



# ARISTOIL PLUS Educational Kit

A Guide for Trainers of Local Stakeholders in  
the production of Healthy Extra Virgin Olive Oil  
rich in Polyphenols

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**Interreg**   
Mediterranean

 **ARISTOIL PLUS**

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Thanks to all ARISTOIL and ARISTOIL PLUS project partners!!!

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# What is the Educational Kit?

The Educational Kit is a collection of the most important knowledge built within the three years of research and experimentation through the ARISTOIL project funded by Interreg Med, regarding the parameters affecting the presence of polyphenols in Extra Virgin Olive Oil. But it is not only that. This know-how is being communicated in a simplified way to producers through the Guidelines for Producers. This Kit provides all the access points to the most important information you might need in order to organise a training for your local stakeholders in the field of the production of EVOO rich in polyphenols.





# Who is the Educational Kit for

This Educational Kit is useful to anyone who would like to organise trainings for local stakeholders in the field of the production of EVOO rich in polyphenols. It provides the key informational material for the most important information to be transferred but also many additional reference for further reading and deeper learning.

# How to read it

Every chapter can be read separately, while in its total summarizes the most important results achieved by the project.

# Content



## TO THE READER

What is the Educational Kit  
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## BASIC INFORMATION

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Key Messages

## THE KNOW HOW

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The guidelines for producers  
ARISTOMETRO device  
BIOLOGICAL ACTIVITIES OF OLIVE OIL POLYPHENOLS  
Health Claim as a Marketing tool  
The Living Labs



## SUSTAINABILITY

The Med Healthy Olive Oil Cluster



**"LET FOOD BE YOUR MEDICINE  
AND MEDICINE BE YOUR FOOD."**

*Hippocrates*



# ARISTOIL PLUS Project

The Mediterranean region is the main place around the world for production of olive oil. 95% of the world's olive oil is produced in the Mediterranean and mainly in Greece, Peloponnese which produces 65% of Greek olive oil, Italian regions of Sicily, Calabria and Puglia and Andalusia in Spain, the biggest olive growing area on the planet. The main common challenge for all participating countries in the project is that the average price of olive oil is low in comparison to the production cost and moreover there is a strong competition with the non-Mediterranean seed oil sector. The producers in the Mediterranean are pressed either to reduce the cost of production or to increase the value or the demand for olive oil in the international market in order to maintain the viability and sustainability of the olive tree cultivation and the olive oil production.

Driven and motivated by the recognition of the above constant challenges, as well as the necessity of placing this high-value product available on the market, ARISTOIL PLUS aims to reinforce the Mediterranean Olive oil sector competitiveness through the development of innovative production and quality control methodologies related to olive oil health protecting properties. Based on ARISTOIL's experience, ARISTOIL PLUS partnership is committed to transfer and capitalize the acquired know-how to new territories and new beneficiaries, focusing on:

- Increasing the consciousness of Mediterranean Olive oil actors around the benefits and methods of producing Extra Virgin Olive Oil (EVOO) rich in polyphenols
- Increasing the consumers' awareness on the healthy attributes of EVOO rich in polyphenols
- Introducing a new product of higher value in the market, that promotes consumers' health
- Establishing a new category of olive oil in the market with an innovative approach
- Ensuring the EVOO rich in polyphenols stakeholders' community remains connected, up to date and supported with services in order to develop a competitive advantage for their product

By following a transnational approach, ARISTOIL PLUS will be able to cover a large and diverse territory and support a large and increasing number of olive oil stakeholders from different backgrounds, along with raising awareness to the EVOO consumers.





