balance of our microbiome	78	+2pts	78
In some cases, an imbalance in the microbiome may have significant health consequences	77	+1pt	77
The microbiome plays an important role in immune defense mechanisms	75	+1pt	74
Antibiotics have an impact on our microbiome	69	+3pts	70
In the field of vaginal health , the microbiome plays an important role in women's health	67	+3pts	68
Many diseases such as irritable bowel syndrome (IBS), obesity, vaginose could be linked to the microbiome	63	<i>New item</i>	64
Your microbiome is located exclusively in the gut	51	+5pts	46
The microbiome enables the gut to deliver essential information to the brain for our health	47	=	53
The microbiome is only made up of bacteria	24	<i>New item</i>	28



In Spain, knowledge of the microbiome appears to be similar regardless of age or gender.



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.

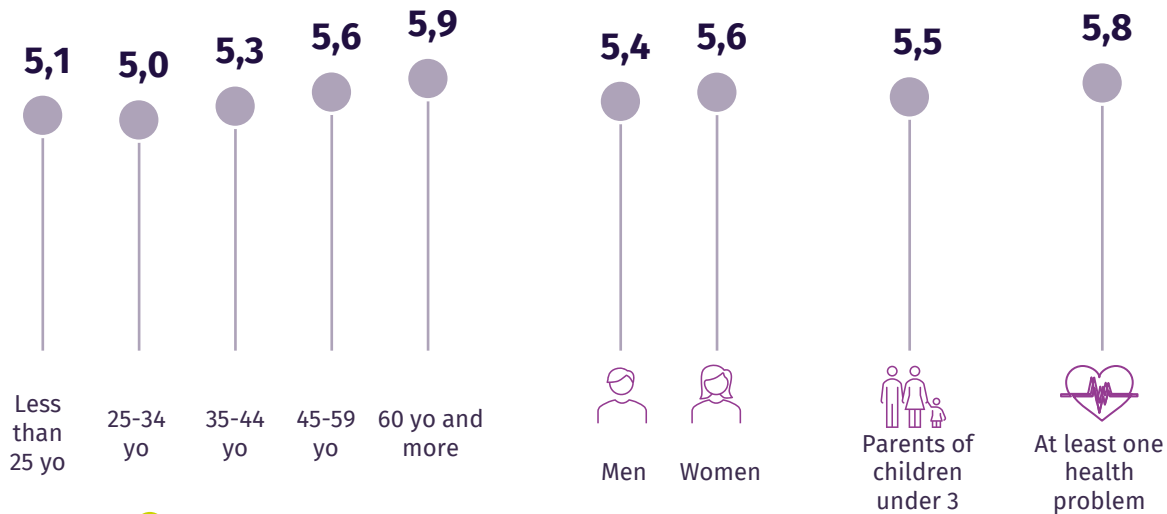
Base: All respondents



5,6

5,5/9

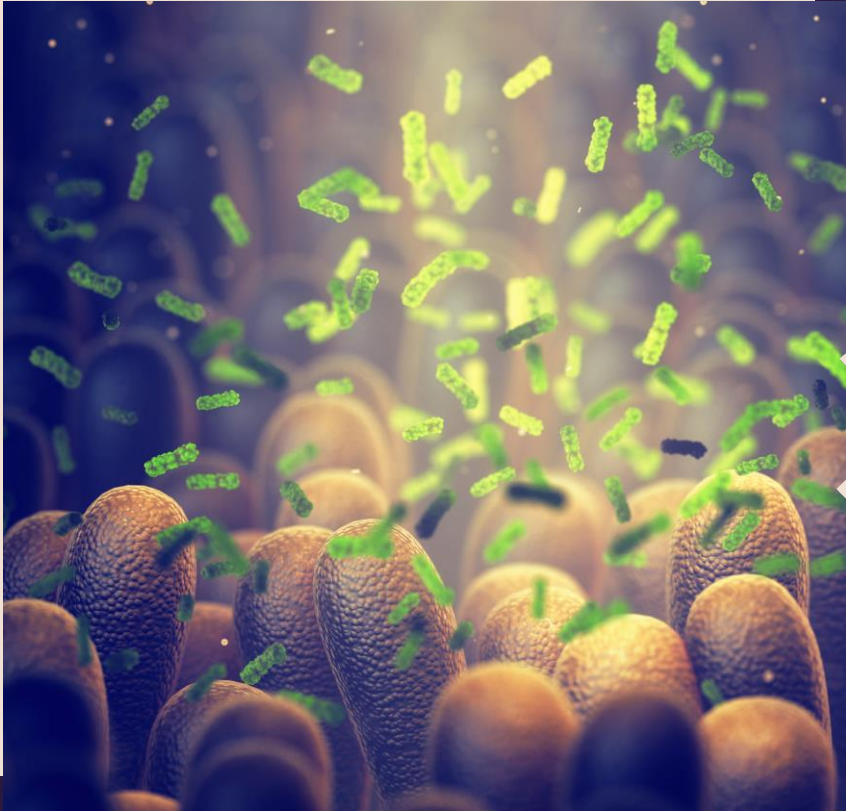
Number of good responses on average



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

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3

To maintain a balanced microbiome, Spanish have adopted healthy behaviors, but less likely to consume probiotics or prebiotics.

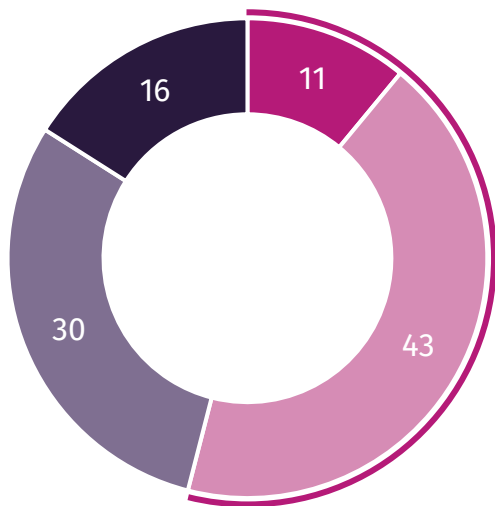


More than half of Spanish have changed their behaviors to keep their microbiome balanced and functioning as smoothly as possible.

