Food safety research in the EU

Consumers' perceptions

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Trusted science for safe food

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EFSA Strategy 2027

Science
Safe food
Sustainability

Adopted at the Management Board meeting
held in virtual modality on 24 June 2021
For EFSA's Management Board
[SIGNED]
Raymond O'Rourke
Chair of the Management Board

European Food Safety Authority

Strategic Objective 1 | Deliver trustworthy assessment and communication of risks from farm to fork

Expected Operational Result 1.2.1 | An **audience-first approach** ensures quality throughout risk communication

Responds to **multiple provisions of the Transparency Regulation** > fostering public understanding, being clear and accessible, **taking risk perceptions into account** et al.

See more in
EFSA social science roadmap

"Ecosystem" track to explore a specific topic or an audience among EFSA customers, partners or stakeholders

"Society" track to inform communication planning and the choice of topics

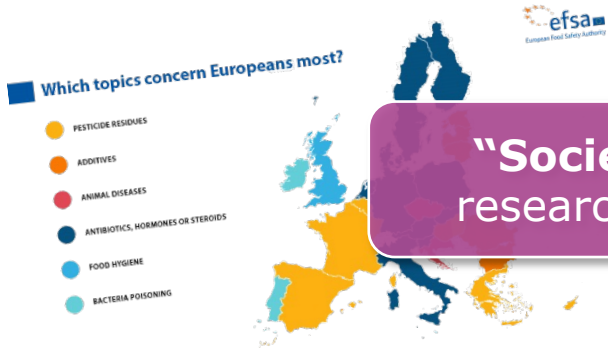**"Personal"** track to focus on personalising user experience across our tools

Which topics concern Europeans most?

- PESTICIDE RESIDUES
- ADDITIVES
- ANIMAL DISEASES
- ANTIBIOTICS, HORMONES OR STEROIDS
- FOOD HYGIENE
- BACTERIA POISONING

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"Society" track research example

- Who > 26,509 citizens in EU27
- When > Mar – April 2022
- How > Interviews face-to-face (F2F) or F2F and online

Citizens and food safety

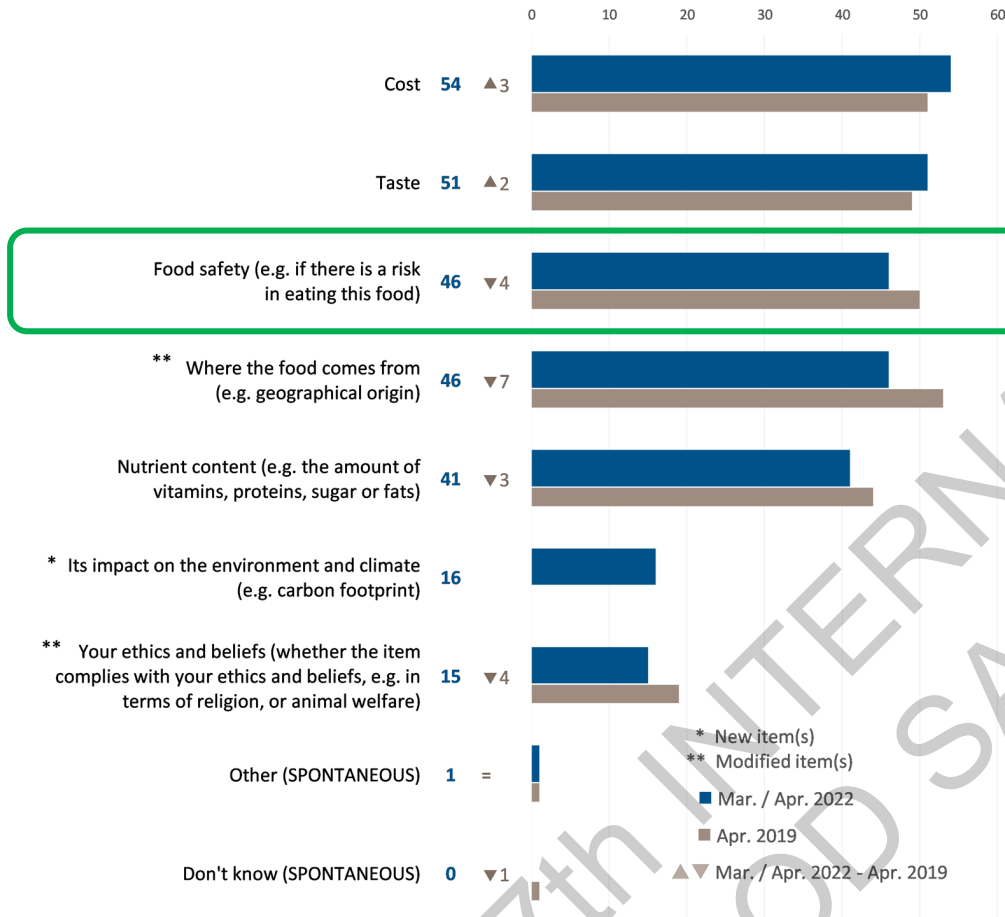Understanding awareness and risk perceptions

Engaging with the EU food safety system

Consumer behaviour: ex. foodborne diseases

Source: Eurobarometer on Food Safety in the EU (2022)

Food safety is the third most cited factor affecting Europeans' food-purchasing decisions

