



**MOUNTAIN
HER**

Dietary and nutritional evaluation of malt and food products to gain consumer interests (PINS)

**D5.3.1 List the dietary and nutritional value of
traditional food and malt products for inclusion in the
label**

Task 5.3 Dietary and nutritional evaluation of malt and food products to gain consumers' interests

Labeling of the nutritional value of the different traditional food and malt products is essential to attract consumers' interest and to provide an objective evaluation of the true added value. Three replicates of all foods and malt products will be submitted regularly to a national ISO certified laboratory to determine their full dietetic profile, such as calories, proteins, fibers, vitamins, and other macro and micro elements. These analyzes will be used to generate the nutrition labels necessary for all foods sold in Europe. In addition, the results will be studied with dietary experts to identify any specific food types rich in nutritional values, so that these elements can be promoted in the package and used to attract consumers.

Exploring the Nutritional Benefits of Barley and Wheat: A Focus on Micro and Macro Elements

Barley and wheat, two ancient grains cherished for their nutritional bounty, offer a plethora of macro and micro elements vital for human health. Understanding their nutritional composition and the significance of accurate nutritional declarations is paramount in promoting optimal dietary practices.

Macro and Micro Elements:

Barley and wheat are rich sources of essential macronutrients such as carbohydrates, proteins, and dietary fiber. Carbohydrates fuel energy needs, while proteins support tissue repair and immune function. Dietary fiber aids digestion and regulates blood sugar levels. Furthermore, these grains boast an array of micronutrients crucial for various bodily functions. Barley excels in manganese, selenium, and phosphorus content, benefiting bone health and antioxidant defense. Wheat stands out for its iron, zinc, and magnesium content, supporting oxygen transport, immune function, and nerve signaling.

Nutritional Declaration:

Accurate nutritional declarations on food labels provide consumers with essential information about serving sizes, calorie content, and nutrient composition. These declarations empower individuals to make informed dietary choices, ensuring alignment with nutritional goals and dietary restrictions.

In conclusion, incorporating barley and wheat into one's diet enriches nutrient intake, promoting overall health. Nutritional declarations serve as indispensable tools in facilitating informed dietary decisions, fostering a culture of health-conscious consumption.

Task 5.3 Dietary and nutritional evaluation of malt and food products to gain consumers' interests

Although the task itself states that all analyzes will be done in Croatia, due to the impracticality of importing unanalyzed raw materials and food from third countries into the EU, in agreement with the project coordinator, it was decided that each country will perform the planned analyzes in its ISO certified laboratories.

For this task Deliverables are planned for M20 and M30 of the project. Since in M20, more precisely in February 2024, we still do not have the necessary raw materials and finished products to be sent for analysis to ISO certified laboratories, the following must be done to begin with:

- 1) Research the legal framework of each country related to obtaining a nutritional declaration for certain products
- 2) Request analysis quotation from 3 ISO certified laboratories in each country:
 - a) for raw material analysis, more precisely, wheat and barley
 - b) for the analysis of products that have been decided to be produced by an individual cooperative

After the requested work is done, all the obtained information must be transferred to the cooperatives/association.

Achievements

COUNTRY	REGULATION FOR FOOD LABELING	LABORATORY	PRICE OF RAW MATERIAL ANALYSIS	THE PRICE OF CREATING A NUTRITIONAL DECLARATION
MOROCCO (Price excluding VAT 20%)	Decree n°2-18-44 / 29 May 2018 (Moroccan Regulation) - information in packaging labels. - LINK	AGQ MOROCCO SARL	Microbiological tests (Enterobacteriaceae, Yeasts & Mold, E.Coli, Staphylococcus aureus, salmonella, listeria, etc.) , Contaminants tests (Heavy metals, Mycotoxins) 263.3 EUR	Price for one sample Energy, Fats, Saturated fats, Carbohydrates, Sugar, Protein, salt and total dietary fiber, etc. 242.00 EUR
		Agro Lab SARL	Microbiological tests , Contaminants tests (Heavy metals, Mycotoxins, pesticides) 410.3 EUR	Price for one sample Energy, Fats, Saturated fats, Carbohydrates, Sugar, Protein, salt and total dietary fiber, etc. 146.8 EUR
		Morocco FOODEX	Microbiological tests 85.8 EUR	Price for one sample Energy, Fats, Saturated fats, Carbohydrates, Sugar, Protein, salt and total dietary fiber, etc. 162.4 EUR
LEBANON	Legislative Decree No. 71, 9/9/1983 - LINK	LARI is a certified laboratory for food analysis for both raw material and end products.	/	/
			/	/
			/	/
TUNISIA *waiting for a quotation from the mentioned laboratories	The food packaging in Tunisia is regulated by the law " arrétée du ministère du commerce, 3 septembre 2008 ". - LINK	LCOC		
		SGS Tunisie / Laboratoires d'analyses		
		LCAAB		
ALGERIA *After the raw material will be collected, and later	Executive Decree No. 05-484 of December 22,	AGRODIV Constantine Central Laboratory		

