

Healthier Lives Through Food

As part of a research project for EIT Food, we are looking for your feedback on how people can live healthier lives through food.

We are interested in understanding which consumer behaviours and attitudes contribute to the most burdensome diet-related non-communicable diseases (e.g., cardiovascular diseases, dementia, etc.), as well as the pressures and incentives faced by industries and other food professionals to combat the issue.

As such, we are looking for two types of participants:

- *Food industry, nutrition, and health experts*, who will be asked for insights on how to shape healthier diets and identify priority areas for future investment
- *Consumers*, who will be asked about their attitudes towards healthy diets and the importance of various impact factors based on their perspective

If you are interested, we would kindly invite you to fill in this survey, which will take you 5-10 minutes to complete.

Data policy information

The survey is anonymous, and you will not be asked to provide any sensitive or identifying data. The collected data will be kept confidential and stored on a secured server.

Taking part in this survey is completely voluntary; you may withdraw at any time without having to give any reason - your answers will not be recorded. For queries or further information, please get in touch with Luca Simone Cocolin (lucasimone.cocolin@unito.it).

This survey has been reviewed by the School Research Ethics Committee at the University of Reading and has been given a favourable ethical opinion for conduct.

Thank you for your time and your help.

The project team

AIT Austrian Institute of Technology,
University of Reading,
University of Torino,
Twine

Data policy message

This survey is being conducted by Dr Julia Vogt (j.vogt@reading.ac.uk) at The University of Reading and Beatrix Wepner (beatrix.wepner@ait.ac.at) at the Austrian Institute of Technology.

By accepting the survey policy, I confirm the following:

- I have received the "Data Policy Information".
- I agree to the arrangements described in the Data Policy Information in so far as they relate to my participation.
- I have been given the opportunity to ask any questions about the survey, which were answered to my satisfaction. The purpose of the project and what will be required of me have been clearly explained.
- I agree to the arrangements described in the Information Sheet in so far as they relate to my participation.
- I have been assured that my identity will not be used, displayed or referred to at any time and that all personal information will remain confidential to the researchers. More to this, the arrangements for storage and eventual disposal of any identifiable material have been made clear to me.
- I understand that the data collected from me in this survey will be preserved and made available in anonymised form, so that they can be consulted and re-used by others.
- I understand that the data collected from me in this survey will be preserved, and subject to safeguards will be made available to other authenticated researchers.
- I understand that participation in this study is completely voluntary and that I can withdraw at any time without having to give an explanation.
- I understand that the project has been reviewed by the School Research Ethics Committee of the University of Reading and National Research Ethics committee where relevant, and has been given a favourable ethical opinion for conduct.
- I am over 18 years old.
- I am happy to proceed with my participation.

☐ I have read the terms and agree to participate in the survey.

Consumer and expert part 1

Affiliation

Do you work in a food, nutrition, or health-related domain?

Please choose **only one** of the following:

- Yes
- No

Please specify which category best describes your role.

Please choose **only one** of the following:

- Primary production (agriculture, husbandry, aquaculture, including agricultural technology, fertilizers, pesticides and other Agrichemicals)
- Food processing & production (including equipment and ingredients)
- Food distribution (logistics, storage, etc.)
- Retail (supermarkets, online shops, brand owners, etc.)
- Support services (marketing, QA, operations, etc.)
- Food services (restaurants, hotels, cafes, etc.)
- Research & education (university, industrial R&D, etc.)
- Government & policy (regulators, NGOs, supranational orgs., etc.)
- Healthcare
- Other

What is your job title and role in the company?

(e.g., Food technologist at FoodTech startup)

Please write your answer here:

Expert-only part

Non-communicable diseases (NCDs) and diets

In this section, we ask for your opinion (input) on barriers and opportunities regarding the relation between diet and non-communicable diseases (NCDs).

NCDs are leading causes of mortality and disability in the developed world, and it has been found that diet is a major contributing factor.