NEW QUESTION

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

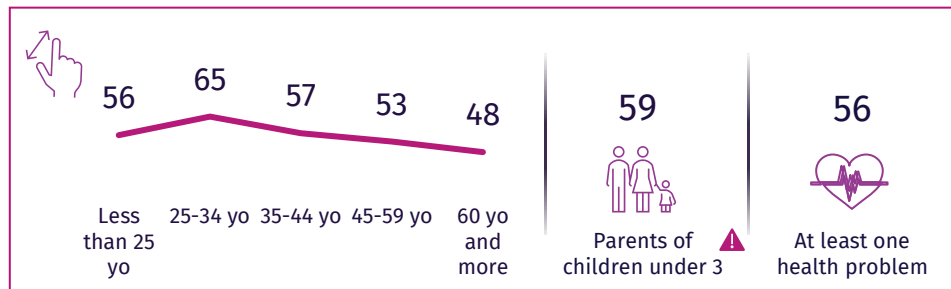


- Yes, a lot
- Yes, a little
- No, not really
- No, not at all

54% have changed their behaviors



58%



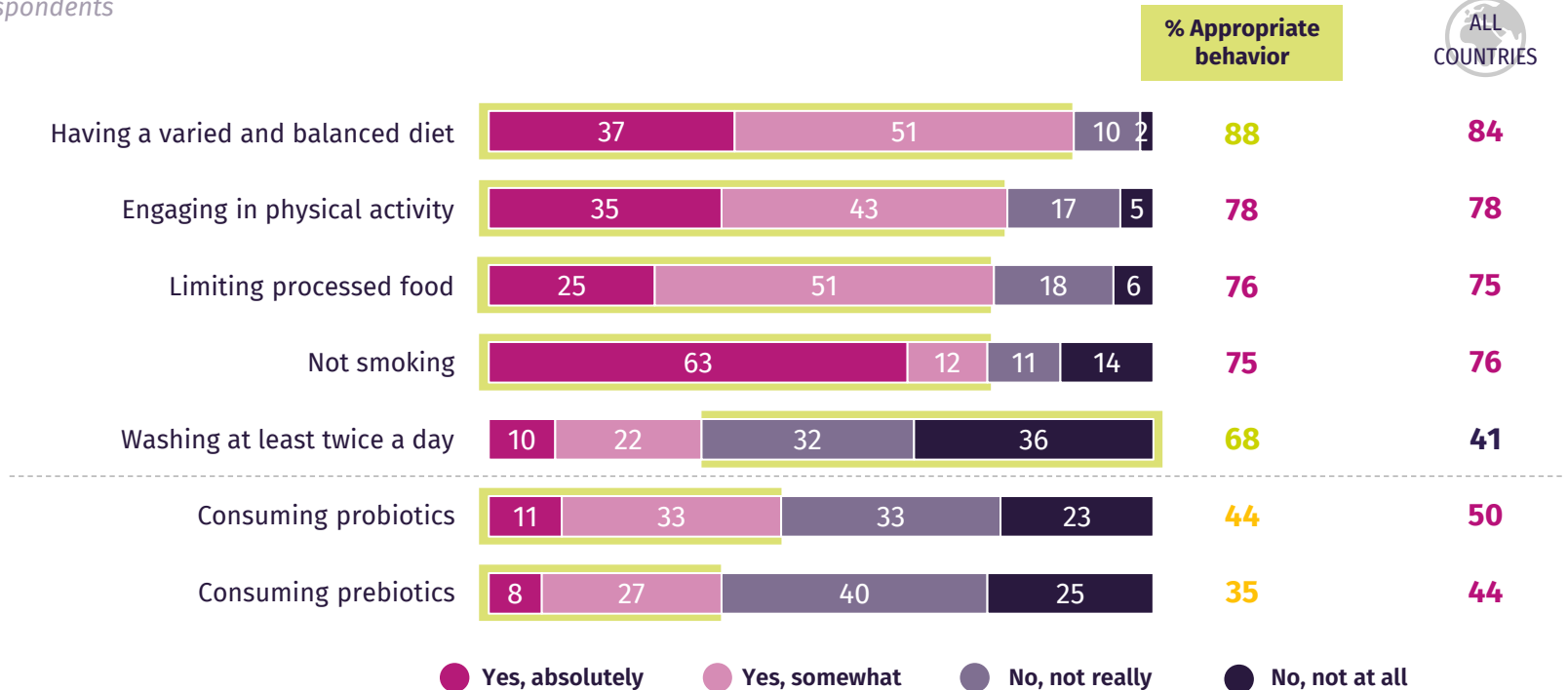
● Significant differences vs total - superior ● Significant differences vs total - inferior

▲ Low basis, results must be interpreted with caution



“Standard” healthy behaviors are widely adopted by Spanish. However, the use of probiotics and prebiotics is lower than the global average.

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





Spanish aged 25-34yo and over 60yo have adopted more appropriate behaviors for their microbiome.

NEW QUESTION

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

Base: All respondents

ALL COUNTRIES

4,5



Number of good responses on average



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

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International
Microbiota
Observatory



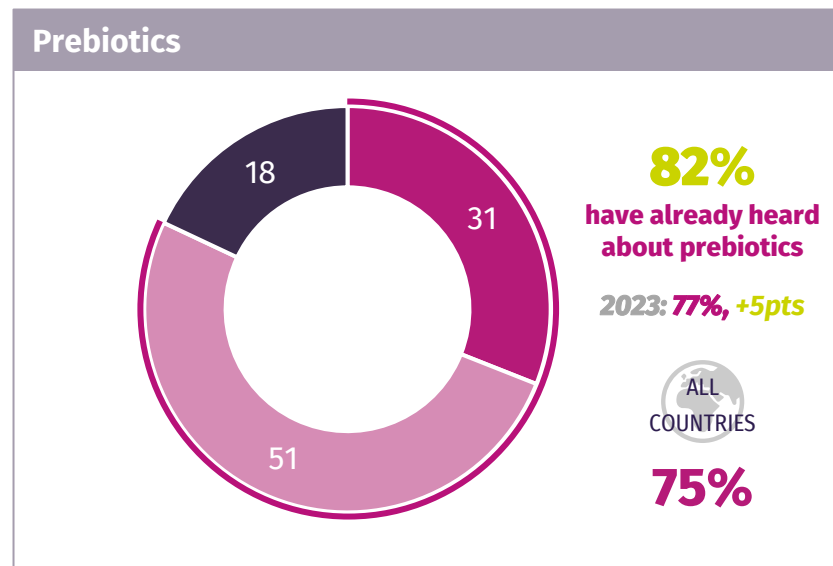
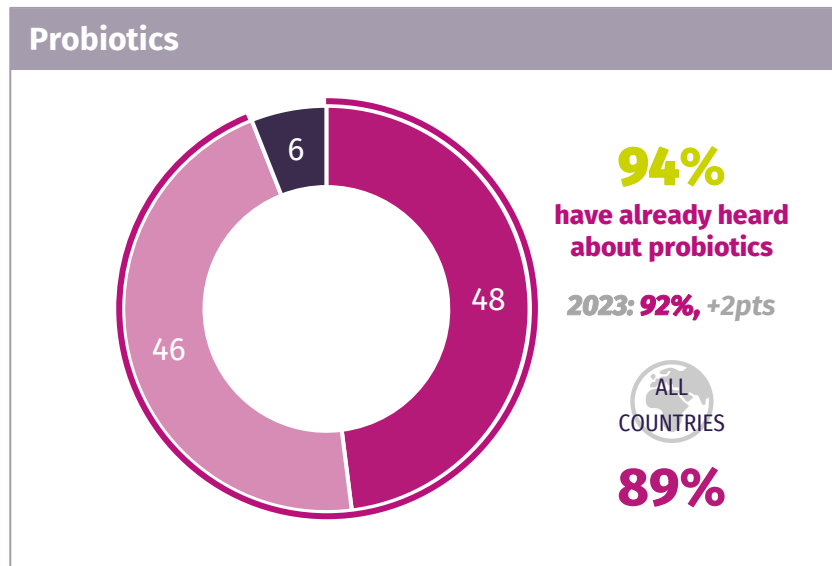
Ipsos



In Spain, the awareness of probiotics and prebiotics is above average. However, an important part of the population still doesn't know exactly what they are.



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

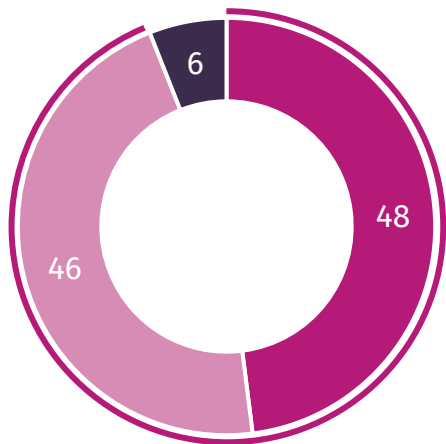


Spanish people aged 25-34 are more aware of probiotics.



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

Probiotics



94%
have already heard
about probiotics

2023: **92%**, +2pts

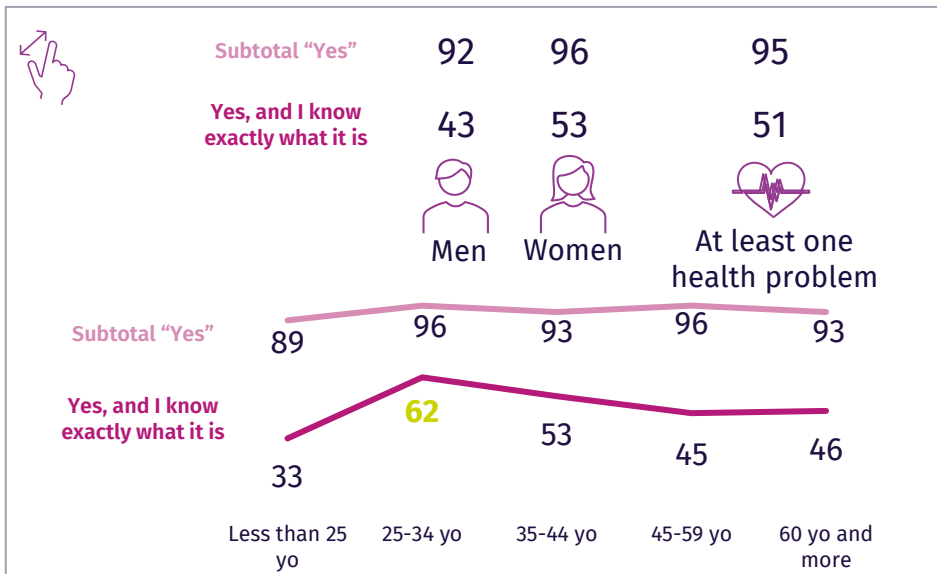


89%

Yes, and I know exactly what it is

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

No, I never heard about it



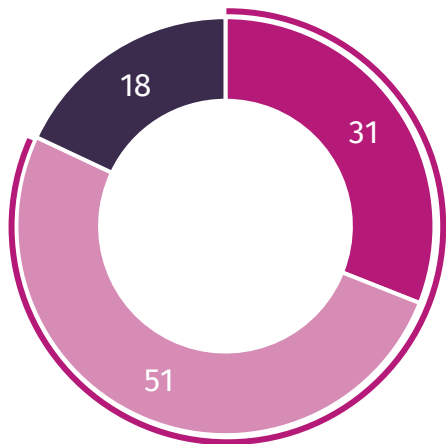


A similar trend for prebiotics awareness: Spanish people aged 25-34 seems more aware of it.