QC1T When you buy food, which of the following are the most important to you? Firstly? And then? (% - EU)
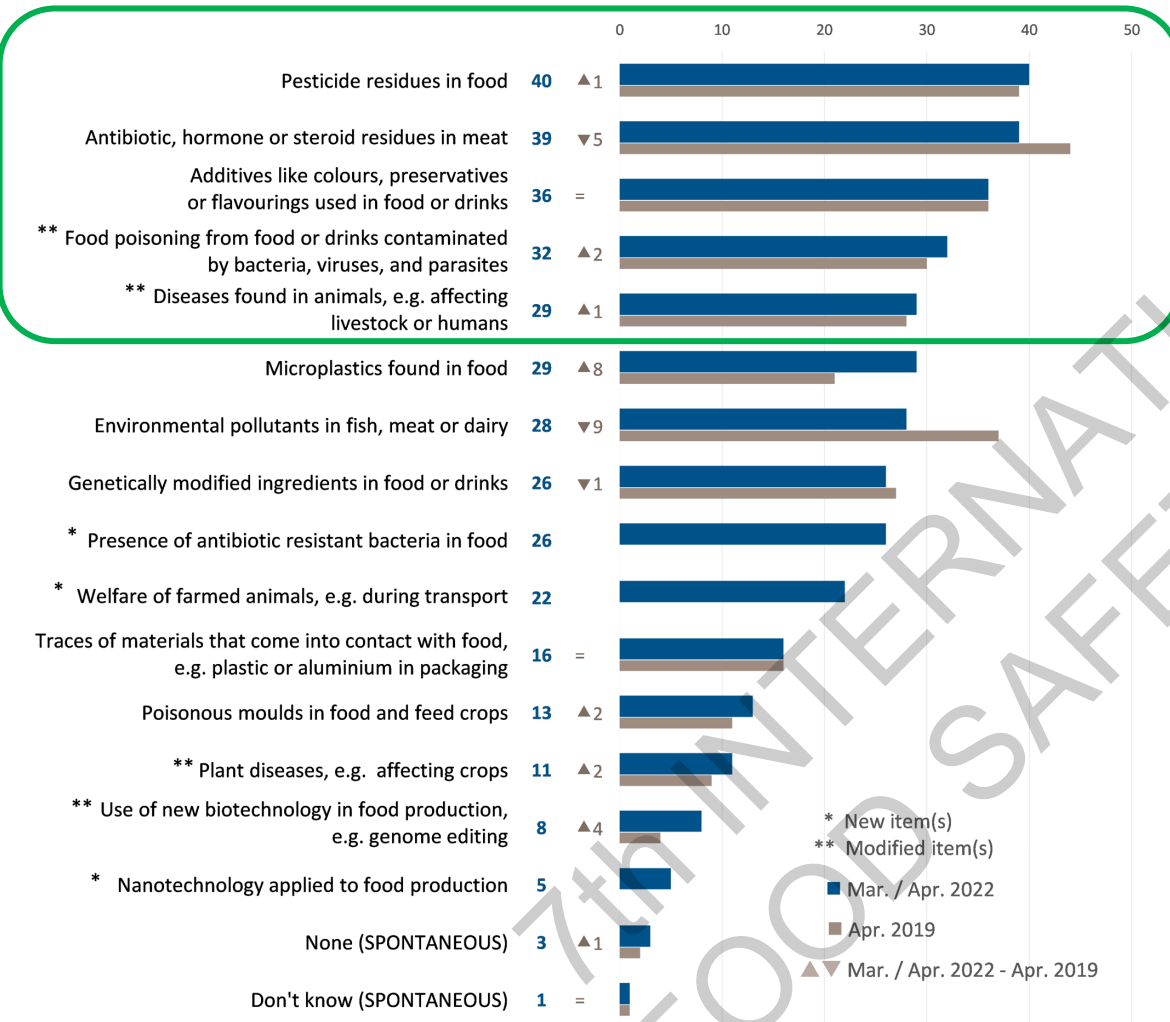
Factor	Value	Change
Cost	54	▲3
Taste	51	▲2
Food safety (e.g. if there is a risk in eating this food)	46	▼4
** Where the food comes from (e.g. geographical origin)	46	▼7
Nutrient content (e.g. the amount of vitamins, proteins, sugar or fats)	41	▼3
* Its impact on the environment and climate (e.g. carbon footprint)	16	
** Your ethics and beliefs (whether the item complies with your ethics and beliefs, e.g. in terms of religion, or animal welfare)	15	▼4
Other (SPONTANEOUS)	1	=
Don't know (SPONTANEOUS)	0	▼1

* New item(s)
** Modified item(s)

■ Mar. / Apr. 2022
■ Apr. 2019
▲▼ Mar. / Apr. 2022 - Apr. 2019

Base: All respondents (26,509)

Source: Eurobarometer on Food Safety in the EU (2022)

Pesticide residues; antibiotic, hormone or steroid residues; and additives are the **top concerns**

QC4T Please tell me which of these topics you have heard about concern you most when it comes to food? Firstly? And then? (% - EU)
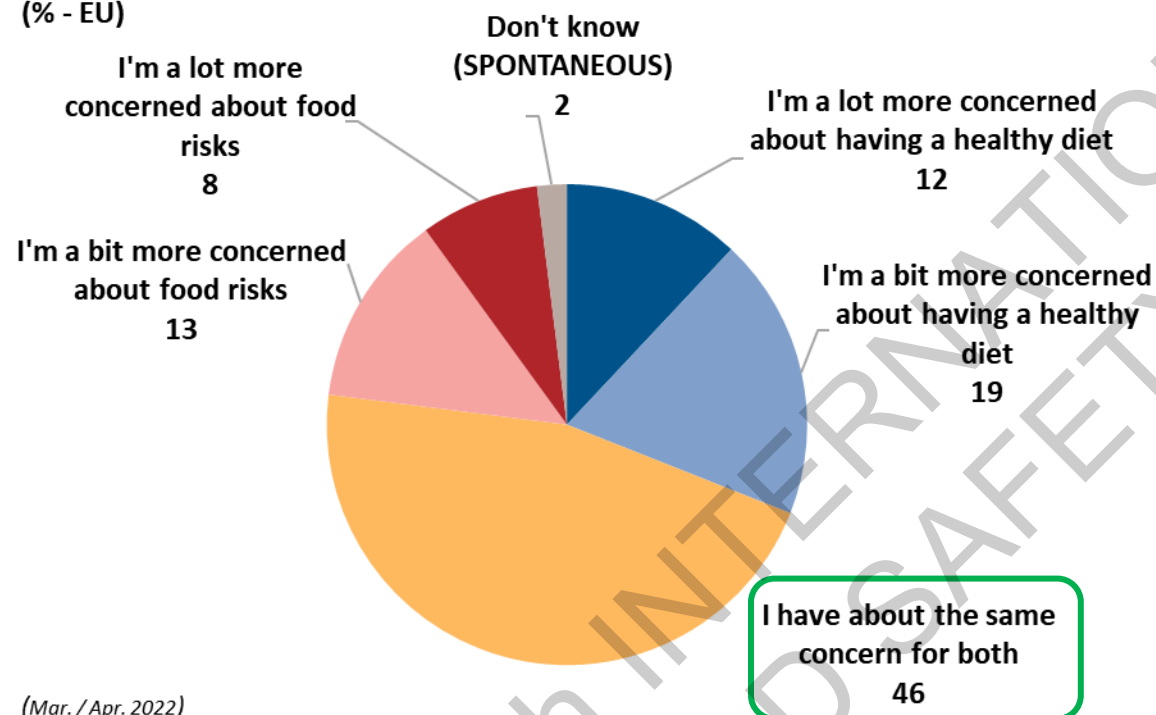
Topic	%	Change
Pesticide residues in food	40	▲1
Antibiotic, hormone or steroid residues in meat	39	▼5
Additives like colours, preservatives or flavourings used in food or drinks	36	=
** Food poisoning from food or drinks contaminated by bacteria, viruses, and parasites	32	▲2
** Diseases found in animals, e.g. affecting livestock or humans	29	▲1
Microplastics found in food	29	▲8
Environmental pollutants in fish, meat or dairy	28	▼9
Genetically modified ingredients in food or drinks	26	▼1
* Presence of antibiotic resistant bacteria in food	26	
* Welfare of farmed animals, e.g. during transport	22	
Traces of materials that come into contact with food, e.g. plastic or aluminium in packaging	16	=
Poisonous moulds in food and feed crops	13	▲2
** Plant diseases, e.g. affecting crops	11	▲2
** Use of new biotechnology in food production, e.g. genome editing	8	▲4
* Nanotechnology applied to food production	5	
None (SPONTANEOUS)	3	▲1
Don't know (SPONTANEOUS)	1	=

* New item(s)
** Modified item(s)