Below are the most pressing NCDs that have been linked to diet:

- Heart disease
- Stroke
- Diabetes (Type 2)
- Obesity
- Colorectal cancer
- Dementia (Alzheimer's and others)

The risk for most NCDs can be reduced with a diet consisting of:

- **high intake of fruits and vegetables:** eating at least 5 servings per day, 3 of vegetables and 2 of fruit
- **choosing whole grains:** consuming less refined grains and foods containing simple sugars and avoiding sugary drinks
- **healthy fats with low content of saturated fats:** consuming less butter, cream, palm oil, cheese, fatty meats and processed meats; replacing animal fats, including dairy fat, with vegetable oils; avoiding food containing industrially produced trans fats.
- **reduced salt consumption:** consuming less foods rich in salt (cheese, cold cuts, preserved foods, sauces rich in salt, etc.) and adding only a small amount of salt while cooking
- **healthy protein sources:** choosing fish, legumes and white meat; consuming red meat and processed meat only 1-2 servings per week; eating eggs and cheese with moderation
- **low alcohol intake:** consuming not more than 2 unit/day for males and 1 unit/day for females
- consumption of portions of foods that allow to maintain/achieve a **healthy weight**

Several factors, personal, social, economic, environmental, technological, and policy, influence the adoption of an NCD-preventative diet. Please read through the list of factors and indicate how much you agree or disagree in your role as an expert in your field of work.

Personal factors to adopt an NCD-preventative diet.

To increase the adoption of an NCD-preventative diet, the following factors have the most influence...

Please choose the appropriate response for each item:

	<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly agree</i>
Alcohol intake	☐	☐	☐	☐	☐
Cooking skills	☐	☐	☐	☐	☐

Eating habits	☐	☐	☐	☐	☐
Food preferences	☐	☐	☐	☐	☐
Knowledge about NCD-preventative diet	☐	☐	☐	☐	☐
Preparation time	☐	☐	☐	☐	☐
Self-control	☐	☐	☐	☐	☐
Shopping habits	☐	☐	☐	☐	☐
Specific knowledge to prepare NCD-preventative dishes	☐	☐	☐	☐	☐

Social factors to adopt an NCD-preventative diet.

To increase the adoption of an NCD-preventative diet, the following factors have the most influence...

Please choose the appropriate response for each item:

	<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly agree</i>
Cultural tradition	☐	☐	☐	☐	☐
Diet of family and friends	☐	☐	☐	☐	☐
Expectations within my environment	☐	☐	☐	☐	☐
Offers for out-of-home eating (canteens, restaurants etc.)	☐	☐	☐	☐	☐

Economic factors to adopt an NCD-preventative diet.

To increase the adoption of an NCD-preventative diet, the following factors have the most impact...

Please choose the appropriate response for each item:

	<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly agree</i>
Price	☐	☐	☐	☐	☐
Availability of appropriate cooking facilities or kitchen appliances to prepare that diet	☐	☐	☐	☐	☐
Availability in restaurants nearby	☐	☐	☐	☐	☐
Availability in supermarkets nearby	☐	☐	☐	☐	☐
Economic efficiency in production	☐	☐	☐	☐	☐

Environmental factors to adopt an NCD-preventative diet.

To increase the adoption of an NCD-preventative diet, the following factors should be considered foremost...

Please choose the appropriate response for each item:

	<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly agree</i>
Air pollution	☐	☐	☐	☐	☐
Agricultural production methods	☐	☐	☐	☐	☐
Climate change	☐	☐	☐	☐	☐
Environmentally friendly industrial production	☐	☐	☐	☐	☐
Regional production	☐	☐	☐	☐	☐
Respect of animal welfare	☐	☐	☐	☐	☐
Respect of human working conditions	☐	☐	☐	☐	☐
Soil composition	☐	☐	☐	☐	☐

Technological factors to adopt an NCD-preventative diet.

To increase the adoption of an NCD-preventative diet, the following factors have the most impact...

