

FEAST

Data collection completed
and integrated into the
FEAST database

Milestone Document



M2.1



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Food systems that support transitions to hEalthy And Sustainable dieTs

Milestone Name	Data collection completed and integrated into the FEAST database
Milestone Number	M2.1
Description	Milestone report on completion of data collection from 27 country survey to map and monitor dietary patterns across Europe.
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Milestone Related No.	
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HISTORY OF CHANGES

Table 1 Document history of changes

HISTORY OF CHANGES		
Version	Publication Date	Changes
1.0	12.07.2024	First version

Key Facts

Action Number: 101060536

Action Acronym: FEAST

Action title: Food systems that support transitions to hEalthy And Sustainable dieTs

Date: 12.07.2024

Milestone version: 1.0

1 Introduction

In Europe, existing food systems often result in a 'Lose-Lose-Lose-Win' scenario, in which large food companies emerge as winners with significant negative consequences for the environment, public health, the public sector and small/medium enterprises (e.g. farmers, small shops) in the food system (1). These systems are accountable for substantial environmental degradation, comprising 26% of global greenhouse gas (GHG) emissions, consuming 50% of global habitable land use, utilizing 70% of freshwater resources, contributing to 78% of eutrophication and driving 60% of biodiversity loss (2). This impact extends beyond environmental concerns. Current food systems play a critical role in perpetuating preventable diseases, both in Europe and globally, resulting in indirect costs to society, further undermining health systems and the economy. Moreover, food systems have contributed to the exacerbation of health inequalities across the EU, perpetuating disparities in access to healthy and sustainable food (2).

The intricate and dynamic nature of food systems presents a significant challenge when it comes to implementing strategies to promote fairness and sustainability. Like complex ecosystems, food systems are shaped by a combination of internal mechanisms and external influences (1). A multitude of actors, covering various spatial and temporal dimensions, contribute to this complexity with their diverse values and approaches. Consequently, this diversity can lead to conflicting interests, tensions, and unresolved issues, resulting in fundamental uncertainties on their future evolution (3).

This report outlines research that has been conducted on the micro-level factors that influence individual food behaviours, delving into a comprehensive analysis of the geographic, socio-economic, behavioral, and cultural influences shaping dietary preferences at both individual and group levels. It also aims to consider the diverse food environments spanning urban, suburban, rural, and coastal areas across Europe and, if data detect access vulnerability, to understanding the unique dynamics within various vulnerable groups.

The current landscape of research on dietary behaviors within the European Union is characterized by limitations and disparities. Existing studies are often confined to a selection of few EU countries, utilizing different populations, survey methodologies, and tools. This lack of standardization impedes the harmonization of data across studies, making it challenging to draw comprehensive and comparable conclusions (4–6). The food intake frequency questionnaire, widely used in dietary research, primarily focuses on assessing adherence to healthy diets. However, it often is not adequate in capturing the multifaceted nature of dietary behaviors. Important aspects such as behavioral patterns, communication dynamics around food, and their implications for fostering healthier and more sustainable dietary behaviors are often overlooked (7,8).

The data collection reported herein aims to fill the gap by mapping and monitoring food consumption behaviors and adherence to healthier and more sustainable dietary choices across Europe. It adopts a

comprehensive approach, with a specific focus on identifying the drivers and barriers influencing individuals' dietary habits. These individual-level insights will then be used to define priorities in food policy improvements to stem unhealthy and unsustainable food choices largely driven by narrow commercial interests.

2 Milestone 2.1

Milestone 2.1 "data collection completed and integrated into the FEAST database" references the dataset created to achieve Task 2.2 of FEAST WP2 "Explore adherence to and factors influencing healthy/sustainable dietary choices across Europe". This task was led by SSA and supported by other institutions involved in WP2, specifically UKH, LBI, UCC, IRD, ICL, USG, KUL, OD, TNO and IPVC. This task involved the design of a cross-sectional EU-survey based on a quantitative questionnaire to collect primary data on dietary patterns; purchasing and consumption behaviours; barriers and facilitators to the adherence to healthier and more sustainable diets; and opinions on food system policies, from adult populations across the Europe.