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



Prebiotics



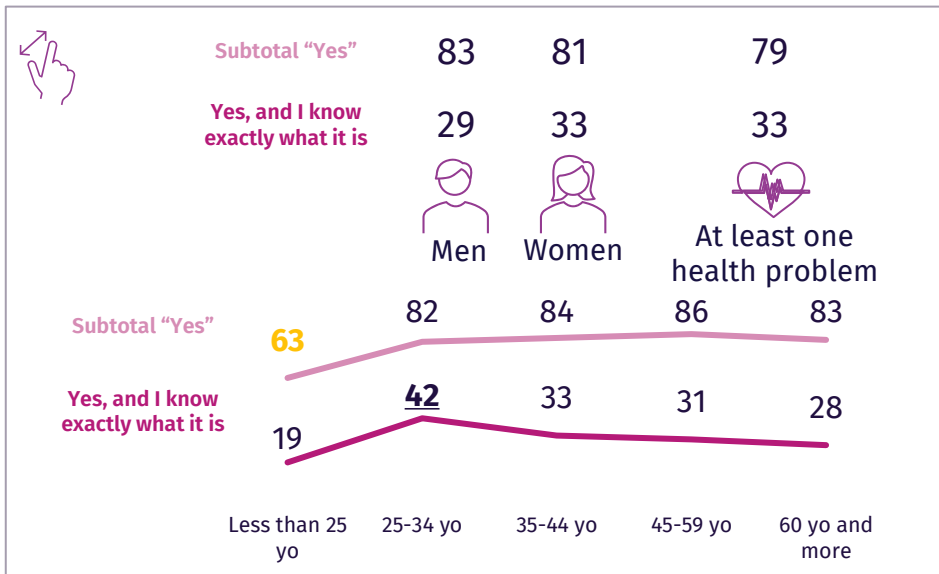
82%
have already heard
about prebiotics

2023: **77%**, +5pts



75%

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





4

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

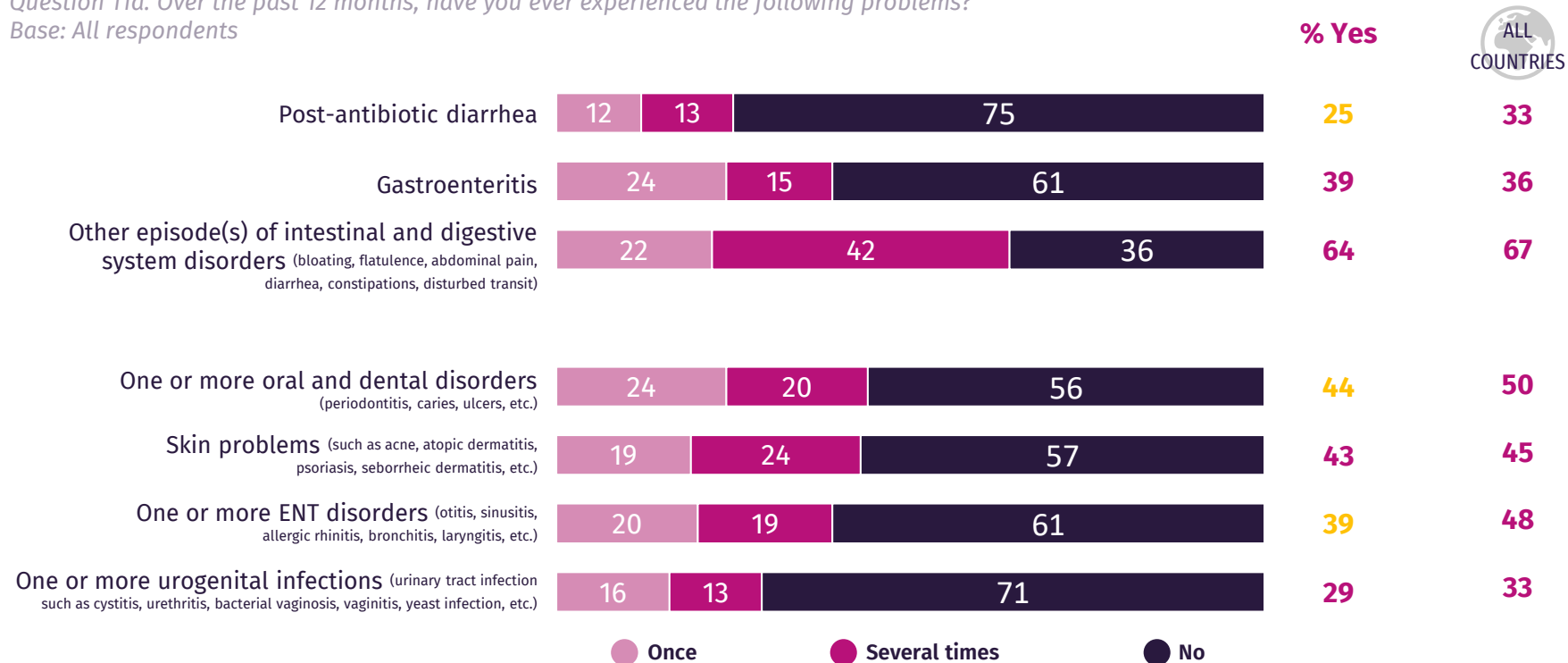


In the last 12 months, 1 out of 4 Spanish have experienced post-antibiotic diarrhea, 2 out of 5 have had a gastroenteritis, and 2 out of 3 have suffered from other episodes of intestinal and digestive system disorders.

NEW QUESTION

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

Base: All respondents



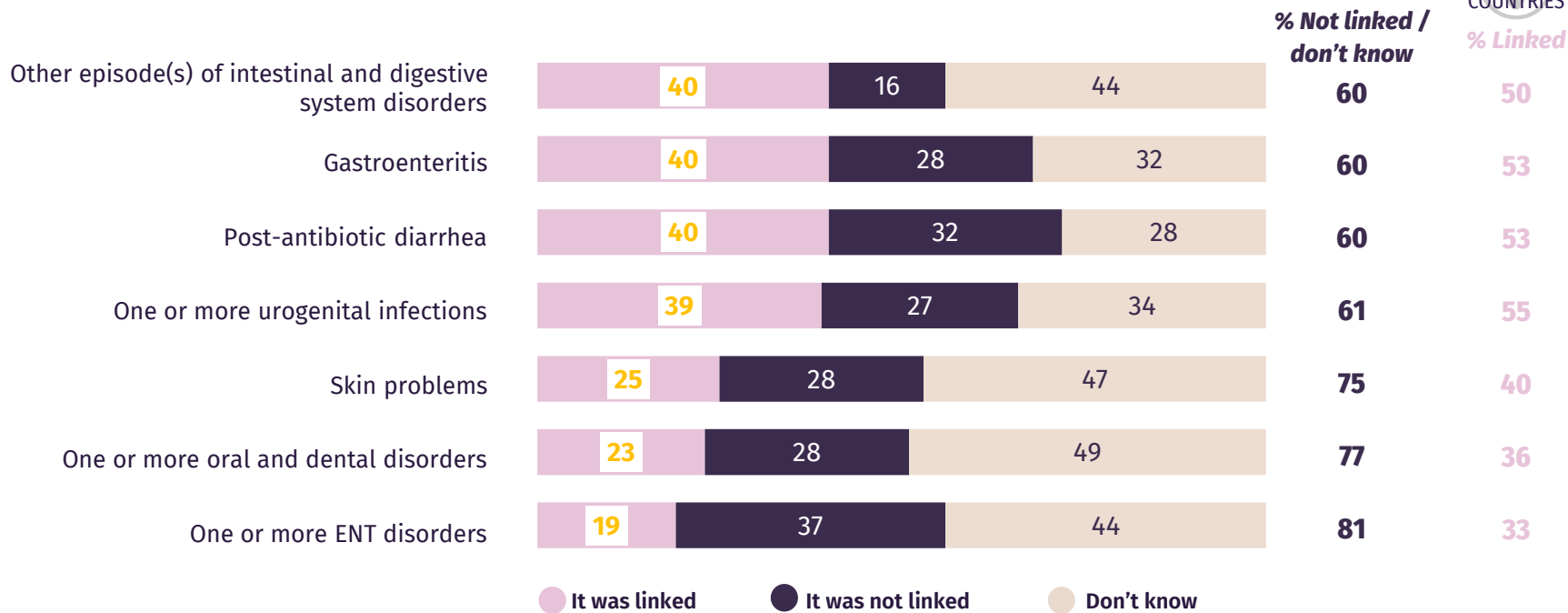


When suffering from health problems, Spanish are less likely than average to say that their problem is linked to their microbiome.

