

Executive Board

25th, September 2025

10:30-11:15

WORK PACKAGE 1:

Identification, understanding and measurement of the consumers' behavior in the food choices, based on socioeconomic, cultural barriers and other different local determinants

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University of Parma



Objectives

- (1) Understanding consumer behaviour related to MD (main habits, drivers and demands) – consumer purchasing, cooking and eating behaviour and habits in the MED Countries.
- (2) Understanding perceptions and attitudes concerning different aspects of MD products – health dimensions, ready-to-eat products, modern vs. traditional, attitudes toward special product categories (fruit, vegetables, meat and fish, fat, dairy products, bread...) with focus on local determinants (tradition, heritage, purchasing power, etc.).
- (3) Understanding implication of consumer trends for MD and ready-to-eat products.
- (4) Understanding consumer's segmentation (concerning attitudes, socio-demographic profile, psychology, purchasing models, health consciousness, etc.) to identify the position of MD and ready-to-eat foods in consumers 'diet perspective through qualitative and quantitative research.
- (5) Giving an insight of the MED countries stakeholders (producing industry, retailers, consumers' association, policy makers, etc.) and their expectations on MD future to be able to create innovative business models.



WORK PACKAGE 1: MAIN TASKS AND STATUS

MAIN TASKS

STATUS



Task 1.1: State of the art regarding MD in the MED population (M1-M10) – *Lead UNIPR*

Completed

Results are presented in Deliverable 1.1 (M10), presented in annual meeting



Task 1.2: Evaluation of socioeconomic, cultural barriers, and food behavior through qualitative methodologies (M1-M24) – *Lead UNIPR*

Completed - Semi-structured interviews and focus groups finished). Report shared in October.

Completed- Ethnographic observations finished
Results in **Deliverable 1.2**



Task 1.3: Identification of Motivations, Barriers, and Perceptions for new ingredients/recipes/products developed by the partners (M1-M24) - *Lead UNIPR*

Completed– Data collection started in connection with WP2 (pilot study - recruitment questionnaire)
Results in **Deliverable 1.2**



Task 1.4 Computer aided web interview, consumer attitudes and preferences - Lead UEX (M24-M34)

Data collection finished in Spain-Italy and France
Data collection on-going for Portugal, Tunisia, and Turkey



Task 1.5: Validation of local determinants of food choice to develop business models for new MD food products and healthy eating habits
Lead: IBE (M24-M34)

Task 1.5.a Connection with WP4, Subtask 4.1.2: Participatory Approaches (M18 - M24) and Subtask 4.1.3: Validation and Dissemination (M24 - M30)

Task 1.5.b Connection with WP6, Subtask 6.4 : Policy recommendation paper (M24 – M36)

Milestone M4



Stakeholders consultation: Farmers, retailers, chef, restaurants owners etc. (1.5.a)

Policy Makers (1.5.b)



Task 1.2 Evaluation of socio-economic, cultural barriers, and food behaviour through qualitative methodologies - RESULTS

The following slides provide a brief overview of the main findings from the data collected through the semi-structured interviews and focus groups.

A comprehensive analysis of these results is presented in a detailed report sent via email the 24th of October 2024.

Semi-structured interviews main findings

- Most participants associated the Mediterranean Diet (MD) with **healthy eating, balanced and varied**, while only European countries have considered the minimally processed food preparation method as a part of the MD.
- Similarities emerged among European countries, and the categories of ingredients that are at the base of the food pyramid were associated by more respondents than the categories positioned toward the top. On the other hand, opposite results emerged from the non-European countries, as Turkish participants mentioned 14 out of 15 categories while Tunisia associated only five food groups with the MD.

Semi-structured interviews main findings

- **Health aspects, nutritional claims, and personal preference** are the main **motivations**, followed by eating habits, preparation method, and product price.
- Regarding **barriers**, participants would consume fewer foods that are considered **unhealthy**. Other barriers are **personal taste, price, and eating habits**.
- Survey showed a similarity between the responses of Italy, Spain, and Portugal compared to Turkey and Tunisia.