Please choose the appropriate response for each item:

	<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly agree</i>
Cultured foods (e.g., lab-grown meat)	☐	☐	☐	☐	☐
Dieting apps	☐	☐	☐	☐	☐
Degree of food processing	☐	☐	☐	☐	☐
Meal-kit providers (e.g., delivery of ready to cook meals)	☐	☐	☐	☐	☐
New preservation technologies (ultrahigh pressure, etc.)	☐	☐	☐	☐	☐
Packaging technologies (modified atmosphere, sous vide, active packaging, etc.)	☐	☐	☐	☐	☐
Plant-based alternatives	☐	☐	☐	☐	☐
Unconventional proteins (insects, algae, etc.)	☐	☐	☐	☐	☐

Use of additives (preservatives, emulsifiers, etc.)	☐	☐	☐	☐	☐
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Policy factors to adopt an NCD-preventative diet.

To increase the adoption of an NCD-preventative diet, the following factors should be supported by policy...

Please choose the appropriate response for each item:

	<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly agree</i>
Harmonised, mandatory front-pack nutrition label	☐	☐	☐	☐	☐
Harmonised, voluntary front-pack nutrition label	☐	☐	☐	☐	☐
Price reduction of healthy food (e.g., through subsidies)	☐	☐	☐	☐	☐
Price increase of unhealthy food (e.g., through taxation)	☐	☐	☐	☐	☐
Regulation on food reformulation (e.g., for lower salt, sugar, fat)	☐	☐	☐	☐	☐
Regulation of advertisement practices	☐	☐	☐	☐	☐
Regulation of offers at public services (e.g., schools, hospitals)	☐	☐	☐	☐	☐

Preventing non-communicable diseases (NCDs)

In this section, we are interested in your role as a potential actor in reducing the burden of non-communicable diseases (NCDs).

How important do you think your area of work is in combatting the following diseases?

Please choose the appropriate response for each item:

	<i>Not important</i>	<i>Slightly important</i>	<i>Moderately important</i>	<i>Quite important</i>	<i>Extremely important</i>
Heart disease	☐	☐	☐	☐	☐
Stroke	☐	☐	☐	☐	☐
Diabetes (Type 2)	☐	☐	☐	☐	☐
Obesity	☐	☐	☐	☐	☐
Colorectal cancer	☐	☐	☐	☐	☐
Dementia (Alzheimer's and others)	☐	☐	☐	☐	☐

In your area of work, which of the indicated NCDs are taken into consideration at the moment?

Please choose **all** that apply:

- ☐ None
- ☐ Heart disease
- ☐ Stroke
- ☐ Diabetes (Type 2)
- ☐ Obesity
- ☐ Colorectal cancer
- ☐ Dementia (Alzheimer's and other)
- ☐ Other:

In your area of work, which strategies do you use to tackle the above-mentioned NCDs?

Please choose **all** that apply:

- ☐ Nothing
- ☐ Diversifying ingredients
- ☐ Implementing consumer education programs
- ☐ Increasing healthy ingredients
- ☐ Reducing unhealthy ingredients
- ☐ Other:

Solutions

In this section, we are interested in potential solutions for shaping healthier diets to reduce mortality and disability due to NCDs.

Which sectors of the food chain are mainly responsible for INCREASING the following ingredients in consumer diets?

Please select max. 3 options per row.

	<i>Primary production</i>	<i>Food processing</i>	<i>Food distribution</i>	<i>Retail</i>	<i>Support services (incl. marketing)</i>	<i>Food services</i>	<i>I don't know</i>
Dietary fibre	☐	☐	☐	☐	☐	☐	☐
Healthy fats	☐	☐	☐	☐	☐	☐	☐
Healthy proteins	☐	☐	☐	☐	☐	☐	☐
Vitamins and minerals	☐	☐	☐	☐	☐	☐	☐
Whole grains	☐	☐	☐	☐	☐	☐	☐

Which sectors of the food chain are mainly responsible for REDUCING the following ingredients in consumer diets?

Please select max. 3 options per row.