NEW QUESTION

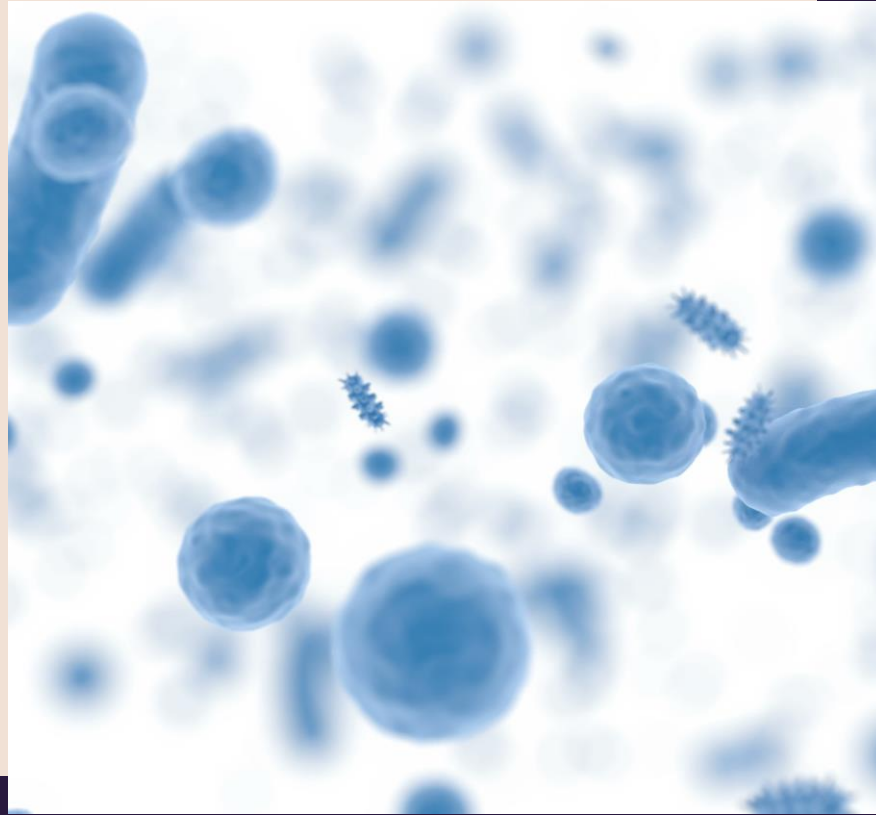
Question 11b. And do you think this or these problems are linked to your microbiome?

Base: People who have experienced these problems





Healthcare professionals have a key role to play in better informing Spanish people



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.



13% of Spanish discover the microbiome while answering the survey, a lower proportion than average. Otherwise, the main sources are healthcare professionals, health-related TV programs and relatives.

NEW QUESTION

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

Base: All respondents

ALL COUNTRIES





Sources are diverse: those aged under 25 yo first heard about microbiome through school or studies, 25-34 yo through social media, and 45-59 yo through HCPs.



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

Base: All respondents

NEW QUESTION

	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=43	n=73	n=95	n=147	n=142	n=234	n=266	▲ n=20	n=298
While answering this questionnaire	13	4	11	8	11	20	13	13	10	14
By a healthcare professional	12	8	10	12	16	10	13	11	15	13
On television, in health-related programs	9	7	9	6	10	10	12	6	5	8
Your family, friends, acquaintances	9	10	6	8	12	7	7	10	5	8
School/studies	8	20	8	8	8	6	8	9	14	9
Advertisements (TV, press, street ads.)	7	16	4	7	5	6	5	8	5	6
Occupational doctor / workplace nurse	7	2	7	9	7	6	8	6	10	9
On television during the news	5	5	4	5	6	5	5	6	0	5
On social media (influencers...)	4	7	12	8	1	1	3	5	10	4
In specialized press (wellness, health magazines)	3	0	0	6	2	3	2	3	0	2
On a blog, an online article	3	4	4	1	4	2	2	3	0	3
In a booklet/brochure at your healthcare professional's office	2	0	3	1	1	4	2	2	5	3
On the radio	2	5	6	0	1	3	4	1	0	2
Scientific podcast	2	0	5	3	2	1	2	2	5	2
In national press (general, mainstream media)	2	0	1	2	2	3	2	2	0	1
In regional daily press	1	2	1	0	1	1	1	1	5	1
From your colleagues	1	3	1	3	1	0	1	2	6	2
During a sports activity	0	3	1	0	0	0	0	0	0	0
Other	10	4	7	13	10	12	10	10	5	8

● Significant differences vs total - superior

● Significant differences vs total - inferior

● First source by profile

▲ Low basis, results must be interpreted with caution

USER VOTARY



In Spain, healthcare professionals stand out as the most trusted source of information about the microbiome. Spanish are also more likely to trust a coach during a sport activity than in other countries.

NEW QUESTION

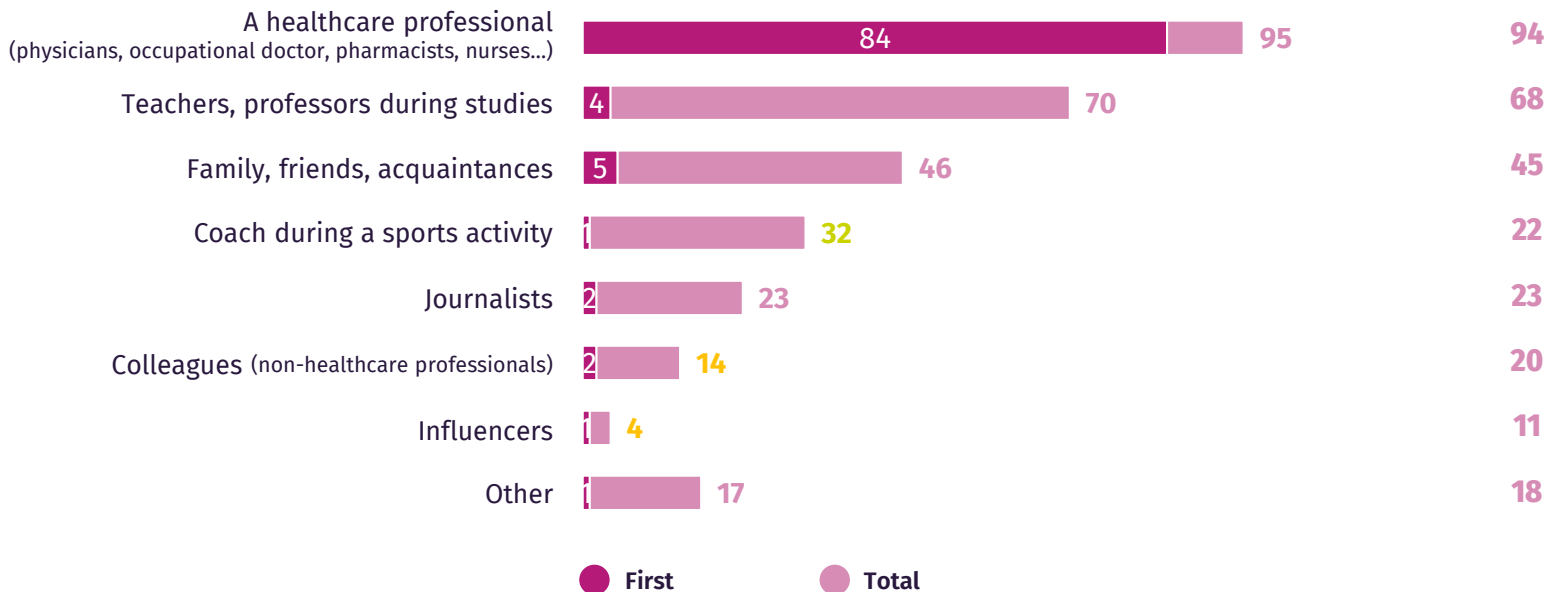
Question 2V2. For relevant and trustworthy information about microbiome, who would you trust the most?

Select the sources you would trust the most: 1st, 2nd, 3rd

Base: All respondents



% Total





And across all age groups, healthcare professionals remain the most trusted source of information. Those under 25 yo are more likely to trust their coach, while those aged 25-34 are more likely to trust influencers.

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=43	n=73	n=95	n=147	n=142	n=234	n=266	▲ n=20	n=298
A healthcare professional (physicians, occupational doctor, pharmacists, nurses...)	95	81	87	92	99	99	95	95	100	94
Teachers, professors during studies	70	63	72	72	72	69	70	71	61	71
Family, friends, acquaintances	46	52	48	46	43	45	45	47	54	45
Coach during a sports activity	32	50	41	28	30	27	33	31	40	32
Journalists	23	29	13	22	20	28	24	21	5	22
Colleagues (non-healthcare professionals)	14	11	19	17	15	10	11	17	19	13
Influencers	4	7	11	9	1	1	6	3	5	6
Other	17	7	9	15	19	21	17	16	16	18

NEW QUESTION



Spanish have received more information from healthcare professionals this year. However, a minority received information.