■ Mar. / Apr. 2022
■ Apr. 2019
▲▼ Mar. / Apr. 2022 - Apr. 2019

Base: those who know at least one topic in QC3 (26,132)

Source: Eurobarometer on Food Safety in the EU (2022)

QC6T Please take a moment to think about your answers to the previous questions about having a healthy diet and about food risks. How does your concern about having a healthy diet compare to your concern about food risks?
(% - EU)

Don't know (SPONTANEOUS)
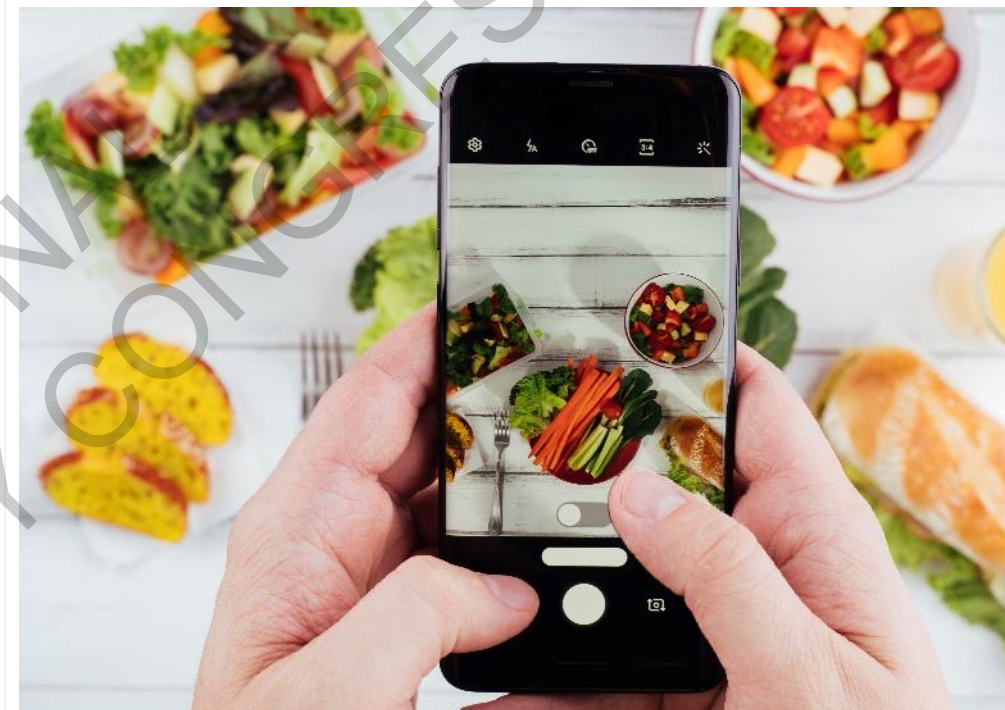2

I'm a lot more concerned about food risks
8

I'm a lot more concerned about having a healthy diet
12

I'm a bit more concerned about food risks
13

I'm a bit more concerned about having a healthy diet
19

I have about the same concern for both
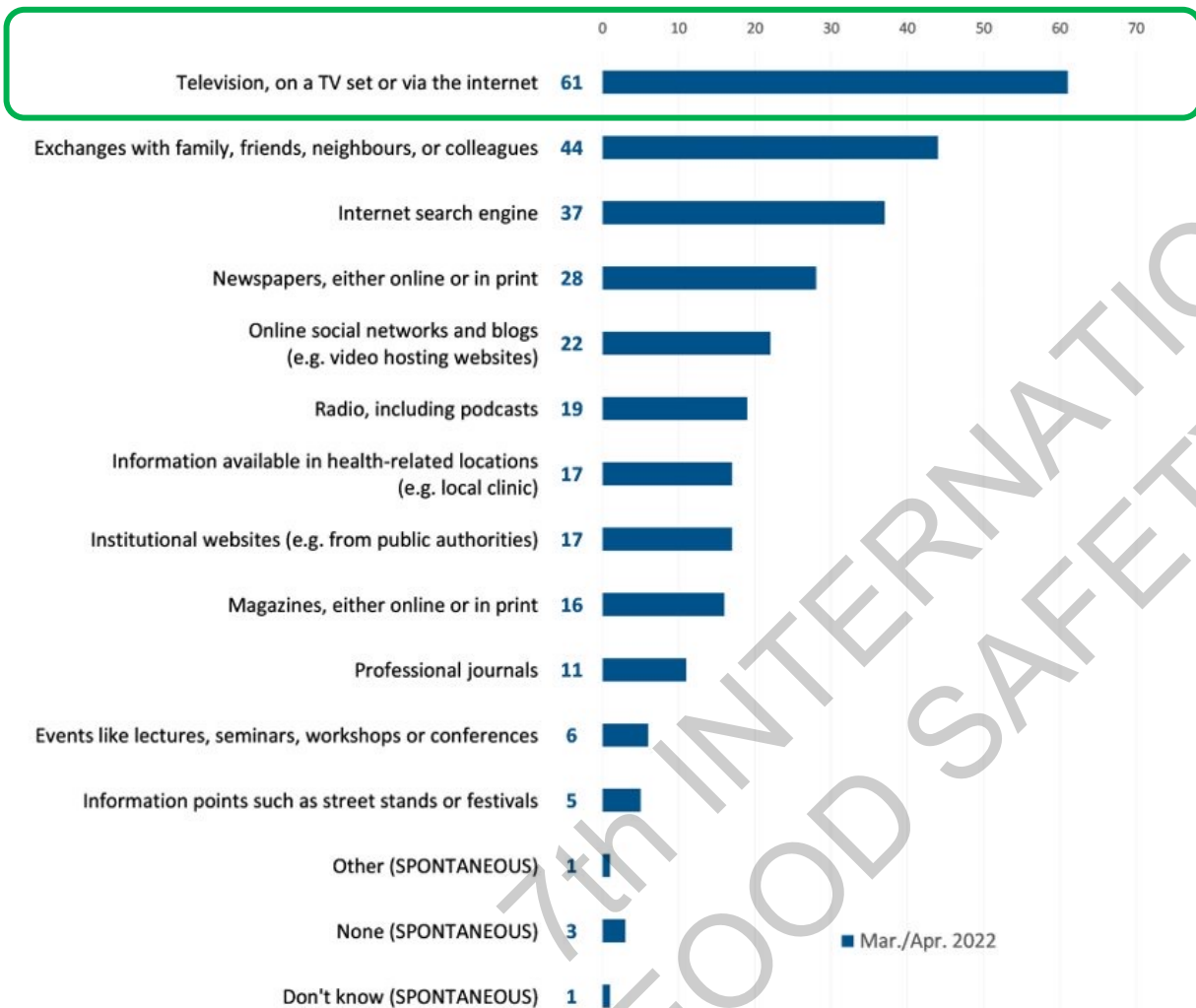46

(Mar. / Apr. 2022)

Base: All respondents (26,509)

Source: Eurobarometer on Food Safety in the EU (2022)

Television is (as in 2019) the most frequent source of information about food risks