	<i>Primary production</i>	<i>Food processing</i>	<i>Food distribution</i>	<i>Retail</i>	<i>Support services (incl. marketing)</i>	<i>Food services</i>	<i>I don't know</i>
Salt	☐	☐	☐	☐	☐	☐	☐
Animal protein (processed meats)	☐	☐	☐	☐	☐	☐	☐
Sugar	☐	☐	☐	☐	☐	☐	☐
Unhealthy fats (with high content of saturated fats)	☐	☐	☐	☐	☐	☐	☐

Which enablers do you think would have greatest impact in reducing NCD burden?

Feel free to provide concrete ideas in the comment window.

Comment only when you choose an answer.

Please choose all that apply and provide a comment:

- ☐ Education (knowledge, skills, etc.)
- ☐ Awareness / marketing campaigns
- ☐ Political instruments (taxation, guidelines, etc.)

- ☐ New markets
- ☐ Technological developments
- ☐ Funding
- ☐ Collaboration / partnerships (e.g. beyond Europe)

Which emerging food trends do you think bear the most potential to improve diets?

Please choose **all** that apply:

- ☐ 3D food printers
- ☐ Alternative proteins
- ☐ Algae
- ☐ Cell culture food (meat from the petri dish)
- ☐ Digital food management
- ☐ E-Commerce
- ☐ Food safety & transparency
- ☐ Food waste reduction
- ☐ Indoor farming
- ☐ Nutraceuticals
- ☐ Personalized nutrition
- ☐ Restaurant digitization
- ☐ Robotics
- ☐ Other:

Consumer-only part

Non-communicable diseases (NCDs) and diets

In this section, we ask for your opinion (input) on the relation between diet and non-communicable diseases (NCDs).

NCDs are leading causes of mortality and disability in the developed world, and it has been found that diet is a major contributing factor.

Below are the most pressing NCDs that have been linked to diet:

- Heart disease
- Stroke
- Diabetes (Type 2)
- Obesity
- Colorectal cancer
- Dementia (Alzheimer's and others)

How problematic do you think the following diseases are in your country?

Please choose the appropriate response for each item:

	<i>Not problematic</i>	<i>Slightly problematic</i>	<i>Moderately problematic</i>	<i>Quite problematic</i>	<i>Extremely problematic</i>
Heart disease	☐	☐	☐	☐	☐
Stroke	☐	☐	☐	☐	☐
Diabetes (Type 2)	☐	☐	☐	☐	☐
Obesity	☐	☐	☐	☐	☐
Colorectal cancer	☐	☐	☐	☐	☐
Dementia (Alzheimer's and others)	☐	☐	☐	☐	☐

How significantly do you think food influences the development of the following NCDs?

Please choose the appropriate response for each item:

	<i>Insignificant</i>	<i>Somewhat significant</i>	<i>Moderately significant</i>	<i>Quite significant</i>	<i>Extremely significant</i>
Heart disease	☐	☐	☐	☐	☐
Stroke	☐	☐	☐	☐	☐
Diabetes (Type 2)	☐	☐	☐	☐	☐
Obesity	☐	☐	☐	☐	☐
Colorectal cancer	☐	☐	☐	☐	☐
Dementia (Alzheimer's and others)	☐	☐	☐	☐	☐

How effective are the following measures to reduce NCDs in your country?

Please choose the appropriate response for each item:

	<i>Not effective</i>	<i>Slightly effective</i>	<i>Moderately effective</i>	<i>Quite effective</i>	<i>Extremely effective</i>
Education of general population (in school, through public service, etc.)	☐	☐	☐	☐	☐
Prevention for potential patients (nutritional education, lifestyle change, etc.)	☐	☐	☐	☐	☐
Treatment for patients with disease (dietetic treatment, drug administration, etc.)	☐	☐	☐	☐	☐

Consumption patterns

The risk for most non-communicable diseases (NCDs) can be reduced with a diet consisting of:

- **high intake of fruits and vegetables:** eating at least 5 servings per day, 3 of vegetables and 2 of fruit
- **choosing whole grains:** consuming less refined grains and foods containing simple sugars and avoiding sugary drinks
- **healthy fats with low content of saturated fats:** consuming less butter, cream, palm oil, cheese, fatty meats and processed meats; replacing animal fats, including dairy fat, with vegetable oils; avoiding food containing industrially produced trans fats.
- **reduced salt consumption:** consuming less foods rich in salt (cheese, cold cuts, preserved foods, sauces rich in salt, etc.) and adding only a small amount of salt while cooking
- **healthy protein sources:** choosing fish, legumes and white meat; consuming red meat and processed meat only 1-2 servings per week; eating eggs and cheese with moderation
- **low alcohol intake:** consuming not more than 2 unit/day for males and 1 unit/day for females
- consumption of portions of foods that allow to maintain/achieve a **healthy weight**

In this section, please provide us with your opinions regarding the facilitators and barriers to adopting such a diet.

Please rate how your own diet relates to the NCD-preventative diet

Please choose the appropriate response for each item:

	<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly agree</i>
My own diet reflects the one described above.	☐	☐	☐	☐	☐
I would like my diet to be more like the one described above.	☐	☐	☐	☐	☐
I am not motivated to change my current diet to the one described above.	☐	☐	☐	☐	☐

Several factors, personal, social, economic, environmental, technological, and policy, influence the adoption of an NCD-preventative diet. Please read through the list of factors and indicate how much you agree or disagree.

Personal factors to adopt an NCD-preventative diet.

Please choose the appropriate response for each item:

To shift to a healthier diet and prevent NCDs, I would have to change my...

Please choose the appropriate response for each item:

	<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly agree</i>
Alcohol intake	☐	☐	☐	☐	☐
Cooking skills	☐	☐	☐	☐	☐

Eating habits	☐	☐	☐	☐	☐
Food preferences	☐	☐	☐	☐	☐
Knowledge about NCD-preventative diet	☐	☐	☐	☐	☐
Preparation time	☐	☐	☐	☐	☐
Self-control	☐	☐	☐	☐	☐
Shopping habits	☐	☐	☐	☐	☐
Specific knowledge to prepare NCD-preventative dishes	☐	☐	☐	☐	☐

Social factors to adopt an NCD-preventative diet.

To shift to a healthier diet and prevent NCDs, I would have to consider...

Please choose the appropriate response for each item:

	<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly agree</i>
Cultural tradition	☐	☐	☐	☐	☐
Diet of family and friends	☐	☐	☐	☐	☐
Expectations within my environment	☐	☐	☐	☐	☐
Offers for out -of-home eating (canteens, restaurants etc.)	☐	☐	☐	☐	☐

Economic factors to adopt an NCD-preventative diet.

To shift to a healthier diet and prevent NCDs, I would have to consider...

Please choose the appropriate response for each item:

	<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly agree</i>
Price	☐	☐	☐	☐	☐
Availability of appropriate cooking facilities or kitchen appliances to prepare that diet	☐	☐	☐	☐	☐
Availability in restaurants nearby	☐	☐	☐	☐	☐
Availability in supermarkets nearby	☐	☐	☐	☐	☐
Economic efficiency in production	☐	☐	☐	☐	☐

Environmental factors to adopt an NCD-preventative diet.

To shift to a healthier diet and prevent NCDs, I consider the following factors to have the most influence...

Please choose the appropriate response for each item:

	<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly agree</i>
Agricultural production methods	☐	☐	☐	☐	☐
Climate change	☐	☐	☐	☐	☐
Environmentally friendly industrial production	☐	☐	☐	☐	☐
Regional production	☐	☐	☐	☐	☐
Respect of animal welfare	☐	☐	☐	☐	☐
Respect of human working conditions	☐	☐	☐	☐	☐
Soil composition	☐	☐	☐	☐	☐

Technological factors to adopt an NCD-preventative diet.