<p>when the products will be produced, the mentioned laboratories will be contacted and a quotation for analyzes will be</p>	<p>2005 LI N K Executive Decree No. 12-214 of May 15, 2012, LINK</p>	<p>SIM agro Blida agri-food laboratory</p>	<p>/</p>	<p>/</p>
<p>ITALY *After the raw material will be collected, and later when the products will be produced, the mentioned laboratories will be contacted and a quotation for analyzes will be requested from them.</p>	<p>REGULATION (EU) No 1169/2011 - LINK</p>	<p>Merieux</p>		
		<p>Neutron</p>		
		<p>Sicural</p>		
		<p>Eurofins</p>		
<p>CROATIA (Price excluding VAT 25%)</p>	<p>REGULATION (EU) No 1169/2011 - LINK</p>	<p>Nastavni Zavod za javno zdravstvo PGŽ</p>	<p>Sensory search with attachment , Mineralization in the microwave ovens , Metals ASS, Mycotoxins , Determination mycotoxins , Determination chlorinated pesticides, Expert opinion , Microbiological analysis 918.00 EUR</p>	<p>Proteins , Fats , Dry substance , Mineralization , Total sugars , etc. Beer Determination shares alcohol EUR 78.00 Price for everything in advance certain products EUR 1,384.00</p>
		<p>Nastavni Zavod za javno zdravstvo dr. Andrija štampar</p>	<p>Price for one sample (Test remains pesticides Aflatoxins , Ochratoxin , Determination zeralenone , deoxynivalenol , fumonosin and T-2, HT-2, Ofredjeno heavy metals) EUR 935.71</p>	<p>Price for one sample 106, 18 EUR</p>
		<p>Labosan d.o.o.</p>	<p>Price for one sample (Hectoliters mass , protein, moisture , impurities , fracture grain)</p>	<p>Price for one sample 112.00 EUR</p>

			25.00 EUR	
		Inspecto d.o.o.	Price for one sample (Test Pesticide residues , Testing heavy metal , Mycotoxins , Microbiological examination) 463, 38 EUR	Price for one sample (Energy value , Fat , Of that saturated neckwear acids , Carbohydrates , Of which sugars , Proteins , Moisture , Ash , Fibers , Sodium , Salt) 112.81 EUR

Conclusion

The mentioned countries have similar laws and regulations that must be followed when placing food products on the market. However, task 5.3 states how food products will be placed on the European market, so it is necessary to be familiar with the following **European Union Regulation , laws and strategies:**

Regulation (EU) No 1169/2011 - [LINK](#)

EU Common Agricultural Policy (CAP) - [LINK](#)

EU Strategy for Sustainable Food Systems - [LINK](#)

EU Health Claims Regulation - [LINK](#)

EU Food Safety Authority (EFSA) - [LINK](#)

These regulations and strategies collectively form a comprehensive framework aimed at ensuring that consumers have access to accurate and transparent information about the food products they purchase and consume, including nutritional information. Compliance with these regulations is mandatory for food businesses operating within the EU market.

The Nutrition declaration on food products must look like this:

NUTRITION DECLARATION	
Average nutritional values per 100g	
Energy	kJ / kcal
Fat	g
of which saturates	g
Carbohydrate	g
of which sugars	g
Protein	g
Salt	g

Justification of delay

No delay

Supporting documents

No supporting documents



**MOUNTAIN
HER**

Empowering women in mountain
farming communities



PRIMA
PARTNERSHIP FOR RESEARCH AND INNOVATION
IN THE MEDITERRANEAN AREA