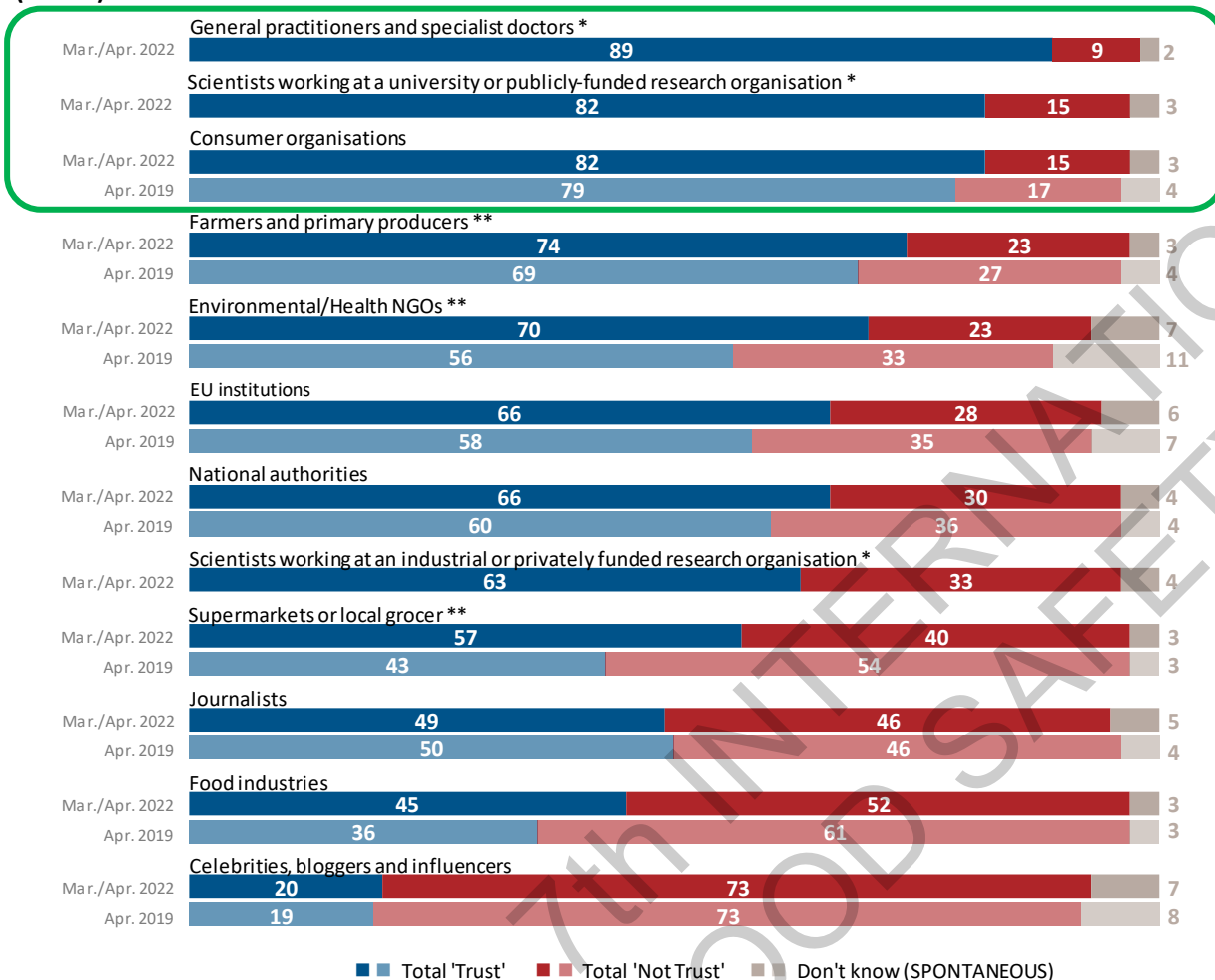QC7T Which of the following are your main sources of information about food risks? Firstly? And then? (% - EU)

Source	%
Television, on a TV set or via the internet	61
Exchanges with family, friends, neighbours, or colleagues	44
Internet search engine	37
Newspapers, either online or in print	28
Online social networks and blogs (e.g. video hosting websites)	22
Radio, including podcasts	19
Information available in health-related locations (e.g. local clinic)	17
Institutional websites (e.g. from public authorities)	17
Magazines, either online or in print	16
Professional journals	11
Events like lectures, seminars, workshops or conferences	6
Information points such as street stands or festivals	5
Other (SPONTANEOUS)	1
None (SPONTANEOUS)	3
Don't know (SPONTANEOUS)	1

■ Mar./Apr. 2022

Base: All respondents (26,509)

Source: Eurobarometer on Food Safety in the EU (2022)

Scientists (in public institutions) remain among the **most trusted sources** of info on food risks

QC10 Please tell to what extent you trust the following sources or not for information on food risks. (% - EU)
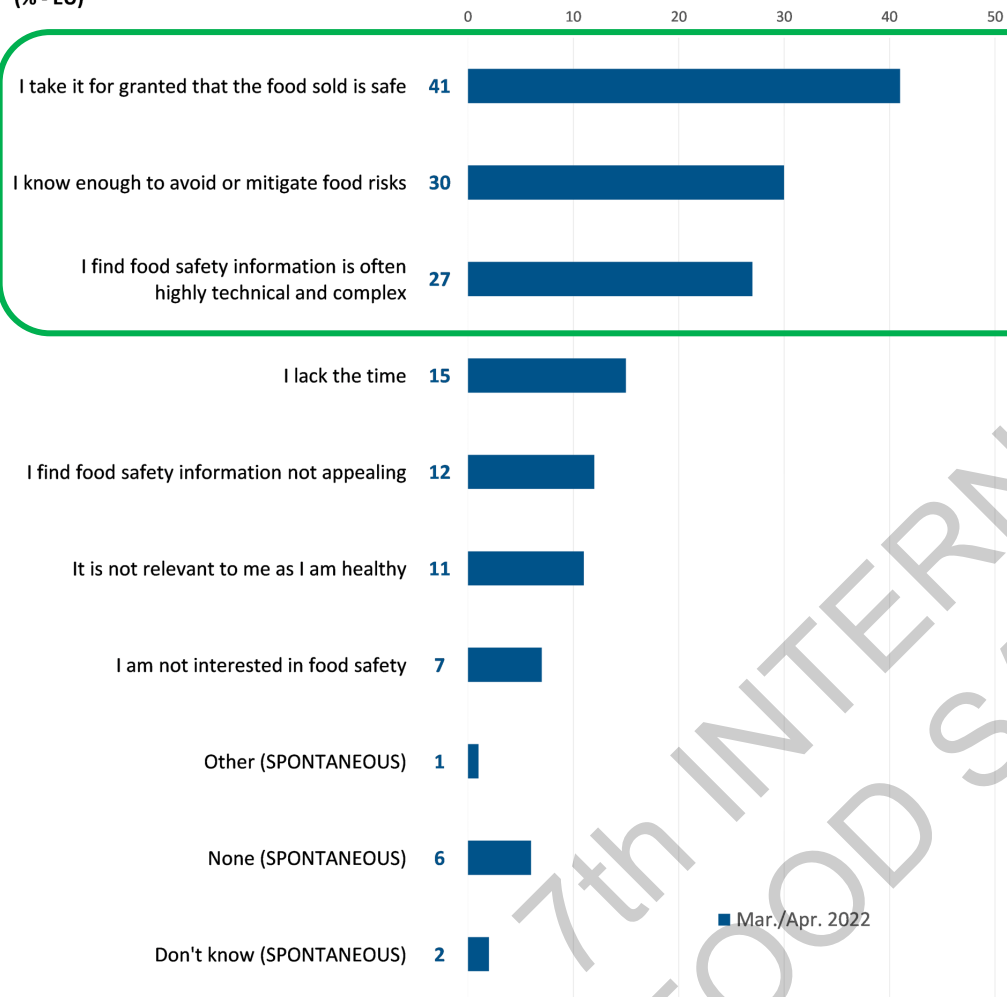
General practitioners and specialist doctors *
- Mar./Apr. 2022: 89 | 9 | 2