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

Base: All respondents

Only **24%** received **ALL THESE INFORMATION**, at least one time
 7% received all these information several times

2023: **17%**, +7pts
 4%, +3pts

% Yes

Evolution vs 2023

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



40

+9pts

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



40

+7pts

Prescribe probiotics or prebiotics



40

+4pts

Explain to you what the microbiome is and what its role and function are *



35

+9pts

● Yes, several times ● Yes, once ● No, never



Spanish appear to be less informed on the microbiome by their healthcare professionals than in other countries.

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

% Yes

	Total	ALL COUNTRIES
% Received ALL THESE INFORMATION, at least one time	24	30
% Received ALL THESE INFORMATION, several times	7	9
Educate you about the importance of preserving as much as possible the balance of your microbiome	40	48
Explain the good behavior to adopt in order to maintain a good balance within your microbiome as much as possible	40	48
Prescribe probiotics or prebiotics	40	50
Explain to you what the microbiome is and what its role and function are	35	45



There are some differences in the prescription of probiotics and prebiotics: 25-34 yo have received it more while older people have received fewer.



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	Parents of children under 3	At least one health problem
	base n=500	n=43	n=73	n=95	n=147	n=142	n=234	n=266	▲ n=20	n=298
Educate you about the importance of preserving as much as possible the balance of your microbiome	40	47	49	41	40	34	42	38	54	42
Explain the good behavior to adopt in order to maintain a good balance within your microbiome as much as possible	40	52	48	45	38	33	40	41	54	44
Prescribe probiotics or prebiotics	40	39	54	47	43	29	36	45	60	42
Explain to you what the microbiome is and what its role and function are *	35	46	43	36	31	31	38	32	49	37

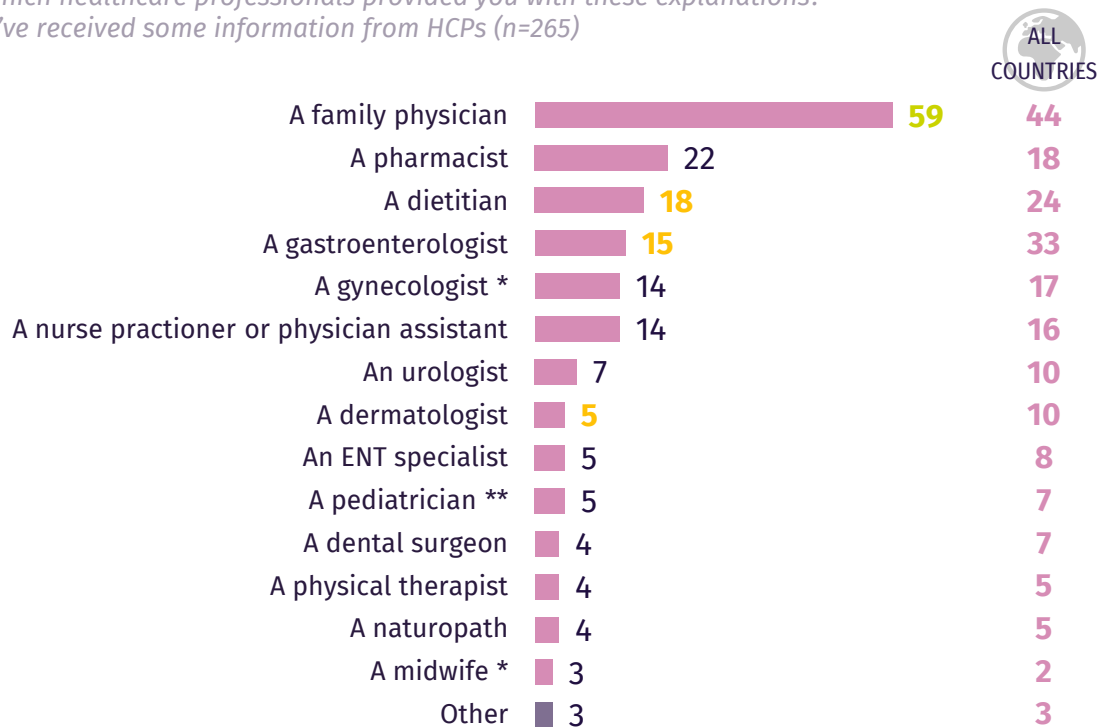


In Spain, family physicians stand out as the most important source of information about the microbiome.

NEW QUESTION

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

Base: People who've received some information from HCPs (n=265)



* Item displayed to women

** Item displayed to parents



The family physician is the most important source of information, and this is even more the case for people over 60 yo.

NEW QUESTION

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

Base: People who've received some information from HCPs (n=265)

	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=265	▲ n=28	n=45	n=53	n=78	n=61	n=120	n=145	▲ n=14	n=170
A family physician	59	42	37	54	66	78	61	58	13	58
A pharmacist	22	27	16	13	20	32	24	20	15	25
A dietitian	18	19	16	16	22	14	21	15	14	20
A gastroenterologist	15	10	18	9	16	17	18	12	20	19
A gynecologist	14	21	21	15	7	14	0	27	29	17
A nurse practitioner or physician assistant	14	14	18	15	14	11	12	16	22	17
An urologist	7	0	4	2	10	11	10	4	7	6
A dermatologist	5	4	10	8	4	1	6	5	14	8
An ENT specialist	5	11	2	10	4	3	6	5	21	8
A pediatrician	5	10	4	4	9	0	2	8	15	5
A dental surgeon	4	8	7	2	4	3	5	4	8	4
A physical therapist	4	0	6	3	5	1	2	5	14	3
A naturopath	4	15	5	2	3	4	5	4	7	4
A midwife	3	11	2	3	3	0	0	5	7	3
Other	3	0	5	6	1	4	4	3	23	1



After being prescribed antibiotics, the level of information remains limited, and lower than other countries.