Conclusions Focus Groups

Italy: Italian participants demonstrated a good understanding of the Mediterranean Diet showing familiarity with most of its guidelines and recognizing its association with both health and sustainability.

For Italian consumers, **geographical origin** plays a significant role and represent a key motivation when selecting products. On the other hand, the **price** is identified as the main barrier when purchasing food.

Spain: Spanish participant mainly associated the Mediterranean Diet with **health and nutritional balance**, describing this diet as low in fat and rich in proteins, vitamins and legumes. Additionally, they associated this diet with **local and traditional foods**. The main motivations behind their food choices included personal preferences, eating habits, health and nutritional consideration, and product affordability. Main barriers identified were **personal health conditions**, the **high cost** of some specific food categories, **lack of habitual consumption** of some foods.

Portugal: Portugese participant associated the Mediterranean Diet with the use of **local and seasonal ingredients**, a diet rich in vegetable and legumes, and the **tradition of shared family meals**. Motivations identified included **health benefits**, accessibility of the food products, the versatility of cooking methods of some foods, and seasonality. Barriers identified were personal **taste preferences**, food intolerance or allergy, price/cost, **lack of knowledge regarding cooking techniques** (food preparation)

Conclusions Focus Groups

Tunisia: Tunisian participant associated the Mediterranean Diet with the consumption of **fresh, locally available food products**. Main motivations identified were **availability and geographical origin** of the food products along with personal preferences. Main barriers included **price, religion restrictions**, unhealthy foods.

Türkiye: Turkish participant associated the Mediterranean diet with a high consumption of fruit and vegetables, where steaming or raw consumption methods are preferred. Main motivations included **personal taste**, organicity and **freshness** of food products, **availability** and **affordability** of products. Main barriers included personal taste, **price, religious restrictions**, and unhealthy characteristic of certain food categories.

Ethnographic observations

Results in Deliverable 1.2

- Ethnographic direct observation constituted the third qualitative methodology employed
- Fieldwork was conducted through ethnographic observations of **university canteens** located in **Italy, Spain and TÜRKİYE**.
- Description of the canteen/food service
- Menu offerings and pricing
- Customer flow and peak hours
- Customer satisfaction and feedback
- Comments from operators and staff
- Alignment of the menu with the principles of the Mediterranean diet
- Food quality
- Availability of nutritional information
- Food processing

Adherence to the Mediterranean diet

- ITALY: The menu follows the Mediterranean diet, offering a wide variety of dishes, primary using seasonal products. In some cases, frozen products may be used, and when this happens, it is indicated on the menu with an asterisk. The menu is designed to include various types of grains (wheat, rice, spelt, mixed grains, and whole-grains), animal proteins (fish, turkey, pork, rabbit, or beef), plant-based proteins (tofu, seitan, beans, chickpeas, lentils, and mixed legumes), seasonal fruits (two or three types), and seasonal vegetables. These vegetables are served either as a condiment for first courses or as a side dish, and can be cooked in the oven, pan-fried, steamed, or serve raw.

Adherence to the Mediterranean diet

- SPAIN: The menu adheres firmly to the principles of the Mediterranean diet, with a strong emphasis on fresh, seasonal produce, olive oil, legumes, fish, meats and whole grains. However, while the general structure follows Mediterranean principles, some dishes, such as fried foods or heavier meats, occasionally deviate from this tradition, although there will always be an option on the menu that fits the Mediterranean diet.