Scientists working at a university or publicly-funded research organisation *
- Mar./Apr. 2022: 82 | 15 | 3

Consumer organisations
- Mar./Apr. 2022: 82 | 15 | 3
- Apr. 2019: 79 | 17 | 4

Farmers and primary producers **
- Mar./Apr. 2022: 74 | 23 | 3
- Apr. 2019: 69 | 27 | 4

Environmental/Health NGOs **
- Mar./Apr. 2022: 70 | 23 | 7
- Apr. 2019: 56 | 33 | 11

EU institutions
- Mar./Apr. 2022: 66 | 28 | 6
- Apr. 2019: 58 | 35 | 7

National authorities
- Mar./Apr. 2022: 66 | 30 | 4
- Apr. 2019: 60 | 36 | 4

Scientists working at an industrial or privately funded research organisation *
- Mar./Apr. 2022: 63 | 33 | 4

Supermarkets or local grocer **
- Mar./Apr. 2022: 57 | 40 | 3
- Apr. 2019: 43 | 54 | 3

Journalists
- Mar./Apr. 2022: 49 | 46 | 5
- Apr. 2019: 50 | 46 | 4

Food industries
- Mar./Apr. 2022: 45 | 52 | 3
- Apr. 2019: 36 | 61 | 3

Celebrities, bloggers and influencers
- Mar./Apr. 2022: 20 | 73 | 7
- Apr. 2019: 19 | 73 | 8

Legend: ■ Total 'Trust' ■ Total 'Not Trust' ■ Don't know (SPONTANEOUS)
New item *   Modified item **

Base: All respondents (26,509)

Source: Eurobarometer on Food Safety in the EU (2022)

Taking it for granted that the food sold is safe is the top **reason not to engage with food safety** information

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QC9 Sometimes people do not pay attention to information about food safety (i.e. risks associated with eating certain foods) and this can happen due to several reasons. Which of the following reasons apply to you? Select up to three. (MAX. 3 ANSWERS) (% - EU)
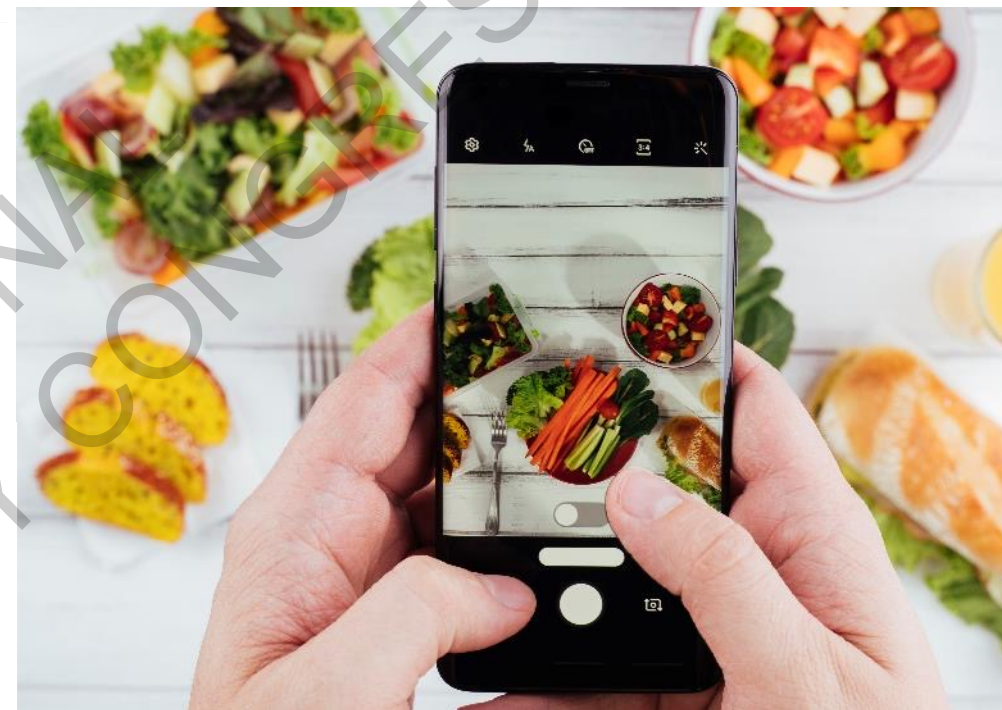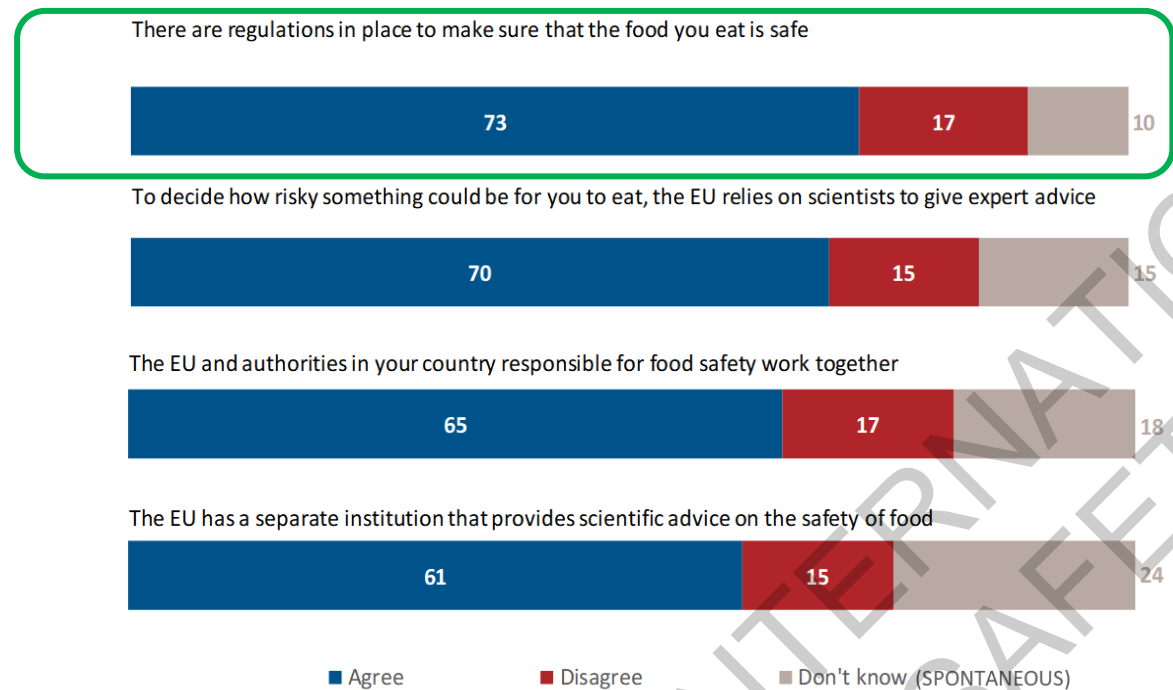
Reason	%
I take it for granted that the food sold is safe	41
I know enough to avoid or mitigate food risks	30
I find food safety information is often highly technical and complex	27
I lack the time	15
I find food safety information not appealing	12
It is not relevant to me as I am healthy	11
I am not interested in food safety	7
Other (SPONTANEOUS)	1
None (SPONTANEOUS)	6
Don't know (SPONTANEOUS)	2