2.1 Work Package 2

FEAST WP2, titled "Mapping and Monitoring Dietary Patterns," aims to comprehensively map and monitor dietary habits across Europe, encompassing both the general population and vulnerable demographics such as women, children, the elderly, chronic patients, residents of deprived areas, and those facing disadvantaged socio-economic conditions like migrants. To realize this objective, the WP2 team designed a study on food purchasing and consumption habits, which delves into various aspects including: adherence to the EAT-Lancet Planetary health diet, identification of perceived barriers and facilitators influencing healthy and sustainable dietary choices, and assessment of attitudes towards specific policies addressing food systems. This study was conducted through an online survey aiming to achieve at least 1000 responses per country, per 27 countries in the EU and geographical Europe. These countries include: Austria, Belgium, Bulgaria, Croatia, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Netherlands, Norway, Poland, Portugal, Romania, Slovenia, Slovakia, Spain, Sweden, Switzerland and the United Kingdom

The process of survey development unfolded through several key stages:

1. **Literature Review:** Initiated with an exhaustive literature review by the WP2 team to identify relevant factors to measures.
2. **Item Selection:** Tools identified items from the literature review (scales and questionnaires) underwent multiple rounds of voting by WP2 members. Through these rounds, members selected items deemed most relevant to the survey's objectives and most suited for assessing measures of interest within the target population.
3. **Sampling:** WP2 members agreed to adopt a sample design based on quotas representative of gender, age and educational attainment level of the 27 European countries. This approach makes it possible to conduct a comprehensive and inclusive study that accurately reflects the diverse demographics of the European population.
4. **Ethical Approval:** Submission for ethical approval of the survey and associated documents, such as the Participant Information Sheet to inform participants on the survey and the processing of their data.
5. **Procurement:** Identification and selection of a market research agency tasked with the translation of the tools (questionnaire and participant information sheet) into different languages and with the dissemination of the survey across 27 countries.
6. **Survey Preparation:** This involved scripting, the definition of the sampling quotas, and final configuration of the survey to ensure its suitability for dissemination across diverse linguistic and cultural contexts.
7. **Data Collection:** The finalized survey was disseminated, and data collection was completed.

The subsequent sections provide a more comprehensive description of each of these steps in the questionnaire development process.

2.2 Literature review

The WP2 team undertook a comprehensive review of the scientific literature to pinpoint items and scales utilized in gauging food purchasing and consumption decisions, as well as the drivers and barriers influencing the adoption of healthier and more sustainable diets. This updated a previous review on this topic (9) also by adding the healthy dimension of diet and yielded a selection of relevant items that could be used for our questionnaire. These totaled over 100 items covering various aspects of food purchasing and consumption, as well as the drivers and barriers to healthier and more sustainable dietary practices. The WP2 team determined which items to incorporate into the questionnaire through multiple rounds of voting.

2.3 Item selection

The questionnaire items identified through the literature review underwent three rounds of voting, allowing all WP2 institutions to contribute their insights regarding the most pertinent items for inclusion in the final questionnaire. Once selected, these items were integrated with other scales. To measure food consumption habits a brief food frequency questionnaire was designed to assess food consumption within the framework of the EAT-Lancet Planetary Health Diet (10). Additionally, the team designed items gauging self-perceptions of dietary sustainability, perspectives on food system policies, and inquiries into respondents' sociodemographic characteristics, such as age, educational level, household income, household composition, presence of concurrent chronic health conditions, and geographical location. Section 3 of this report provides a detailed overview of the sections of the questionnaire and Annex 1 contains the full questionnaire.

2.4 Sampling

WP2 members agreed to adopt a sample design based on quotas representative of gender, age, and educational attainment level of the 27 European countries. This approach makes it possible to conduct a comprehensive and inclusive study that accurately reflects the diverse demographics of the European population. By ensuring that the sample includes proportional representation from different gender groups, age brackets, and educational backgrounds, the study can yield more reliable and generalizable findings. The quotas were defined based on data on educational attainment statistics obtained from EUROSTAT (11) relevant to 2022 for 26 out of the 27 European countries, and relevant to 2019 for the United Kingdom. As data on level of educational attainment was not available for adults over 75 years of age, the definition of quotas for this age group followed demographic distribution by sex (12).

Table 1 presents the stratified sample design and quotas defined per country.

Table 2 Our stratification strategy is based on the distribution for sex, age group and educational attainment level (according to ISCED 2011) in our target countries.