Adherence to the Mediterranean diet

- **TÜRKİYE** : The dining hall menu consists of general legumes (baked beans with ground beef, chickpea and beef stew), vegetables and seasonal products (vegetable soup, haydari), whole grains and starchy foods (rice pilaf, bulgur pilaf, noodles, pasta), protein sources (meatball, chicken cordon bleu, cokertme kebab, chicken tantuni), dairy products (ayran), fresh fruits and desserts (keskul, sutlac) and these lists are diversified every week. It is possible to find an option suitable for the Mediterranean diet every day

Task 1.3: Identification of Motivations, Barriers, and Perceptions for new ingredients/recipes/products developed by the partners (M1-M24) - Lead UNIPR

- To achieve the objective of Task 1.3, a pilot study was conducted in four countries: Italy, Spain, Portugal and Türkiye. Information collected from the ethnographic direct observations carried out under Task 1.2 were instrumental in identifying potential barriers to the introduction of new recipes and ingredients. In light of these findings, the originally planned brainstorming sessions with experts and operators, outlined in the project annex, were replaced by these observational insights.
- As agreed among the project partners, the pilot study was performed in the form of a recruitment questionnaire, administered to participants during the activities of Task 2.1.3 under WP2. The questionnaire aimed to evaluate the acceptability of various innovative recipes and was developed in collaboration with the WP2 working group.

- Participants were shown a photo of each recipe along with the list of ingredients included in them. Based on this information they were asked to respond to six questions per recipe. These questions were designed after a review of the existing literature, particularly of the study realized by Sogari et al. (2021), and were as follows:
- How much do you think you will like this ingredients/recipe?
- How much do you want to taste this ingredients/recipe?
- Are this ingredients/recipe visually appealing?
- How likely would you choose this ingredients/recipe next time you have the opportunity?
- Are this ingredients/recipe unfamiliar to you?
- Are you allergic to any of these ingredients?

Results

- For question 1-5, a 5-point Likert scale was used to determine average scores per recipe and to obtain an overall mean score, allowing for a ranking of the proposed recipes based in participants' intention to taste them. Question 6 was a binary question (Yes/No). Overall, no allergies or intolerances related to the ingredients in the proposed recipes were reported.
- The recruitment questionnaire was administered online. Each participating country collected its data and submitted it to UNIPR for the analysis. The analysis of the data leads to conclude that a good level of acceptability of the recipe can be expected in the subsequent phase covered by WP2 activities. The outcomes of WP2 will make it possible to verify whether the theoretical acceptability and the preference ranking have been confirmed during the tasting phase.

Figure 1 – Ranking of the recipes (Italy)

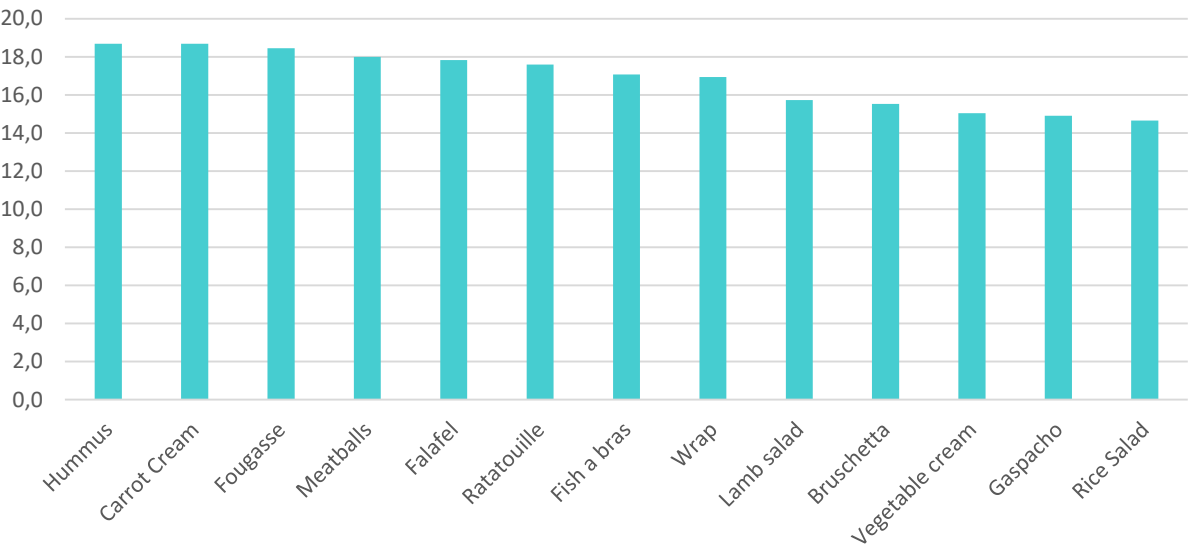


Figure 2 – Ranking of the recipes (Spain)