■ Mar./Apr. 2022

Base: All respondents (26,509)

Source: Eurobarometer on Food Safety in the EU (2022)

7th INTERNATIONAL FOOD SAFETY CONGRESS

Awareness of different aspects of the **EU food safety system** is high

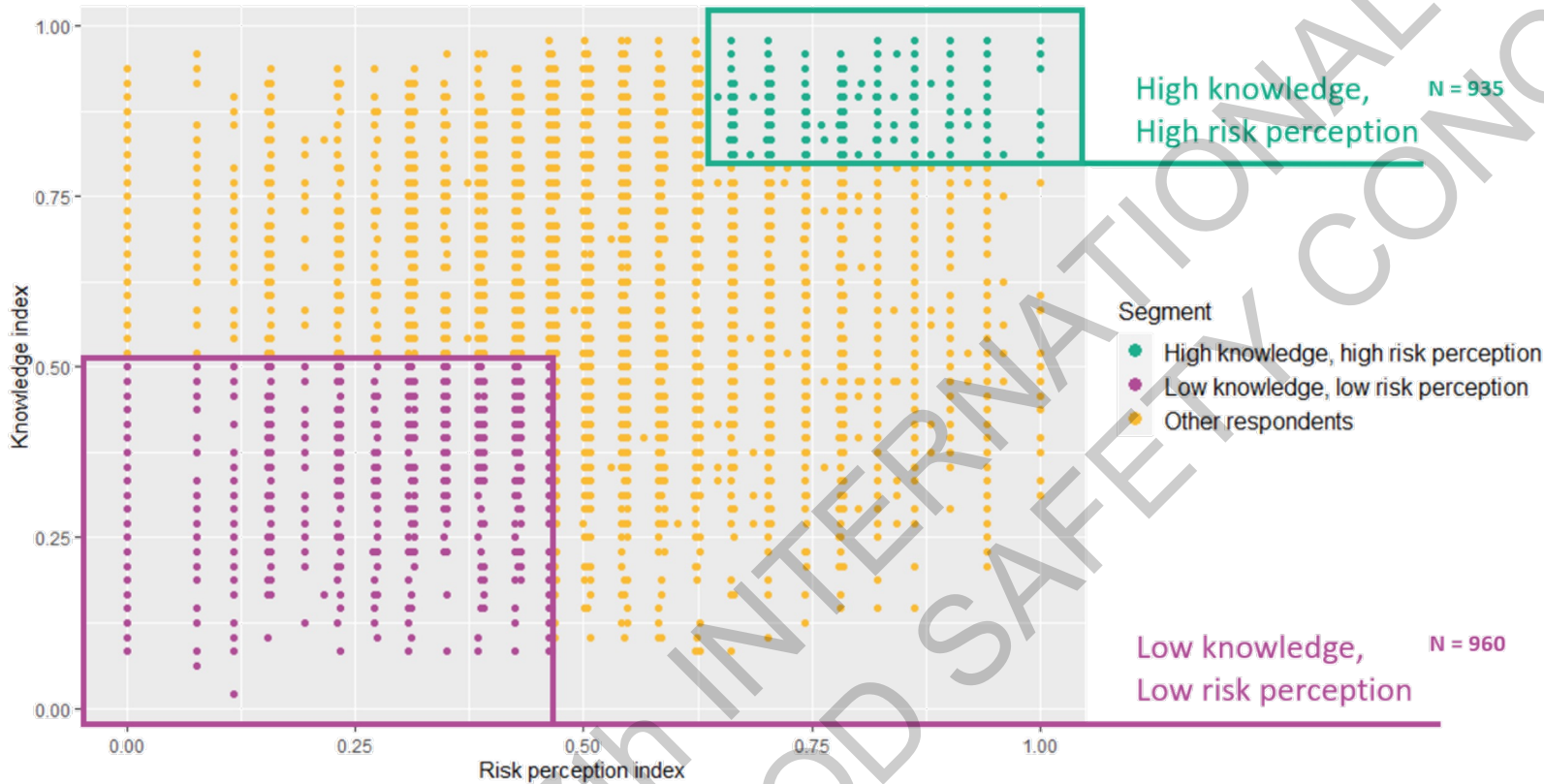QA12 Please tell which of the following statements you agree or disagree with
(% - EU)

There are regulations in place to make sure that the food you eat is safe

Agree	Disagree	Don't know
73	17	10

To decide how risky something could be for you to eat, the EU relies on scientists to give expert advice

Agree	Disagree	Don't know
70	15	15

The EU and authorities in your country responsible for food safety work together

Agree	Disagree	Don't know
65	17	18

The EU has a separate institution that provides scientific advice on the safety of food

Agree	Disagree	Don't know
61	15	24

■ Agree   ■ Disagree   ■ Don't know (SPONTANEOUS)

Base: All respondents (26,509)

Source: Eurobarometer on Food Safety in the EU (2022)

How to combine data | A segmentation approach

Food safety knowledge

Risk perceptions

Preferred information sources

Trust in actors

+

Combine with socio-demographic characteristics

Source: Technical Assistance in the Field of Risk Communication (2021)

Communication on **dietary sugars** | An example

Knowledge index (y-axis) vs Risk perception index (x-axis)

High knowledge, High risk perception — N = 935

Segment
- High knowledge, high risk perception
- Low knowledge, low risk perception
- Other respondents

Low knowledge, Low risk perception — N = 960

Source: EU Insights study on consumers and dietary sugars

KNOWLEDGE AND PERCEPTION CAN HELP US DESIGN RISK COMMUNICATION STRATEGIES

Communicate general advice and explanations through the most popular sources of info on dietary sugars – TV and the internet!