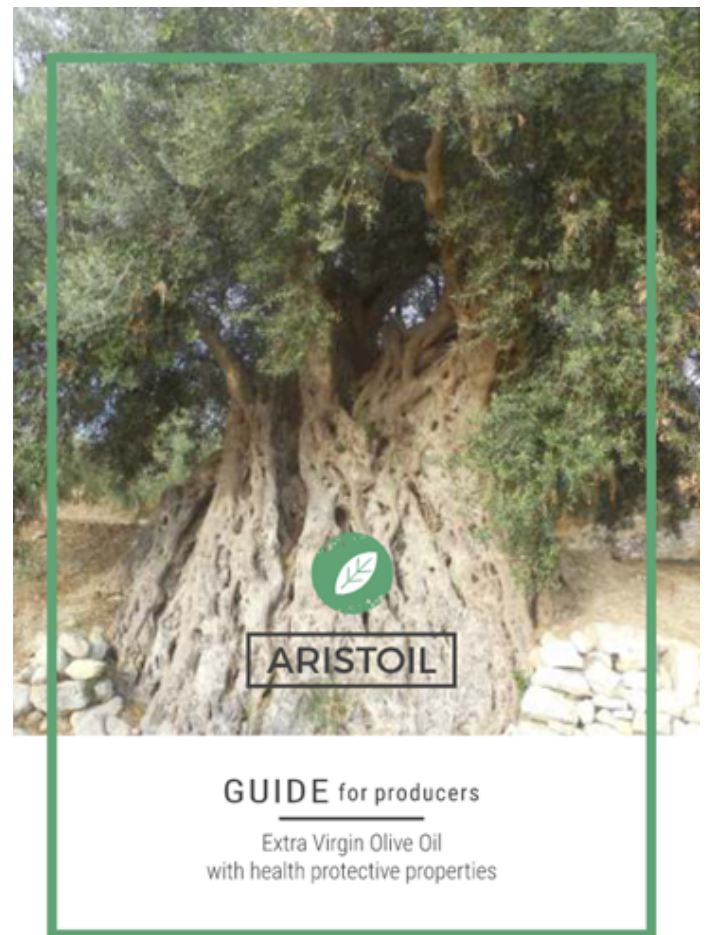


**Not All Extra Virgin Olive Oils are  
the Same!**



# DID YOU KNOW?

Any cultivar is able to provide extra virgin olive oil with polyphenolic content that exceeds the threshold established in the 432/2012 European Regulation. However, orchards with traditional and endemic olive groves that stand out for a wide varietal richness have been found to produce olive oil high in polyphenols.



## The Guide for producers

Phenolic compounds have an outstanding nutritional interest recognized by the European Food Safety Authority (EFSA) and embodied in the 432/2012 European Regulation, which includes the health claims associated with the consumption of food components. The health claim refers to the protective role of phenolic compounds against the oxidation of blood lipids, one of the main mechanisms involved in the development of cardiovascular diseases. This beneficial effect occurs when 20 g of olive oil with a minimum content of 250 mg of phenolic compounds per kg of oil are consumed daily.

The guidelines for the production of EVOO are the best reference to obtain a product with high phenolic content. Any anomaly that occurs before, during or after harvesting can have a significant effect on the antioxidants content, with special emphasis on polyphenolic compounds.

To have access to the full document with guidelines please visit: [www.aristoil.eu](http://www.aristoil.eu)



# ARISTOMETRO

ARISTOMETRO is a portable analytical device able to measure the level of polyphenols -oleocanthal and oleacein, the most widely researched phenols- in olive oil.

The device can be used by the producers:

- to decide if it is the right time for harvesting depending on the market targeted .
- to check whether the storage method used is adequate for preserving polyphenols after a couple of months.

**You can learn everything about the use of the device on our website**

<https://aristoil.eu/training>





# **BIOLOGICAL EFFECTS OF POLYPHENOLS**

A booklet regarding high quality olive oil's health benefits is available for consumers through the project ARISTOIL.

This booklet is the result of 3 Faculties of pharmacy efforts and includes the registration of researches published in scientific magazines. These researches prove that phenols in olive oil contribute to health claim of human body.

Olive oil, rich in phenols, is a valuable food with health claim protection.

**To get access to the booklet please visit:  
<https://aristoil.eu/training>**

# Health Claim as a Marketing tool



New lifestyles and spending patterns linked to a growing demand for well-being are outlining growing consumption trends for health products.