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

Only **21%** received ALL THESE INFORMATION from their HCPs

2023: **18%**, +3pts

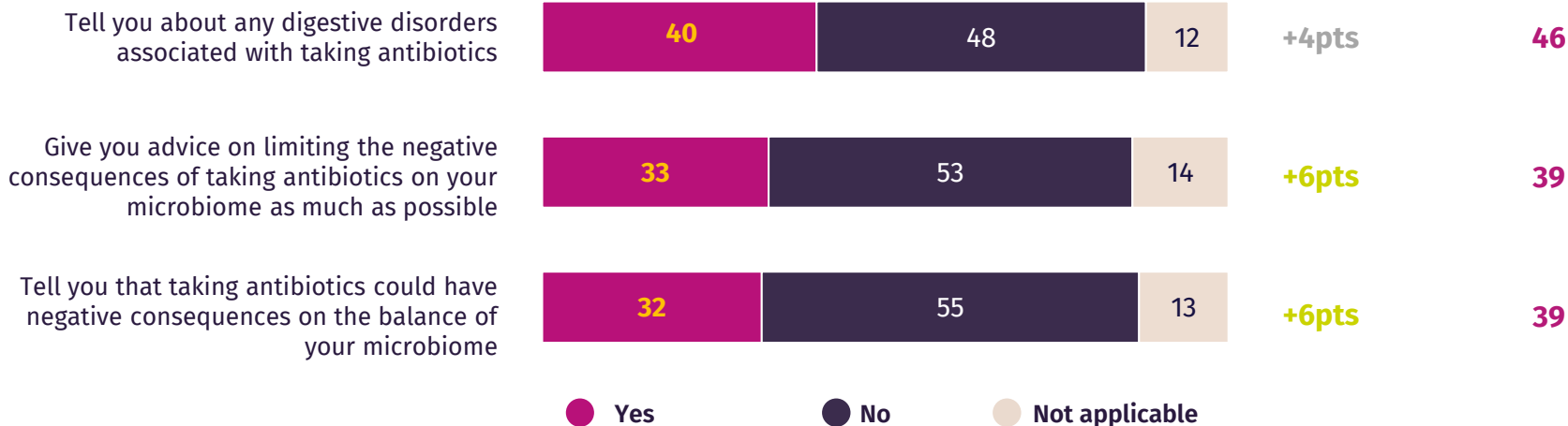


27%

Evolution vs 2023



% Yes

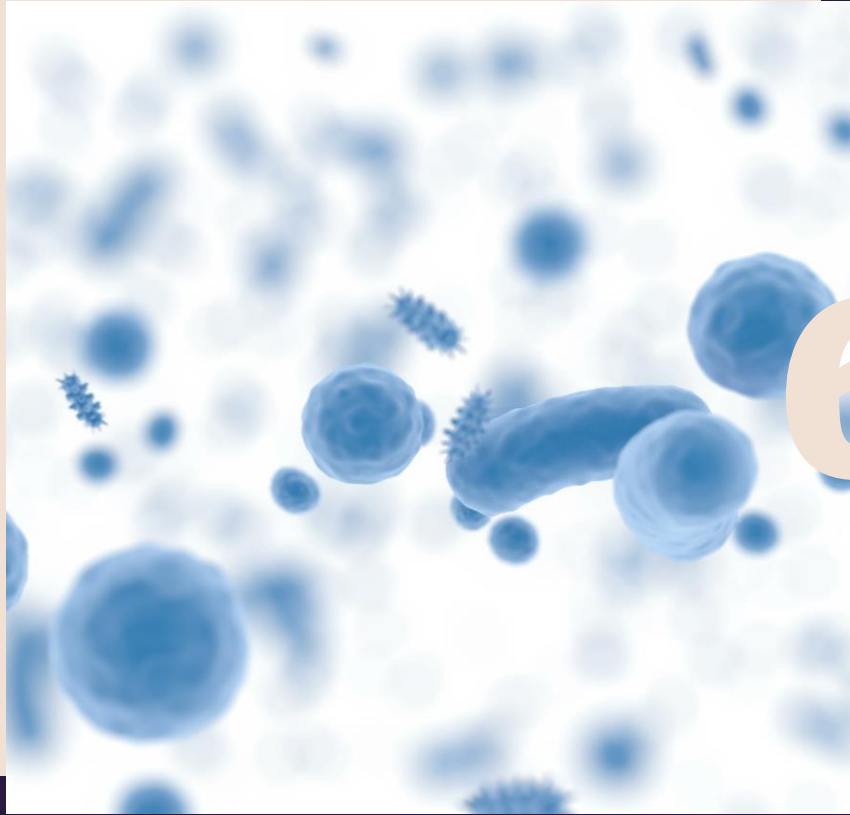




Spanish under 25 yo received less information and advice when prescribed antibiotics.

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

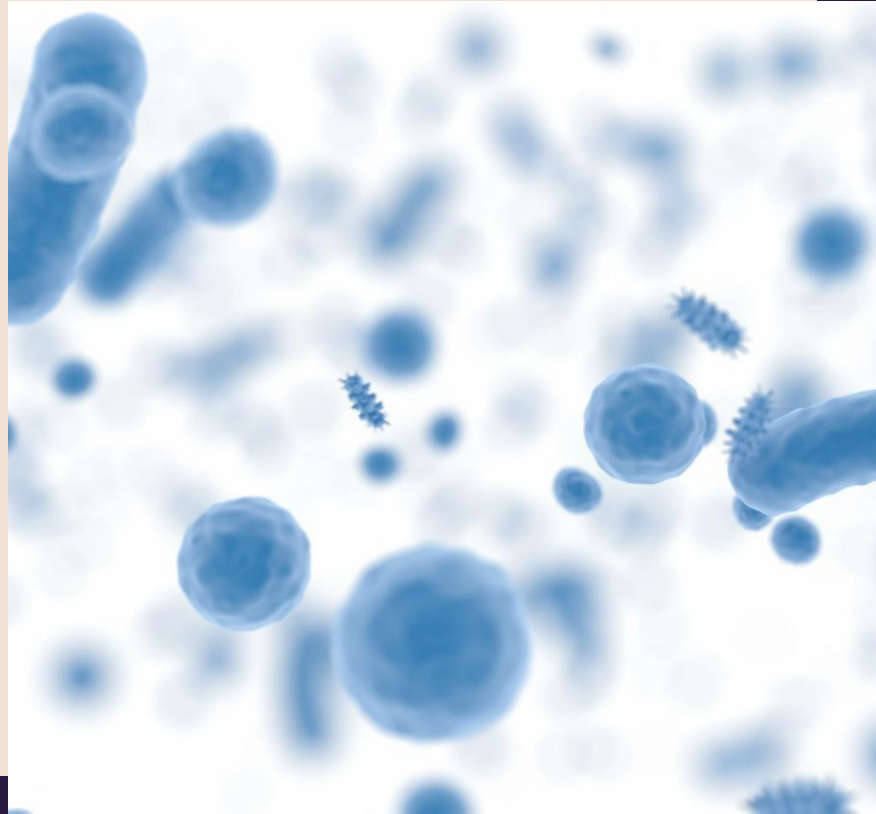
% Yes	Total	Less than 25 yo	25-34 yo	35-44 yo	45-59 yo	60 yo and more	Parents of children under 3	At least one health problem
	base n=500	n=43	n=73	n=95	n=147	n=142	▲ n=20	n=298
% HAVE RECEIVED ALL THESE INFORMATION FROM THEIR HCPS	21	7	23	23	25	20	15	23
Tell you about any digestive disorders associated with taking antibiotics	40	28	44	34	43	41	30	45
Give you advice on limiting the negative consequences of taking antibiotics on your microbiome as much as possible	33	25	36	32	34	32	35	34
Tell you that taking antibiotics could have negative consequences on the balance of your microbiome	32	27	34	35	37	28	35	36



6

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.

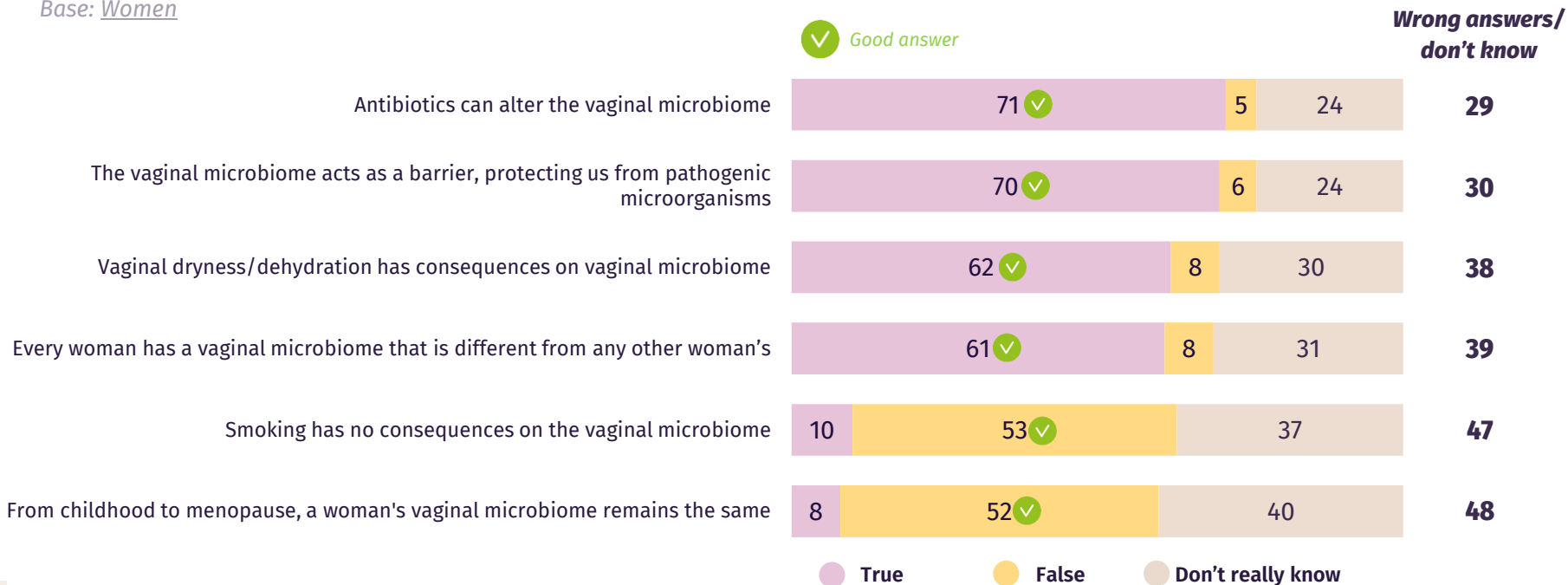


Spanish women have some knowledge on vaginal microbiome: 7 out of 10 know that it has a barrier function, and that antibiotics can alter it.