Sex	Age group	Educational Attainment Level (ISCED-2011)
F	Y18-24	ED 0-2
		ED 3-4
		ED 5-8
	Y25-34	ED 0-2
		ED 3-4
		ED 5-8
	Y35-44	ED 0-2
		ED 3-4
		ED 5-8
	Y45-54	ED 0-2
		ED 3-4
		ED 5-8
	Y55-74	ED 0-2
		ED 3-4
		ED 5-8
	Y75-84	N/D
	Y85 and more	N/D
	M	Y18-24
ED 3-4		
ED 5-8		
Y25-34		ED 0-2
		ED 3-4
		ED 5-8
Y35-44		ED 0-2
		ED 3-4
		ED 5-8
Y45-54		ED 0-2
		ED 3-4
		ED 5-8
Y55-74		ED 0-2
		ED 3-4
		ED 5-8
Y75-84		N/D
Y85 and more		N/D

2.5 Ethical approval

The survey-related documents underwent scrutiny by the Ethics Committee of Scuola Superiore Sant'Anna to obtain approval for the study. These documents comprised the questionnaire, participant information sheet containing informed consent from respondents, study protocol, and study synopsis. The initial request for ethics approval was submitted on May 16, 2023. Following requests for additional information, the SSA ethics committee granted full approval on July 7, 2023, under resolution n.29/2023. Subsequently, modifications were made to the questionnaire, including the inclusion of an extra item, as well as to the participant information sheet. An amendment approval request was forwarded to the SSA ethics committee on December 13, 2023. This request was approved in full on January 31, 2024, under resolution n.52/2024.

2.6 Procurement

The WP2 team deliberated on the optimal strategy for disseminating the survey to participants across the EU. With the initial objective of recruiting 27,000 participants, careful consideration was given to gathering a sample that could adequately reflect the diverse food choices and sociodemographic characteristics of populations residing in the European countries. The options weighed included: 1. distributing the survey via social media, 2. engaging marketing and communication agencies to promote the survey internationally, or 3. utilizing market-based research agencies that utilize pre-existing panels of participants from each relevant country. After a comparative evaluation based on proposed costs from several actors, the decision was made to distribute the survey through the services of CINT™, a platform specializing in market research and insights gathering. The advantage of this actor lies in its ability to access standardized participant numbers per country based on panel compositions, the acceptance to ensure desired demographic representation per quotas, and facilitate questionnaire scripting, translation into target languages, and distribution to demographics specified by the provided quotas. The procurement activity took place across several months, from 25/04/2023 to 27/10/2023.

2.7 Survey preparation

Several steps were taken prior to the survey's official launch. The questionnaire was scripted onto the online platform where participants would submit their responses. Additionally, the questionnaire and participant information sheet were translated into the 24 target languages spoken across the 27 selected European countries. Demographic quotas were established and filled, while income levels for each target country were determined. Furthermore, educational equivalencies between target nations and the international standard for education, ISCED-2011, were provided. The web questionnaires were tested internally in the FEAST consortium, prior to dissemination to test for usability and checking the translations for several languages spoken within the FEAST consortium, which represents 15 European countries.

2.8 Data Collection

Data collection initiated with a soft launch of the survey on February 6, 2024, aiming to gather 1350 responses (averaging 50 respondents per country) to conduct a semi-quantitative validation of the questionnaire. This process aimed to evaluate the validity and reliability of each scale. This initial target was met by February 9, 2024. Analysis of the validation indicated a high level of reliability among questionnaire items and demonstrated the validity of the latent variables defined by the study team. Consequently, the survey resumed with a full launch on February 16, 2024. Full data collection, comprising 27,417 completed questionnaires, concluded on June 18, 2024. Four months were necessary to complete data collection, also due to the efforts necessary to achieve hard-to-reach quotas, such as elderly individuals above 75 years of age and individuals with educational attainment levels lower than lower-secondary school.

3 The Questionnaire

The full questionnaire consisting of 88-items divided into eight sections is contained in Annex 1 and is described below.

Dietary patterns

To assess dietary behaviors across Europe, a simplified food frequency questionnaire was developed to determine the level of adherence to the EAT-Lancet planetary health diet (10). The planetary health diet provides guidelines to promote the consumption of a healthier and more sustainable diet, by strongly reducing the consumption of animal-sourced foods and promoting consumption of plant-sourced foods. Hence, the consumption of the 14 food groups (whole grains, tubers and starches, vegetables, fruits, dairy, red meat, poultry, eggs, fish and shellfish, legumes, unsaturated oils, saturated/animal fats and added sugars) from the planetary health diet was explored through seven levels of frequency of consumption: never, once-to-three times per month, once per week, from two to three times per week, from four to six times per week, daily (once a day) and two or more times daily. An index will be created to evaluate the healthfulness and sustainability of European diets.