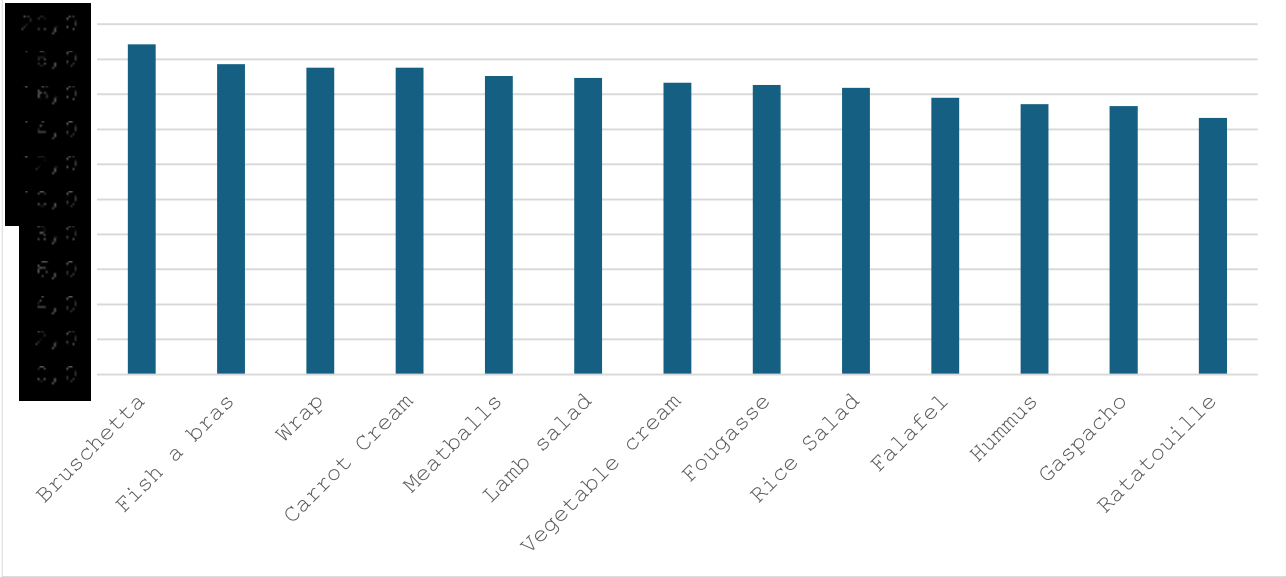


Figure 3 – Ranking of the recipes (Portugal)