To shift to a healthier diet and prevent NCDs, I consider the following factors to have the most influence...

Please choose the appropriate response for each item:

	<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly agree</i>
Cultured foods (e.g., lab-grown meat)	☐	☐	☐	☐	☐
Dieting apps	☐	☐	☐	☐	☐
Degree of food processing	☐	☐	☐	☐	☐
Meal-kit providers (e.g., delivery of ready to cook meals)	☐	☐	☐	☐	☐
New preservation technologies (ultrahigh pressure, etc.)	☐	☐	☐	☐	☐
Packaging technologies (modified atmosphere, sous vide, active packaging, etc.)	☐	☐	☐	☐	☐
Plant-based alternatives	☐	☐	☐	☐	☐
Use of additives (preservatives, emulsifiers, etc.)	☐	☐	☐	☐	☐

Unconventional proteins (insects, algae, etc.)	☐	☐	☐	☐	☐
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Policy factors to adopt an NCD-preventative diet.

To shift to a healthier diet and prevent NCDs, I would support...

Please choose the appropriate response for each item:

	<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly agree</i>
Harmonised front-pack nutrition label	☐	☐	☐	☐	☐
Price reduction of healthy food (e.g., through subsidies)	☐	☐	☐	☐	☐
Price increase of unhealthy food (e.g., through taxation)	☐	☐	☐	☐	☐
Regulation on food reformulation (e.g., for lower salt, sugar, fat)	☐	☐	☐	☐	☐
Regulation of advertisement practices	☐	☐	☐	☐	☐
Regulation of offers at public services (e.g., schools, hospitals)	☐	☐	☐	☐	☐

How would you rank the above factors regarding their importance for switching to an NCD-preventative diet?

Please select at most 6 answers

Please number each box in order of preference from 1 to 6

- ☐ Personal factors
- ☐ Social factors
- ☐ Economic factors
- ☐ Environmental factors
- ☐ Technological factors
- ☐ Policy factors

Consumer and expert part 2

Demographic information

What is your gender?

Choose one of the following answers

Please choose **only one** of the following:

- Male
- Female
- Non-binary
- Prefer not to answer

What is your age?

Your answer must be between 18 and 100.

Only an integer value may be entered in this field.

Please write your answer here:

What is your highest completed level of education?

Please choose **only one** of the following:

- Primary education
- Lower secondary education
- Upper secondary education
- Post-secondary non-tertiary education
- Short-cycle tertiary education
- Bachelor's or equivalent level
- Master's or equivalent level
- Doctoral or equivalent level

What is your country of residence? (choose "Other" for non-European countries)

Please choose **only one** of the following:

- | | | |
|----------------------------|-------------------|------------------|
| • Albania | • Greece | • Poland |
| • Andorra | • Hungary | • Portugal |
| • Austria | • Iceland | • Romania |
| • Belarus | • Ireland | • Russia |
| • Belgium | • Italy | • San Marino |
| • Bosnia and Herzegovina | • Latvia | • Serbia |
| • Bulgaria | • Liechtenstein | • Slovakia |
| • Croatia | • Lithuania | • Slovenia |
| • Cyprus | • Luxembourg | • Spain |
| • Czech Republic (Czechia) | • Malta | • Sweden |
| • Denmark | • Moldova | • Switzerland |
| • Estonia | • Monaco | • Ukraine |
| • Finland | • Montenegro | • United Kingdom |
| • France | • Netherlands | • Other |
| • Germany | • North Macedonia | |
| | • Norway | |

What type of area do you reside in?

Please choose **only one** of the following:

- An inner-city area
- A suburban area
- A rural area

[Submit](#)

You have reached the end of the survey.

Please click "Submit" to record the answers.

Thank you for participating in the survey.

If you want to further participate in the roadmapping process, please use the link below to leave your contact details. You will be forwarded to another survey provider to ensure your survey responses cannot be traced back to your contact information.

[EIT Food Roadmap Mission 1.](#)

Thank you for completing this survey.