Purchasing and consumption behaviors, sustainability perception and informative sources

In this section, the purchasing and consumption behaviors of respondents across Europe were investigated, by addressing behaviors specifically related to habits of cooking and food purchasing within the household, as well as factors considered when individuals purchase and consume foods. Questions on purchasing behavior were developed to address whether consumers make their choices based on individual factors, such as cost-value, overall liking of the product, religious beliefs; elements

related to food item per se, such as nutritional value, seasonality; convenience, whether tied to the ease of preparation, as well as to the availability where the item is purchased; the packaging, both in size and appearance, as well as in the labeling; and, finally, related to environmental impact, both as the knowledge of the impact, as well as through the availability of certifications to attest to ethical/sustainable production (13–15). The effect of these items on purchasing behavior is investigated through five possible levels of frequency of effect: never, rarely, sometimes, often, always. One section of the questionnaire is dedicated to exploring respondents' perceptions of the sustainability of their dietary behaviors and those of their social circles.

Another section focuses on identifying the main sources from which respondents obtain food information, including media (both traditional and online), family and/or peers, health professionals and/or health authorities, and other relevant sources (16).

Drivers and barriers to healthier and more sustainable diets

The questionnaire aims to investigate the factors influencing individuals' adoption of healthier and more sustainable dietary practices by assessing both facilitators and barriers. The facilitators section comprises eight questions designed to gauge the extent to which various elements support individuals in adhering to a healthier and more sustainable diet. These elements include personal knowledge about healthier and more sustainable diets, the availability of practical tools and resources, access to healthier food choices, social expectations, external pressures, the influence of peers' eating habits, personal health goals, and access to information on more sustainable food production. Conversely, the barriers section comprises ten questions aimed at identifying factors that may hinder individuals from maintaining a healthier and more sustainable diet. These barriers encompass issues such as irregular working hours, busy lifestyles, reluctance to give up preferred foods, challenges associated with unfamiliar or unusual foods, affordability concerns, difficulties in meal preparation, lack of willpower and knowledge, the influence of peers' unhealthy eating habits, and limited availability of healthier food options in proximity to one's residence or workplace (4,17–19). The influence of these items on the consumption of a healthier and more sustainable diet is investigated through a 5-point Likert scale: 1-Not at all, 2, 3, 4, 5-Completely.

Policy

The questionnaire includes a section dedicated to eliciting respondents' opinions on various food policies. Through ten statements, participants are asked to express their support or opposition to each proposed policy. The policies cover a range of measures aimed at promoting healthier and more sustainable food consumption practices. These policies include increasing taxes on products with higher added sugar, implementing a 0% value-added tax (VAT) on fruits and vegetables, banning price

discounts for unhealthier food and beverages, prohibiting the marketing of unhealthier products on various media platforms, such as social media, television, and magazines, as well as restricting their placement at supermarket checkouts. Additionally, policies addressing the marketing of unhealthier foods to children, outdoor advertisements for such products, sales of energy drinks to minors, taxes on red meat production, and the inclusion of environmental sustainability labels on packaged foods are presented. Participants are provided with response options to indicate their level of support or opposition to each policy, along with options to refrain from responding or indicate uncertainty (20).

Sociodemographics

The sociodemographic section of the questionnaire collects information about respondents' age, level of education, gender identity, principal occupational status, household net yearly income, perception of household income sufficiency, household composition, country of birth, country of birth of parents, country of residence and duration of stay, description of residential area, residential ZIP code, description of work/study location, work/study ZIP code, pre-existing health conditions, height, and weight.

4 Data Storage and treatment

In light of the sensitive nature of the information collected in the sociodemographic section of the questionnaire, stringent measures are implemented for data storage and analysis in line with FEAST's Data Management Plan (21). To ensure security and compliance with GDPR regulations, all data will be exclusively stored and analyzed through remote access to a central server at UKH accessible to all institutions involved in the data analysis, designated as data processors, thus limiting the use of data externally. Each data processor will analyze strictly the data necessary to achieve their specific task within WP2. This approach significantly mitigates the risks associated with potential data breaches involving sensitive sociodemographic information. Access to the central server will be strictly controlled and monitored, with robust encryption protocols in place to safeguard the confidentiality and integrity of the stored data. Additionally, measures will be implemented to pseudonymize the data, further enhancing privacy protection. At the end of the analyses, data will be fully anonymized and made available on our FEAST Zenodo.

5 Acronyms and abbreviations

Table 3 List of acronyms and abbreviations

WP2	Work Package 2
SSA	Scuola Superiore Sant'Anna
UKH	Universitätsklinikum Heidelberg
LBI	Louis Bolk Instituut
UCC	University College Cork
IRD	Institut de recherche pour le développement
ICL	ICLEI – Local Governments for Sustainability
USG	Università di Scienze Gastronomiche di Pollenzo
KUL	Katholieke Universiteit Leuven
OD	OpenDot
TNO	Azienda Sanitaria Toscana Nord-Ovest
IPVC	Instituto Politécnico de Viana do Castelo

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Annex 1 - European Survey: Adherence to and factors influencing healthy/sustainable dietary choices across Europe.