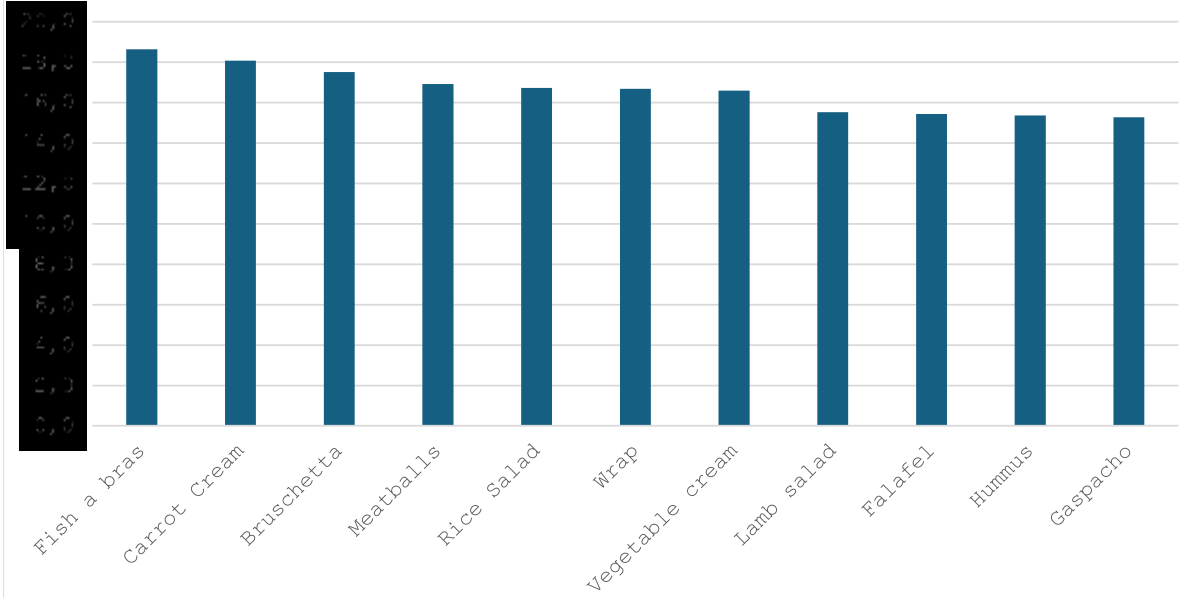
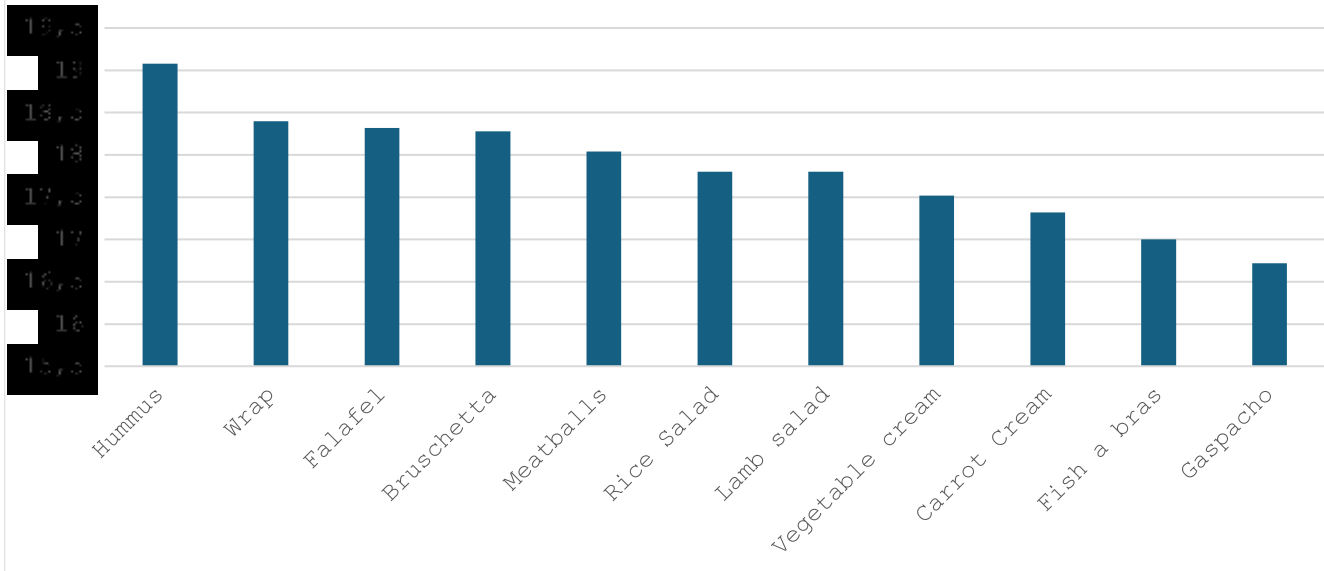


Figure 4 – Ranking of the recipes (Türkiye)



Task 1.4: Computer-Aided Web Interviews. (Lead: UEX; involved: UNIPR, IPLEIRIA CICYTEX, DMU, ADU, JASSP, UTM) (M24 M34)

- A CAWS survey will be performed on a representative sample of around 500 consumers in all member countries. Constructs such as awareness, attitude, and other value-related variables, consumer preferences will be investigated by means of hypothetical choice situations (choice experiments) to quantitatively assess consumer attitudes and preferences. The purpose is also to test the consumption frequency of traditional meals and the trends and reasons regarding declining demand throughout the last decade together with new needs related to convenience. The data will be used via a statistical observatory.