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



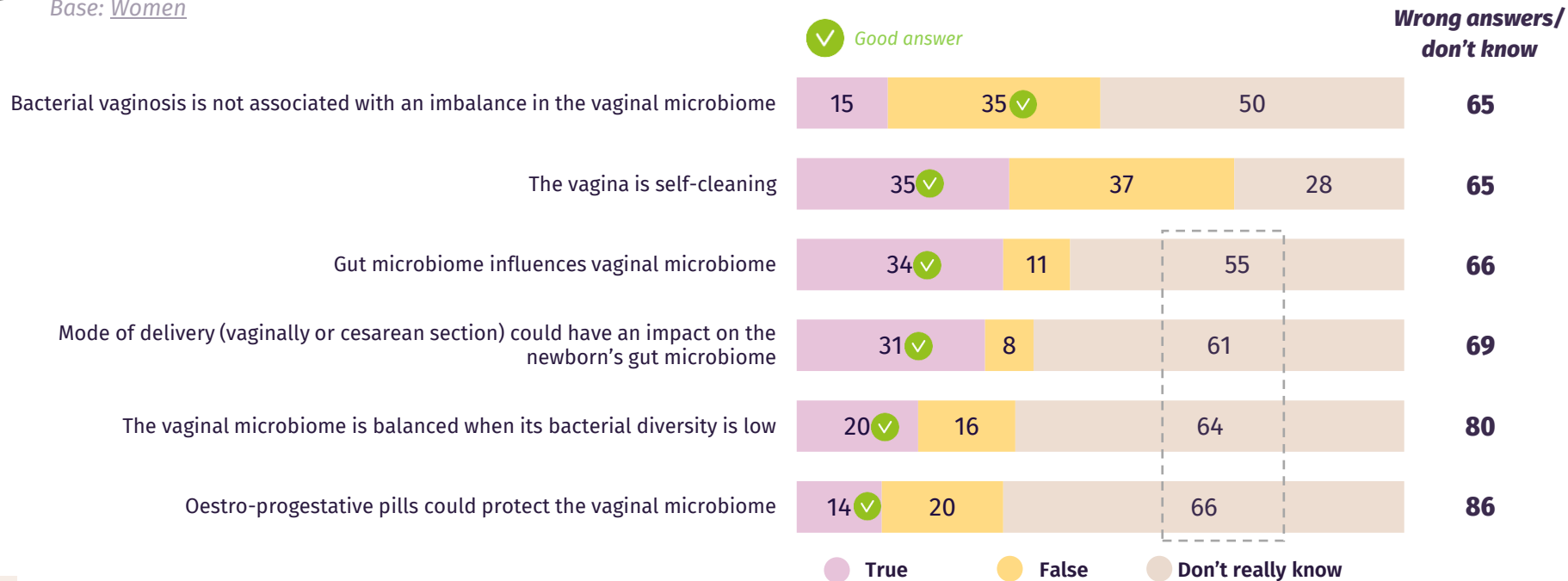


When it comes to the most specific aspects of the vaginal microbiome, the majority of Spanish women simply do not know the answer.



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





And Spanish women have lower levels of knowledge about the vaginal microbiome, compared to other countries.

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

% good answer

	Total	Evolution vs 2023	ALL COUNTRIES
Antibiotics can alter the vaginal microbiome	71	<i>New item</i>	69
The vaginal microbiome acts as a barrier, protecting us from pathogenic microorganisms	70	+7pts	68
Vaginal dryness/dehydration has consequences on vaginal microbiome	62	<i>New item</i>	69
Every woman has a vaginal microbiome that is different from any other woman's	61	+3pts	64
Smoking has no consequences on the vaginal microbiome	53	<i>New item</i>	55
From childhood to menopause, a woman's vaginal microbiome remains the same	52	+4pts	55
Bacterial vaginosis is not associated with an imbalance in the vaginal microbiome	35	+3pts	44
The vagina is self-cleaning	35	+5pts	56
Gut microbiome influences vaginal microbiome	34	<i>New item</i>	43
Mode of delivery (vaginally or cesarean section) could have an impact on the newborn's gut microbiome	31	<i>New item</i>	40
The vaginal microbiome is balanced when its bacterial diversity is low	20	+3pts	30
Oestro-progestative pills could protect the vaginal microbiome	14	<i>New item</i>	22



Significant differences vs total - superior



Significant differences vs total - inferior



Knowledge of the vaginal microbiome appears to be similar across all 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 do not really know.

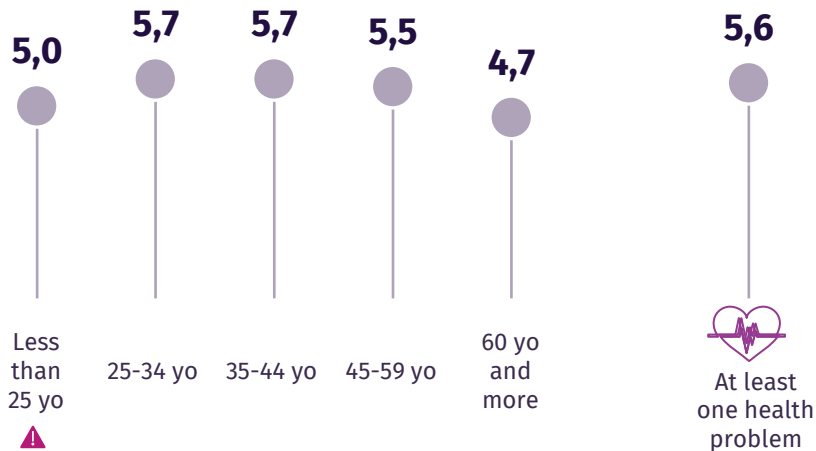
Base: Women



6,2

5,4/12

Number of good responses on average



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



Few Spanish women have received information or advice from HCPs about their vaginal microbiome. However, an increasing number of women have been sensitised compared to the previous year.

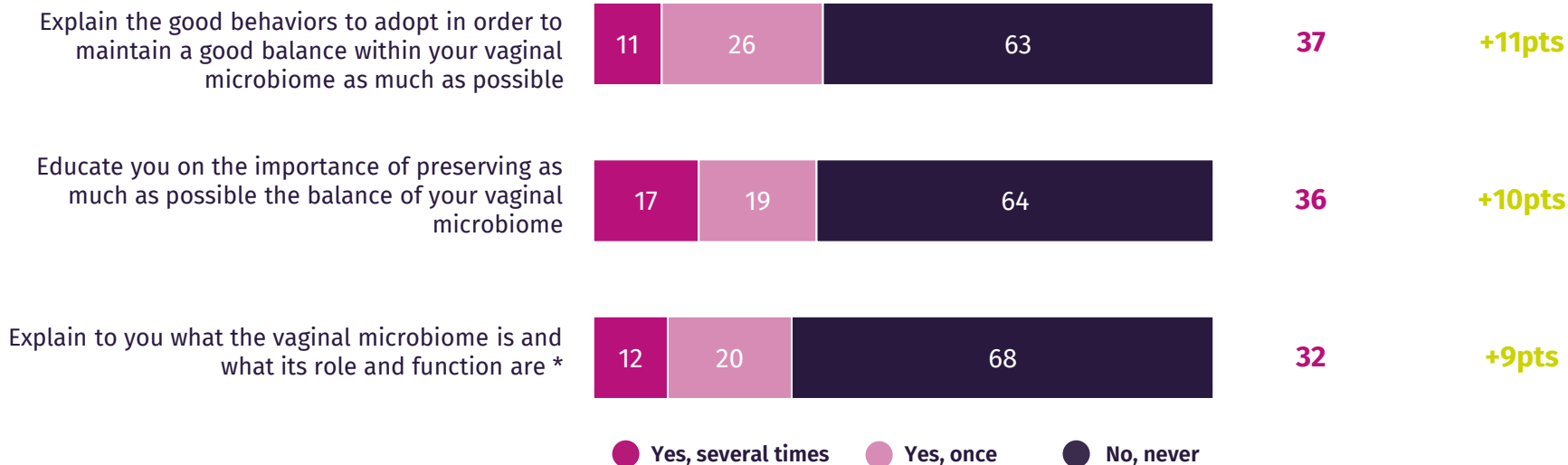


Question 14. Has the healthcare professional following your gynecological health talked to you about the following?
Base: Women

28% received ALL THESE INFORMATION, at least one time
7% received all these information several times

2023: 19%, +9pts
4%, +3pts

% Yes Evolution vs 2023



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



And Spanish women are less informed about vaginal microbiome by their HCPs than average.

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	28	37
% Received ALL THESE INFORMATION, <u>several times</u>	7	14
Explain the good behaviors to adopt in order to maintain a good balance within your vaginal microbiome as much as possible	37	48
Educate you on the importance of preserving as much as possible the balance of your vaginal microbiome	36	48
Explain to you what the vaginal microbiome is and what its role and function are	32	43



Significant differences vs total - superior



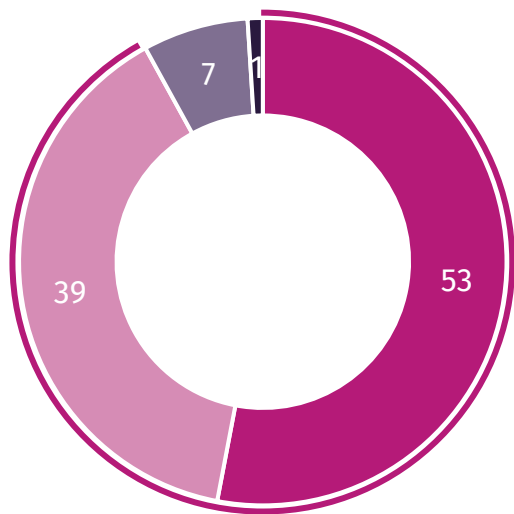
Significant differences vs total - inferior



The vast majority of Spanish women would like to be more informed 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