DIETARY PATTERN (14 questions)

Q1 Select your frequency of consumption for each food group in the last month

Q1.01 **Whole grains** (Rice, wheat, corn, bread and other whole grain products in the form of breakfast cereals, biscuits, tortillas and other sources) (*Not including refined versions of these products, such as white rice and white bread*) and **Pseudograins** (Amaranth, Buckwheat, Quinoa)

1. Never
2. One to three times a month
3. Once per week
4. From 2 to 3 times a week
5. From 4 to 6 times a week
6. Daily (one time a day)
7. Daily (2 or more times a day)

Q1.02 **Tubers or Starches** (Potatoes, cassava and their derivatives, such as potato flour and instant mashed potatoes)

1. Never
2. One to three times a month
3. Once per week
4. From 2 to 3 times a week
5. From 4 to 6 times a week
6. Daily (one time a day)
7. Daily (2 or more times a day)

Q1.03 **Vegetables** (all vegetables, excluding legumes and starchy vegetables)

1. Never
2. One to three times a month
3. Once per week
4. From 2 to 3 times a week
5. From 4 to 6 times a week
6. Daily (one time a day)
7. Daily (2 or more times a day)

Q1.04 **Fruits** (All fruits and berries, excluding fruit juices)

1. Never
2. One to three times a month
3. Once per week
4. From 2 to 3 times a week
5. From 4 to 6 times a week
6. Daily (one time a day)
7. Daily (2 or more times a day)

Q1.05 Dairy Foods (milk, yogurt, cheese, from cow, goat or buffalo) *(excluding butter and cream)*

1. Never
2. One to three times a month
3. Once per week
4. From 2 to 3 times a week
5. From 4 to 6 times a week
6. Daily (one time a day)
7. Daily (2 or more times a day)

Q1.06 Beef, lamb, goat, pork, and red meat in its processed form (e.g., sausages, ham, bologna, dried meat, etc.)

1. Never
2. One to three times a month
3. Once per week
4. From 2 to 3 times a week
5. From 4 to 6 times a week
6. Daily (one time a day)
7. Daily (2 or more times a day)

Q1.07 Chicken and other poultry (e.g. duck, geese, turkey)

1. Never
2. One to three times a month
3. Once per week
4. From 2 to 3 times a week
5. From 4 to 6 times a week
6. Daily (one time a day)
7. Daily (2 or more times a day)

Q1.08 Eggs (from chicken and other poultry)

1. Never
2. One to three times a month
3. Once per week
4. From 2 to 3 times a week
5. From 4 to 6 times a week
6. Daily (one time a day)
7. Daily (2 or more times a day)

Q1.09 Fish and shellfish (e.g., mussels, shrimp, octopus)

1. Never
2. One to three times a month
3. Once per week
4. From 2 to 3 times a week
5. From 4 to 6 times a week
6. Daily (one time a day)
7. Daily (2 or more times a day)

Q1.10 Legumes (e.g. dried or canned beans, lentils, chickpeas, peas, soy, tofu, soy products)

1. Never
2. One to three times a month
3. Once per week
4. From 2 to 3 times a week
5. From 4 to 6 times a week
6. Daily (one time a day)
7. Daily (2 or more times a day)

Q1.11 Nuts (e.g., pistachios, walnuts, hazelnuts, almonds, peanuts, nut mixes) (*excluding sweetened and salted nuts*)

1. Never
2. One to three times a month
3. Once per week
4. From 2 to 3 times a week
5. From 4 to 6 times a week
6. Daily (one time a day)
7. Daily (2 or more times a day)

Q1.12 All plant oils (e.g. olive oil, sunflower oil, soybean oil, etc.) and **plant margarines**

1. Never
2. One to three times a month
3. Once per week
4. From 2 to 3 times a week
5. From 4 to 6 times a week
6. Daily (one time a day)
7. Daily (2 or more times a day)

Q1.13 Animal fats and other saturated fats (butter, tallow, lard, coconut oil, cream)

1. Never
2. One to three times a month
3. Once per week
4. From 2 to 3 times a week
5. From 4 to 6 times a week
6. Daily (one time a day)
7. Daily (2 or more times a day)

Q1.14 Added sugars (all sugars – white, brown, honey, agave syrup, maple syrup), **sweets/desserts, fruit-juices and sugar-sweetened beverages (e.g. soda)**

1. Never
2. One to three times a month
3. Once per week
4. From 2 to 3 times a week
5. From 4 to 6 times a week
6. Daily (one time a day)
7. Daily (2 or more times a day)

PURCHASING AND CONSUMPTION (21 questions)

Q2) In an average week, how often are you the person in charge of household grocery purchases?