Task 1.4: Computer-Aided Web Interviews.

- Lead: UEX; involved: UNIPR, IPLEIRIA CICYTEX, DMU, ADU, JASSP, UTM
- Person in charge of coordinating the activities: Paula Gaspar
- Work to do:
 - A Computer-Aided Web Interviews: the survey will be performed on a representative sample of around **500 consumers in all member countries**.
 - Constructs such as awareness, attitude, and other value-related variables, consumer preferences will be investigated by means of hypothetical choice situations (**choice experiments**) to quantitatively assess consumer attitudes and preferences.
 - The purpose is also to **test the consumption frequency of traditional meals** and the **trends and reasons regarding declining demand** throughout the last decade together with new needs related to convenience.
 - The data will be used via a statistical observatory.

Task is therefore on-going

- Questionnaire developed: Final version agreed by all partners
- Translations done in each language using the final English version agreed
- Images edited for adaptation to each questionnaire
- Programming done by Netquest company
- Portugal colleagues prepared an English version as a template in Google forms for partners not using Netquest and later translated

Countries using company Netquest services:

- Spain
- Italy
- France

Countries using Google forms tool:

- Portugal
- Tunisia
- Turkey

Questionnaire

- Final version in English
- **BLOCK 0:** KNOWLEDGE ABOUT THE MEDITERRANEAN DIET
- **BLOCK I:** BACKGROUND INFORMATION: INTRODUCTION TO THE MEDITERRANEAN DIET.
- **BLOCK II:** MOTIVATIONS PERCEIVED BY THE CONSUMER TO FOLLOW THE MEDITERRANEAN DIET (tendencies)
- **BLOCK III:** BARRIERS PERCEIVED BY CONSUMER TO FOLLOW THE MEDITERRANEAN DIET. (reasons for decrease)
- **BLOCK IV:** LEVEL OF ADHERENCE TO THE MEDITERRANEAN DIET (MEDAS QUESTIONNAIRE) (frequency of consumption)
- **BLOCK V:** CHOICE EXPERIMENT (preferences)
- **BLOCK VI:** SOCIODEMOGRAPHIC CHARACTERISTICS

BLOCK V: CHOICE EXPERIMENT (preferences)

- Text
- *Please, before you tell us what type of **CREAM OF VEGETABLES** you prefer, we would like to ask you to make an effort to choose as if you were in a real purchasing situation, especially when evaluating the price of the products. In this type of study, participants often do not pay attention to prices since they are not actually going to buy the product. This leads to errors that can be avoided if you make each of your next decisions in the same way as you would if you were buying these same servings of cream of vegetable soup in a store.*



BLOCK V: CHOICE EXPERIMENT (preferences)

- **(Explanation of levels)**
- **Shelf-life** : it refers to the period during which the food retains an acceptable quality from a safety and organoleptic point of view. You can find this information displayed in different ways:
 - Long-life foods (products to be consumed between 1 and 3 years)
 - Intermediate shelf-life foods (products to be consumed between 1 and 3 months)
 - Short-life foods (products to be consumed between 1 and 3 days)
- **Type of packaging**: you can find this information displayed in different ways:
 - Glass
 - Tetra Pack/aluminium
 - Plastic
- **Nutritional characteristics**: it refers to the nutritional quality of a product. You can find this information displayed in different ways:
 - Low in salt
 - Rich source of dietary fiber
 - Source of protein
- **Other quality indication**: it refers to the other related quality of a product. You can find this information displayed in different ways:
 - Local product
 - Organic (Bio Logo)
 - No additives/Natural ingredients
 - With olive oil
- **Price**: it refers to the price of €/350g of the product. There will be three price levels.
 - The size is to be decided but the price per kg or liter should be indicated nearby the price of that size.
 - For instance:
 - Low PRICE: (-25% of the market price)
Price 2.65 €/350g (7,5 €/1 kg)
 - Medium price (Average of the market price)
Price 3.5 €/350g (10 €/1 kg)
 - High price (+25% of the market price)
Price 4,37 €/350g (12,5 €/1 kg)