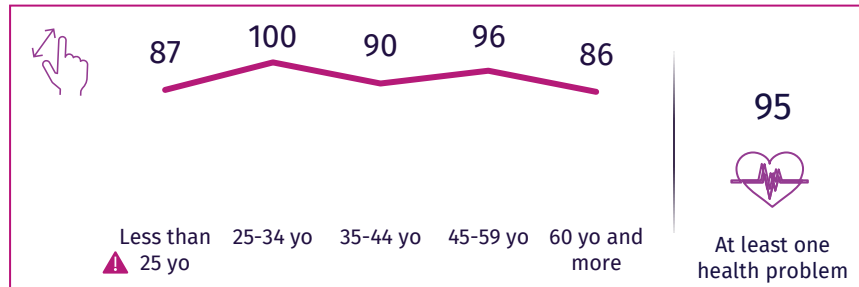
- Yes, absolutely
- Yes, somewhat
- No, not really
- No, not at all

92% would like to have more information about the importance of the vaginal microbiome and its impact on health

2023: 90%, +2pts



88%



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

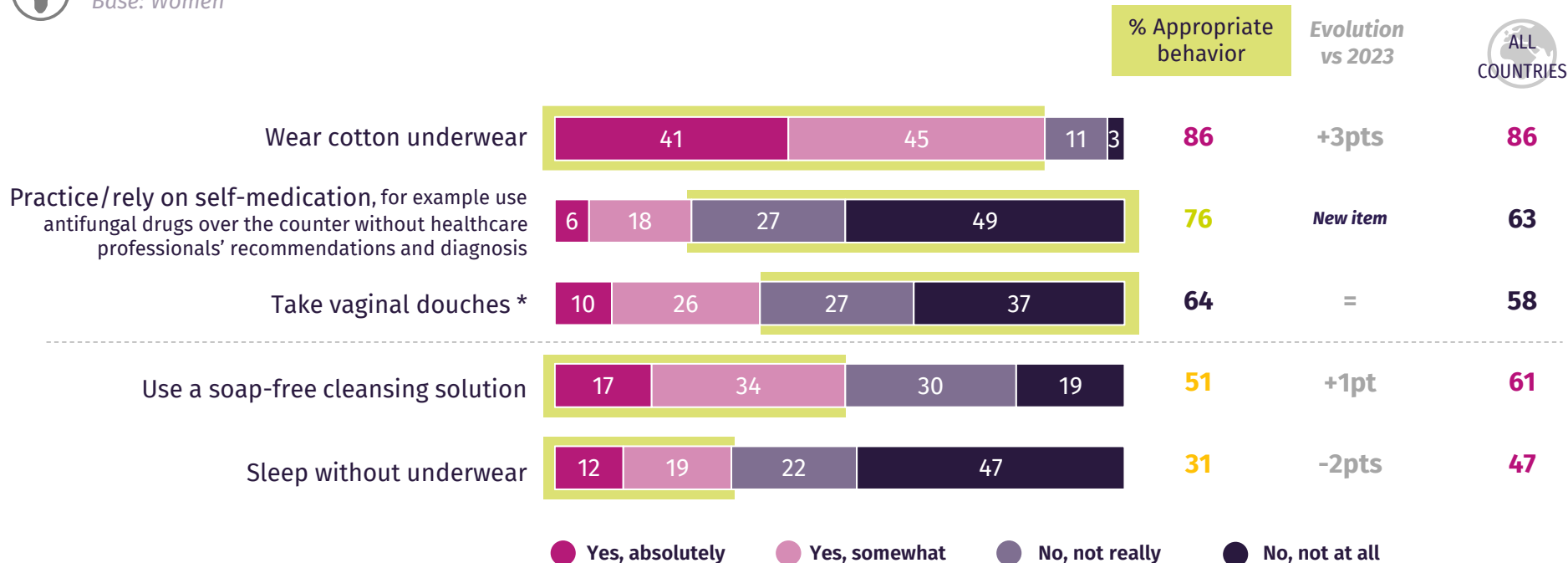
▲ Low basis, results must be interpreted with caution



Spanish women adopt specific behaviors to protect their vaginal microbiome. However, they are less likely than average to use a soap-free cleansing solution or sleep without underwear.



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).



Spanish women have adopted the same amount of appropriate behaviors for their vaginal microbiome, regardless of their age.



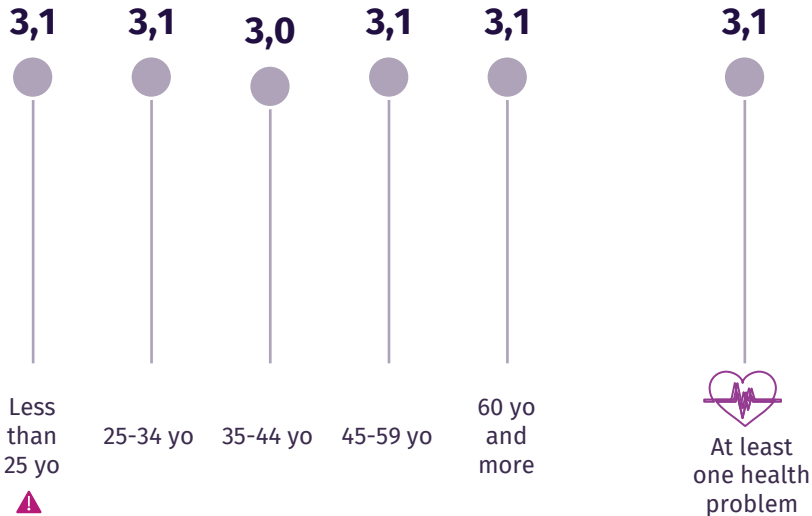
Question 16. In your daily life, do you regularly adopt the following behaviors?
Base: Women



3,2

3,1/5

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

A large, light-colored illustration of a diverse microbiome, featuring various shapes of bacteria and fungi, is positioned on the left side of the slide. The illustration is semi-transparent and overlaps a white rectangular area.

Main results per country

Learnings on Spanish results



Spain

Awareness of the microbiome & its diversity	
Know exactly what is « microbiome »	27%
Subtotal « Aware »	76%
Subtotal Aware of the gut microbiome	61%
Subtotal Aware of all microbiome	25%

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

Level of knowledge around the solutions which can maintain the microbiota balanced	
Know exactly what are probiotics	48% ↗
Know exactly what are prebiotics	31% ↗

Adoption and identification of appropriate behaviors to maintain a balanced microbiota	
Have changed their behaviors	54%

Level of information provided by healthcare professionals	
Have heard about the microbiome from healthcare professional	12%
Received at least one piece of information at least once	53% ↗

Key learnings

In Spain, awareness of the microbiome has progressed since last year. However, Spanish awareness of the diversity of microbiome remains low, and below average. They seem to be more familiar with the term “flora”.

To maintain their microbiome balanced, half of Spanish have changed their behaviors. They have adopted standard healthy behaviors, but are less likely to consume probiotics or prebiotics compared to other countries.

Spanish are less likely than average to have received information about microbiome from healthcare professionals. In fact, their level of information on the subject is really low, even though it has improved since last year.

A large, light-colored illustration of a microbiome, showing various shapes representing different types of bacteria and fungi, set against a dark blue background.

ANNEXES

FIABILITÉ DES RÉSULTATS

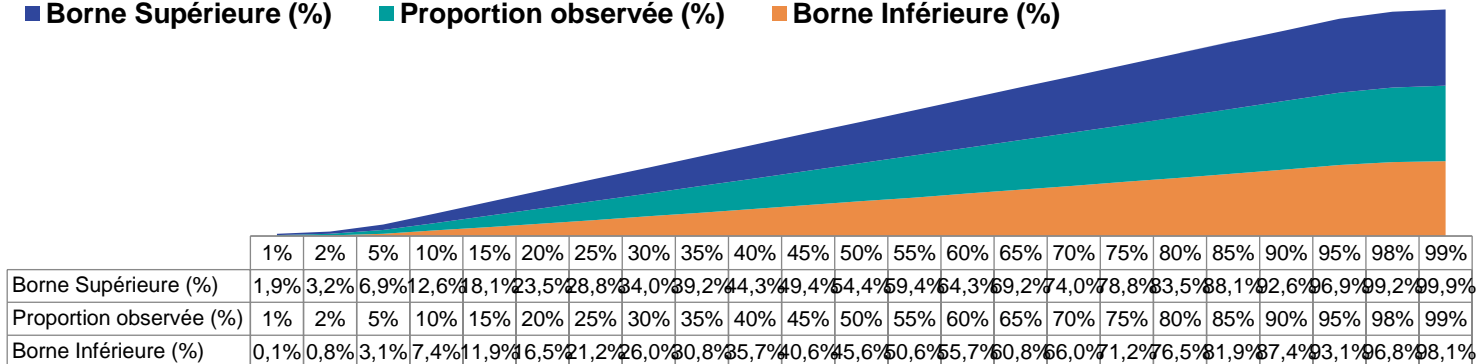
Feuille de calcul

En l'occurrence s'agissant de cette étude :

- Intervalle de confiance : **95%**
- Taille d'échantillon : **500**

Les proportions observées sont comprises entre :

■ Borne Supérieure (%) ■ Proportion observée (%) ■ Borne Inférieure (%)



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



Questionnaire

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

Ipsos 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 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.