1. Never
2. Rarely
3. Sometimes
4. Often
5. Always

Q3) In an average week, select place(s) where most household food shopping comes from (*please check all that apply*)

1. Independent stores, Butchers, Grocers
2. One supermarket
3. Two or more supermarkets
4. Local markets (Including farmer's markets)
5. Direct from a farmer or community supported agriculture
6. Online grocery delivery
7. Food banks/community larders

Q4) In an average week, how often are you the person in charge of cooking/preparing meals in the household?

1. Never
2. Rarely
3. Sometimes
4. Often
5. Always

Q5) In an average week, where do most of your meals come from? (*please check all that apply*)
(*Multiple choice*)

1. Prepared at home
2. Ready made meals from shops/supermarkets
3. Restaurants
4. Canteen
5. Takeaway
6. Meal delivery
7. Food banks/community larders

Q6) How often do you consider the following elements when purchasing/consuming food?

Q6.01 Good quality for its price

1. Never
2. Rarely
3. Sometime
4. Often
5. Always

Q6.02 Clear ingredients list

1. Never
2. Rarely
3. Sometime
4. Often
5. Always

Q6.03 Nutritional value of the product

1. Never
2. Rarely
3. Sometime
4. Often
5. Always

Q6.04 Packaging appearance (Color, use of pictures, overall design)

1. Never
2. Rarely
3. Sometime
4. Often
5. Always

Q6.05 Packaging size

1. Never
2. Rarely
3. Sometime
4. Often
5. Always

Q6.06 Environmentally friendly packaging

1. Never
2. Rarely
3. Sometime
4. Often
5. Always

Q6.07 Clear information about the country of origin

1. Never
2. Rarely
3. Sometime
4. Often
5. Always

Q6.08 Ease of preparation

1. Never
2. Rarely
3. Sometime
4. Often
5. Always

Q6.09 Availability where I usually shop for food

1. Never
2. Rarely
3. Sometime
4. Often
5. Always

Q6.10 What I'm typically used to eating

1. Never
2. Rarely
3. Sometime
4. Often
5. Always

Q6.11 Religious beliefs

1. Never
2. Rarely
3. Sometime
4. Often
5. Always

Q6.12 Seasonality of the food

1. Never
2. Rarely
3. Sometime
4. Often
5. Always

Q6.13 Impact on the environment (greenhouse gas emissions, biodiversity loss, deforestation, water use, etc.)

1. Never
2. Rarely
3. Sometime
4. Often
5. Always

Q6.14 Certified for ethical and/or sustainable production (fairtrade, MSC, rain forest alliance certified)

1. Never
2. Rarely
3. Sometime
4. Often
5. Always

Q6.15 Eating habits of others around me

1. Never
2. Rarely
3. Sometime
4. Often
5. Always

Q6.16 Food produced locally

1. Never
2. Rarely
3. Sometime
4. Often
5. Always

Q6.17 Overall liking of the product (appearance, odour, taste, flavour, texture)

1. Never
2. Rarely
3. Sometime
4. Often
5. Always

SUSTAINABILITY (2 questions)

Q7) How often would you say that:

Q7.01 *Personally, you eat a healthy and sustainable diet?*

1. Never
2. From time to time
3. Most of the time
999. I Don't know

Q7.02 *Others in your social circle eat a healthy and sustainable diet?*

1. Never
2. From time to time
3. Most of the time
999. I Don't know

Q8) Select up to three of your main sources of nutritional information

1. Family
2. Friends/Peers/Neighbours
3. Traditional media (e.g. TV, Radio, Newspapers, Books, Magazines, etc.)
4. Online Resources (e.g. Social Media, Google searches, Youtube, etc.)
5. School/Work colleagues/Everyday places
6. Healthcare professionals (e.g. nutritionists, dieticians, doctors, nurses, etc.)
7. Consumer-related (e.g. supermarkets, food labels, food packaging, etc.)
8. Government/Health authorities (e.g. National dietary guidelines, international dietary recommendations)
9. Other: Please specify _____

FACILITATORS (8 questions)

Q9) To what extent do these elements support you to eat a healthy and sustainable diet?

Q9.01 My knowledge about healthy and sustainable diets

1. Not at all
- 2.
- 3.
- 4.
5. Completely

Q9.02 Availability of practical supportive tools (e.g., Menu guides, Apps, scoring systems...)