Current stage:

- Spain: Data collection finished. 506 valid responses
- France: Data collection finished. 502 valid responses
- Italy: Data collection finished. 502 valid responses
- Portugal: 447 responses by the 16th September 2025
- Turkey: Still collecting responses
- Tunisia: No news about the number of responses already collected.

How to continue....

- Once all data is collected, it has to be analysed.
- Two different ways depending on data collection procedure (netquest or Google form)
- Meeting will be held to harmonize data analyses.



TASK 1.5 – Validation of local determinants of food choice to develop business models for new MD food products and healthy habits

List of partners: lead: IBE; involved: UNIPR, IPLEIRIA, DMU, ADU, UTM

Timing of the task: M24-M34

Deliverable: [D1.5] Open access scientific paper on food choices motivations (M34; IBE).

Milestone: [M4] Awareness of policy makers regarding determinants of food choice in participant counties (M34; IBE).

Objective of the task: stakeholders (farmers, retailers, policymakers, industry, etc.) consultations, both in person and/or virtual, will give us the possibility to share our results and collect stakeholders' feedback and reactions. Local determinants of food choice will be identified to develop business models for new MD ingredients/food products and healthy eating habits to be validated with stakeholders (policymakers and producers). The consultation will be realized by each local partner in all participants' countries.



TASK 1.5 – Validation of local determinants of food choice to develop business models for new MD food products and healthy habits

This task was split in **two different activities**:

The first one is a **questionnaire** based on results from task 4.1.1 and aimed at **stakeholders from the agrifood sector**, and is being carried out concurrently to task 4.1.2, involving partners from IBE, UNIPR, DMU, UTM, and Spain.

Questionnaires will be sent to participants of seminars and focus groups and filled out remotely.

The second one is aimed at policy makers and is yet to be planned, but it will involve **consultations with policy makers** from the countries of the partners involved, in connection with WP6.



Questionnaire for stakeholders from the agrifood sector

Now that you know what we found out, we would like to ask you a few questions on this topic:

- What do you think of these factors? Do they happen to affect your business model too?
- Is the Mediterranean Diet part of your business model?
 - If yes, why? And how (is it clearly specified or is it present with a series of key concepts to take into account)?
 - If no, why?
- In your opinion and according to your experience in the agrifood sector, what are the main motivations for (insert your country name: Italian/Egyptian/ Spanish) people in following the Mediterranean Diet?
- In your opinion and according to your experience in the agrifood sector, what are the main barriers for (insert your country name: Italian/Egyptian/ Spanish) people in following the Mediterranean Diet?



WORK PACKAGE 1: Deliverables



- **Deliverable 1.1 "State of the art regarding MD in the MED population" (Due in M10)**



D1.1 presents results of Task 1.1 (**Submitted 17 April 2024**) Leader: UNIPR.

- **Deliverable 1.2 "A Pilot study report" (Submitted in time) Leader: UNIPR**



D 1.2 present results of Task 1.2 & Task 1.3 (Submitted in M24, 01/06/2025)

- **Deliverable 1.3 "Consumer perspectives to quantitatively assess consumer attitudes and preferences regarding the MD"**

(Due in M34) – Leader: UEX

- **Deliverable 1.4 "Open Access scientific paper on food choices motivations"**

(Due in M34) – Leader: IBE

Deliverable 1.2 “A Pilot study report” Leader: UNIPR (Task 1.2 & Task 1.3)

Submitted in M24, 01/06/2025

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THANK YOU FOR LISTENING!

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and thank to the WP1 Team