Scientists and doctors are the most trusted source (and face) of risk communications – consider engaging them in campaigns on dietary sugars!
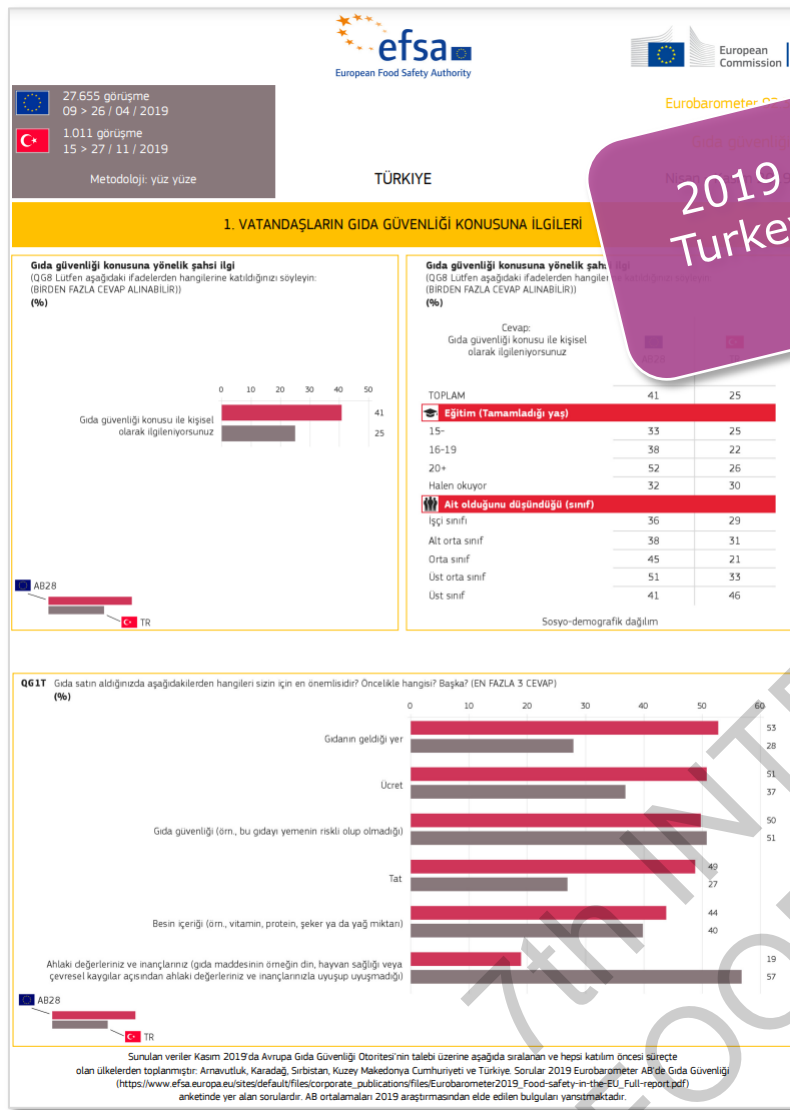
If communicating to audiences with lower knowledge and risk perception, social media is a useful source. Engaging with bloggers or influencers could boost your social media presence - amplify your message by partnering with one that shares your core values!

Assessing concerns | An **evolving model**

Low knowledge **High perception**	High knowledge High perception

KNOWLEDGE

Low knowledge Low perception	High knowledge Low perception

PERCEPTION

KNOWLEDGE	KNOWLEDGE	KNOWLEDGE
Self-reported awareness	Low-Medium-High	-1-0-+1
Self-reported knowledge	Low-Medium-High	-1-0-+1
Objective knowledge	Low-Medium-High	-1-0-+1
Social media volume	Low-Medium-High	-1-0-+1
PERCEPTION	**PERCEPTION**	**PERCEPTION**
Self-reported concern	Low-Medium-High	-1-0-+1
Self-reported importance	Low-Medium-High	-1-0-+1
Self-reported interest	Low-Medium-High	-1-0-+1
Social media sentiment	Green-Orange-Red	-1-0-+1

Follow-up analysis to Technical Assistance in the Field of Risk Communication (2021)
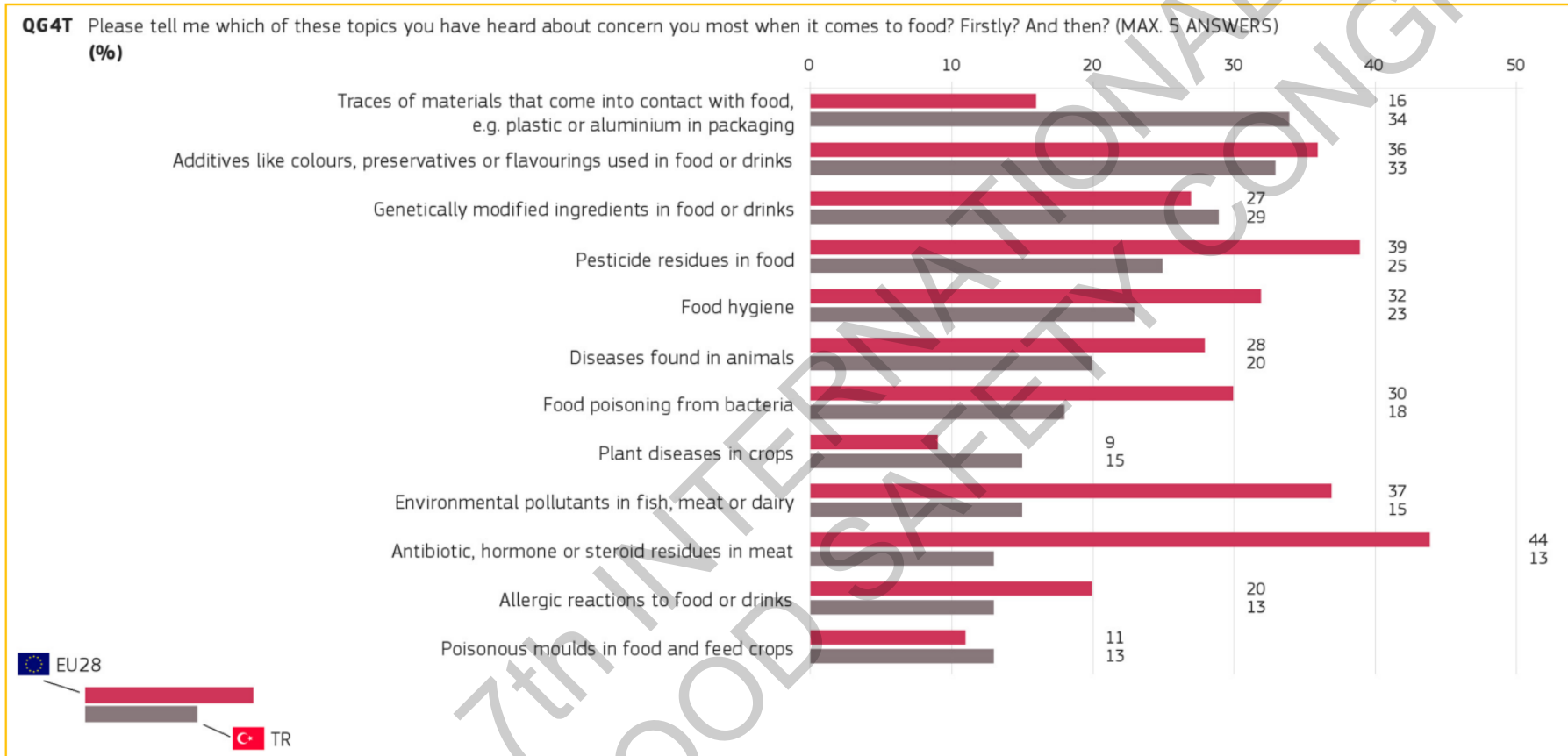
2019 study for Turkey available **here**

- Following the publication of the 2019 Eurobarometer study, the survey was extended to **Albania, Montenegro, North Macedonia, Serbia and Turkey**.