1. Not at all
- 2.
- 3.
- 4.
5. Completely

Q9.03 Availability of healthy and sustainable food choices where I usually eat or shop for food

1. Not at all
- 2.
- 3.
- 4.
5. Completely

Q9.04 Expectations for me to be healthy by people who are important to me

1. Not at all
- 2.
- 3.
- 4.
5. Completely

Q9.05 External pressures to eat a healthy and sustainable diet (social media, policy, social campaigns, healthy eating guidelines..)

1. Not at all
- 2.
- 3.
- 4.
5. Completely

Q9.06 Healthy and sustainable eating habits/behaviors of people I share my meals with

1. Not at all
- 2.
- 3.
- 4.
5. Completely

Q9.07 Personal goal to improve my health

1. Not at all
- 2.
- 3.
- 4.
5. Completely

Q9.08 Availability of information on the sustainable and ethical production of the food item

1. Not at all
- 2.
- 3.
- 4.
5. Completely

BARRIERS (10 questions)

Q10) To what extent do these elements limit you to eat a healthy and sustainable diet?

Q10.01 My irregular working hours

1. Not at all
- 2.
- 3.
- 4.
5. Completely

Q10.02 My busy lifestyle

1. Not at all
- 2.
- 3.
- 4.
5. Completely

Q10.03 Giving up foods that I like

1. Not at all
- 2.
- 3.
- 4.
5. Completely

Q10.04 Having to eat strange or unusual foods

1. Not at all
- 2.
- 3.
- 4.
5. Completely

Q10.05 Unaffordability of healthy and sustainable food choices

1. Not at all
- 2.
- 3.
- 4.
5. Completely

Q10.06 My difficulty in preparing healthy and sustainable meals

1. Not at all
- 2.
- 3.
- 4.
5. Completely

Q10.07 My lack of willpower

1. Not at all
- 2.
- 3.
- 4.
5. Completely

Q10.08 My lack of knowledge about healthy and sustainable eating

1. Not at all
- 2.
- 3.
- 4.
5. Completely

Q10.09 Unhealthy and unsustainable eating habits/behaviours of people I share my meals with

1. Not at all
- 2.
- 3.
- 4.
5. Completely

Q10.10 Unavailability of healthy and sustainable food choices close to where I live/work/spend most of my time

1. Not at all
- 2.
- 3.
- 4.
5. Completely

POLICY QUESTIONS (10 questions)

We are interested in your opinion about food policies. For each statement, please indicate whether you would support or oppose the policy.

Q11) Would you support or oppose a government policy that would require...

Q11.01 Increasing taxes for products with higher added sugar

1. Oppose
 2. Neutral
 3. Support
888. I prefer not to respond
999. I don't know

Q11.02 0% VAT on fruits and vegetables

1. Oppose
 2. Neutral
 3. Support
888. I prefer not to respond
999. I don't know

Q11.03 *Ban* on price discounts for unhealthy food and beverages (e.g., 30% off, or ‘buy-one-get-one-free’)

1. Oppose
 2. Neutral
 3. Support
888. I prefer not to respond
999. I don’t know

Q11.04 *Ban* of marketing of unhealthy food and beverages (e.g., sugary drinks, crisps, chocolate) on all media including social media/ the internet/TV/radio/ newspapers/ magazines

1. Oppose
 2. Neutral
 3. Support
888. I prefer not to respond
999. I don’t know

Q11.05 *Ban* of unhealthy food and beverages (e.g., sugary drinks, crisps, chocolate) at supermarket checkouts

1. Oppose
 2. Neutral
 3. Support
888. I prefer not to respond
999. I don’t know

Q11.06 *Ban* of marketing of unhealthy food and beverages (e.g., sugary drinks, crisps, chocolate) to children through the use of cartoon characters and other appealing elements on packaging

1. Oppose
 2. Neutral
 3. Support
888. I prefer not to respond
999. I don’t know

Q11.07 *Ban* of outdoor advertisements (e.g., at bus stops and billboards) for unhealthy food and beverages (e.g., sugary drinks, crisps, chocolate)

1. Oppose
 2. Neutral
 3. Support
888. I prefer not to respond
999. I don’t know

Q11.08 *Ban* on sales of energy drinks to people under 18 years of age

1. Oppose
 2. Neutral
 3. Support
888. I prefer not to respond
999. I don’t know

Q11.09 Taxes on red meat production

1. Oppose
 2. Neutral
 3. Support
888. I prefer not to respond
999. I don't know

Q11.10 Labels about environmental sustainability (e.g., carbon footprint, harm on wildlife and biodiversity) on packaged foods