Food is not purchased for the simple purpose of satisfying a primary need, appeasing hunger and eating, but with full awareness of the link between nutrition and health. This awareness stimulates in the consumer the need to know the composition of what they introduce into their body, looking for guarantees on the absence of harmful molecules and hoping for the presence of components with beneficial and functional action. The tendency to enhance the healthy virtues of a product, and the awareness of the value attributed by the consumer to these characteristics, has enormously influenced advertising communication, which in the last thirty years has enhanced certain effects of the products, involving pathologies and benefits in terms of prevention. For companies, the possibility of identifying an element of distinctiveness in the health effects of food represents a useful marketing tool. The claims of extra virgin olive oil represent a real opportunity for the market if the current limits to their application are appropriately overcome.



The low income of the producers could push them to use approximate management techniques aimed at maximum savings, which, in the worst case scenario, will lead to the choice not to apply any agronomic intervention, bringing the cultivation of the olive tree back to a subsistence crop with serious repercussions also on the environment and landscape.

In order to avoid cases of misleading advertising, based on health information and without scientific basis but capable of influencing the choices and eating habits of consumers, the European Parliament approved regulation 1924/2006 which governs nutrition and health claims (CLAIMS) provided on food products. The Regulation recognizes two types of claims: - nutritional, indications concerning particular beneficial nutritional properties, due to the energy (caloric value) that it brings / does not bring, and / or to the nutritional or other substances it contains / does not contain; - and health, claims concerning the existence of a relationship between a food or its component and health, including "claims relating to the reduction of a risk of disease" linked to the significant reduction of a risk factor for the development of a human disease.





Nutrition and health claims must not be false, ambiguous, misleading, or give rise to doubts about other foods; encourage excessive consumption of a certain food; state directly or indirectly that a balanced and varied diet cannot generally provide adequate amounts of all nutrients; arousing or exploiting fears in the consumer. The claims must therefore be understandable to the consumer and must demonstrate, based on scientific evidence, that the nutrient has a nutritional or beneficial effect, that it is present in significant quantities to obtain the claimed effect in the product, that it can have the effect declared by consuming a reasonable amount of the product and that it is present in a usable form by the body.

One of the four claims that can be used on the label, the most important, for the marketing implications, is the claim of the polyphenols. The interesting aspect is that it is an exclusive claim for olive oil, and cannot be extended to other food products, as is the case for vitamin E and oleic acid. Since the phenolic molecules are hydrophilic in nature, the producers know well how difficult it is to obtain oils rich in these antioxidants, whose presence in the oil is a function, in addition to the varietal origin, of agronomic practices (pruning, fertilization, irrigation and phytosanitary treatments) and technological.




As a known law of the mill cites, yield and content in phenols are always antithetical aspects in the production of oil. These premises establish a principle: only the best extra virgin olive oils, obtained by early harvesting the drupes, promptly working the product, reducing the process water as much as possible, and limiting the re- heating of the pastes, will be able to maintain a content of bioactive phenolic substances. useful for the application of the claim.

In a demographic dimension that evolves towards a progressive aging of the population, encouraging the use of health foods certified by the presence of claims approved by EFSA could represent a strategy to reduce public health expenditure in the long term. Developing bills aimed at promoting tax relief for companies that produce healthy food, and reducing food taxes to encourage their purchase, could be effective actions to increase the volumes of healthy oil on the market.



# A Living Lab






The Living Lab is an approach, promoted and supported by the European Commission, for developing innovations through a Public-Private-People partnership with a central role for the end-user.

The Living Lab could be defined as a methodology, ecosystem or community that brings people together to innovate. It is a multi-method approach, aiming to engage users to a multi-stakeholder participation in a real-life setting through co-creation activities.

The Aristoil Plus Living Labs (LL) have been implemented in Italy, Spain, Montenegro and Greece through a consultation path for stakeholders, with a special challenge, to co-define the image of the “Healthy Extra-Virgin Olive Oil (HEVOO)”, and of “ARISTOIL MED HEALTHY OLIVE OIL Cluster”. The aim of Aristoil Plus Living Lab is to create a label to make the bottles of olive oil recognizable, as a sort of collar that can help in the communication towards consumers of the Health Benefits of Aristoil olive oil bottles.