- We hope to **repeat the study** in countries that benefit from the Instrument for Pre-accession Assistance (IPA) **in 2023!**

Source: Food perception data for pre-accession countries (2020)

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Risk perception | **Traces of food contact materials**, additives and genetically modified ingredients were the top concerns

QG4T Please tell me which of these topics you have heard about concern you most when it comes to food? Firstly? And then? (MAX. 5 ANSWERS)
(%)

Topic	EU28	TR
Traces of materials that come into contact with food, e.g. plastic or aluminium in packaging	16	34
Additives like colours, preservatives or flavourings used in food or drinks	36	33
Genetically modified ingredients in food or drinks	27	29
Pesticide residues in food	39	25
Food hygiene	32	23
Diseases found in animals	28	20
Food poisoning from bacteria	30	18
Plant diseases in crops	9	15
Environmental pollutants in fish, meat or dairy	37	15
Antibiotic, hormone or steroid residues in meat	44	13
Allergic reactions to food or drinks	20	13
Poisonous moulds in food and feed crops	11	13

EU28
TR

Source: Food perception data for pre-accession countries (2020)

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Sources of information | **Television**, family, friends and neighbours and social media were the most frequent answers
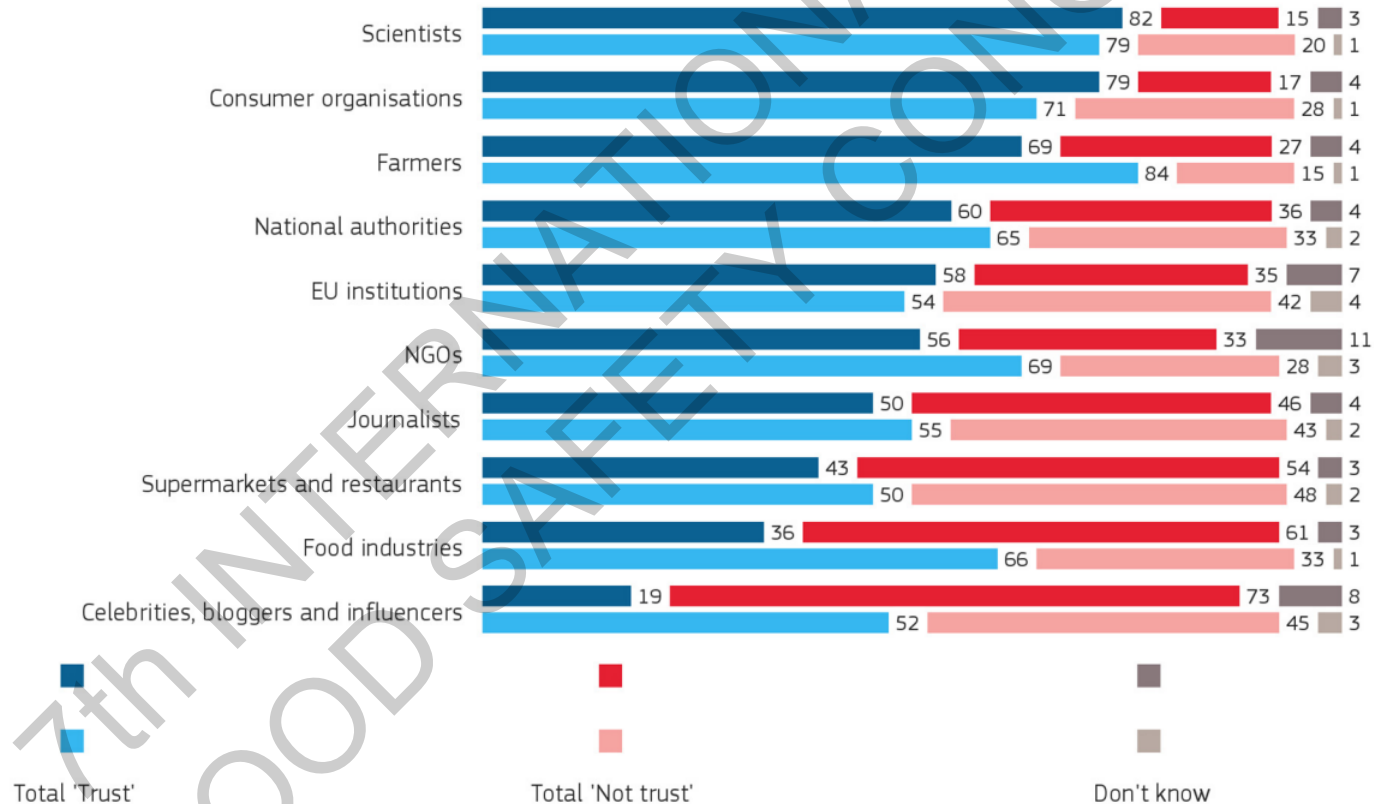

QG5T Which of the following are your main sources of information about food risks? Firstly? And then? (MAX. 4 ANSWERS) (%)

Source	EU28	TR
Television	69	72
Internet (excluding social media)	46	32
Newspapers and magazines	38	17
Family, friends and neighbours	37	48
Radio	25	2
Social media	24	39
Your doctor or a specialist, e.g. dietician or nutritionist	18	16
Professional journals	12	3
Events like lectures, seminars, workshops or conferences	7	8
Your local grocer	7	16
Information points such as street stands or festivals	4	5

EU28
TR

Source: Food perception data for pre-accession countries (2020)

Trust | **Farmers,** scientists, consumer organisations, NGOs and national authorities were the most trusted sources (2 in 3 or higher)

QG7 Please tell me to what extent you trust the following sources or not for information on food risks. (%)

Source	EU28 Total 'Trust'	EU28 Total 'Not trust'	EU28 Don't know	TR Total 'Trust'	TR Total 'Not trust'	TR Don't know
Scientists	82	15	3	79	20	1
Consumer organisations	79	17	4	71	28	1
Farmers	69	27	4	84	15	1
National authorities	60	36	4	65	33	2
EU institutions	58	35	7	54	42	4
NGOs	56	33	11	69	28	3
Journalists	50	46	4	55	43	2
Supermarkets and restaurants	43	54	3	50	48	2
Food industries	36	61	3	66	33	1
Celebrities, bloggers and influencers	19	73	8	52	45	3

EU28 🇪🇺
TR 🇹🇷

Total 'Trust'   Total 'Not trust'   Don't know

Source: Food perception data for pre-accession countries (2020)

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