1. Oppose
 2. Neutral
 3. Support
888. I prefer not to respond
999. I don't know

WHO IS RESPONDING (22 questions)

Q12) Age: *Insert age in completed years* _____

Q13) Level of education:

1. Early childhood education (*hover over "?" to show national equivalencies*)
2. Primary education (*hover over "?" to show national equivalencies*)
3. Lower secondary education (*hover over "?" to show national equivalencies*)
4. Upper secondary education (*hover over "?" to show national equivalencies*)
5. Post-secondary non-tertiary education (*hover over "?" to show national equivalencies*)
6. Short-cycle tertiary education (*hover over "?" to show national equivalencies*)
7. Bachelor's or equivalent (*hover over "?" to show national equivalencies*)
8. Master's or equivalent (*hover over "?" to show national equivalencies*)
9. Doctorate or equivalent (*hover over "?" to show national equivalencies*)

Q14) Gender identity

1. Female
 2. Male
 3. I do not identify in one of the above two genders
888. I prefer not to respond

Q15) How would you describe your principal occupational status?

1. Unemployed
2. Unable to work due to long standing health problems
3. Retired
4. Working part-time
5. Working full-time

Q16) What is your household net yearly income? (€)

1. up to 2999
2. 3000-3999
3. 4000-4999
4. 5000-5999
5. 6000-6999
6. 7000-8499
7. 8500-10999
8. 11000-12499
9. 12500-14999
10. 15000-17499
11. 17500-19999
12. 20000-22499
13. 22500-24999
14. 25000-27499
15. 27500-29999
16. 30000-34999
17. 35000-39999
18. 40000-44999
19. 45000-49999
20. 50000-54999
21. 55000-59999
22. 60000-69999
23. 70000-79999
24. 80000-89999
25. 90000-99999
26. Above 100000

Q17) Do you feel your household income is sufficient to meet your living expenses (e.g. food, housing, energy costs, heating/cooling, travel, etc.)?

1. No
2. Sometimes
3. Yes

Q18) How many people live in your household (including you): *Insert total number of individuals in household* _____

Q19) How many individuals living in your household are under 18 years old? *Insert number of individuals living in your household under 18 years old* _____

Q20) How many individuals living in your household are above 65 years old (including you)? *Insert number of individuals living in your household over 65 years old* _____

Q21) Country of birth

1. Afghanistan (AF)
-
225. Zimbabwe (ZW)

Q22) Country of birth of parent 1 (*Optional)

1. Afghanistan (AF)
-
225. Zimbabwe (ZW)

Q23) Country of birth of parent 2 (*Optional)

1. Afghanistan (AF)

.....

225. Zimbabwe (ZW)

Q24) Country you spend most of your time in

1. Afghanistan (AF)

.....

225. Zimbabwe (ZW)

Q25) How much time have you spent in the above country? *Insert time in completed years* _____

Q26) Would you describe the place where you live as...

1. A city

2. The suburbs or outskirts of a big city

3. A small city or town

4. A country village

5. A farm or home in the country

888. I prefer not to respond

Q27) ZIP code of your place of residence:

Insert ZIP CODE of place of residence _____

888. I prefer not to respond

Q28) Would you describe the place where you work/study/spend most of your time outside of the place you live as...

1. A city

2. The suburbs or outskirts of a big city

3. A small city or town

4. A country village

5. A farm or home in the country

6. I do not have a fixed job/study/usual place where I spend most of my time outside of home

888. I prefer not to respond

Q29) ZIP CODE of your place of work or frequent/usual activity:

Insert ZIP CODE of place of work _____

889. I prefer not to respond

Q30) Do you have any pre-existing health conditions (please check all that apply):

1. I don't have pre-existing health conditions
2. Mental Health Illness (Depression/Anxiety; severe mental illness, e.g. schizophrenia, bipolar disorder)
3. Metabolic disorder (Type 1 Diabetes, Type 2 Diabetes, Obesity)
4. Cardiovascular disease (high blood pressure, high cholesterol, cardiovascular disease)
5. Respiratory disorder (e.g. asthma, COPD)
6. Cancer
7. Gastrointestinal condition (e.g. irritable bowel syndrome)
8. Muskuloskeletal disorders (e.g. osteoporosis, arthritis, sarcopenia, etc.)
9. Other (Please Specify)_____
888. I prefer not to respond

Q31) Your Height: *insert height*_____ (cm)

Q32) Your Weight: *insert weight*_____ (kg)

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