The main steps to organize an effective Aristoil LL are the following:

### **1. Creating a stakeholders contact list**

Every Aristoil+ Living Lab should mandatorily be composed of actors belonging to the four axes of the “**Quadruple Helix**”, for instance:

- Oil producers, including mills, distributors, retailers
- Universities and research centers
- Local and regional bodies, agencies

Normal people, individually or grouped (e.g. consumer association)

### **!!! Start identifying stakeholders !!!**

**You can't engage stakeholders until you know who they are.**

**As you are initiating your projects, start identifying your stakeholders.**

**Additionally, create a project stakeholder database.  
Ask every person you want to invite if there are other relevant stakeholders to invite (as individual or group).**





## 2. Organizing all the contents you will create

Every Aristoil Plus Living Lab should produce news, posts and a report for each meeting.

At the first stage of the event organization, during the planning of the LL, we suggest you have a look at all the information you need to provide for the reporting. Reading in advance the LL event report, will help you in organizing effectively all the content you need to create for the meeting, as well as for the news (agenda, minutes, news for socials etc).

The official event report will be sent via email after every LL meeting to all participants. It is worth sharing some pictures and the main findings of each meeting in the online community you will create.


### **Pay attention!**

**the more concise it will be, the easier it will be to read everything; the more attractive it will be, the more likely it will be imprinted in the memory**

## 3. Creation of an online community

You can start before the online event to set up a virtual community in order to allow all the practitioners and interested people to share contents or more.

An online community is a group of people who interact with each other on an online platform. There's a huge range in how an online community can scale, and understanding what type of online community is the most beneficial for your Living Lab is the first step in building your own community.



Public social networks are online communities that only require someone to have an account to be part of the community. There aren't many guidelines or restrictions when it comes to be part of this type of community.

#### **4. Invite your future key stakeholders/speakers to co-create the agenda**

To involve your stakeholders even more, share with them the working scheme you have hypothesized, ask for their opinions, collect materials and further contacts.

In order to invite stakeholders we propose you to organise a public launch in your country and promote a call with a short description of the Aristoil Plus Living Lab and the form to participate.

#### **5. Create an evaluation form for every LL**

In order to ensure the best experience for your users, create an evaluation form to be filled in after each single event.

Ask for attendee feedback immediately after the event is over, while the experience is still fresh in their minds. You can send your post-event survey over email or share the survey link manually.

#### **6. Sign up a LL agreement with stakeholders**

To ensure that all the data given from users will be protected, an agreement is usually stipulated between participants and those who organize the living lab on how their personal data are processed, how the responsibilities are divided, and how the other rights and liabilities are managed.

# SUSTAINABILITY

The Med Healthy Olive Oil Cluster





The **Aristoil Mediterranean Healthy Olive Oil Cluster** (Aristoil Med Cluster) is a transnational innovation platform for open innovation aiming to raise overall capacity for green-economy development in Med countries through collaboration of research organizations, public government sector, civil society and enterprises and through the establishment of international Aristoil Living Labs (LL) all around Europe. The purpose of the Cluster development is to strengthen local, regional and national competitiveness of olive oil producers and functional food industry through efficient stakeholder resource utilization and internationalisation of olive oil products.





**The Cluster has a simple structure and is the mean to have:**

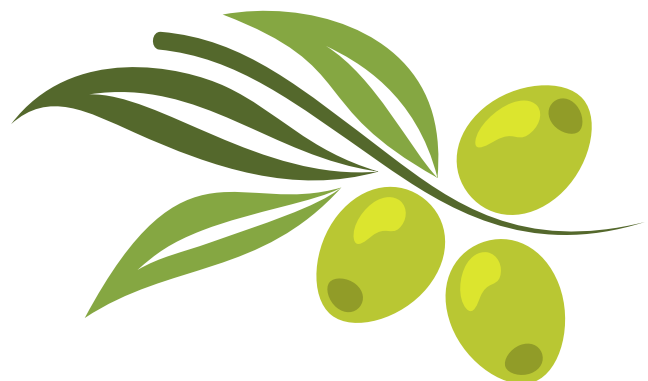
- Direct Communication channel to market
- International Brand increasing visibility of high phenolic local olive oils
- Easier access to Fund raising for research activities

**The Cluster, through the protocol promotes:**

- Olive Oil Research activities and science result promotion
- Promotion of healthy properties of extra-virgin olive oil
- Promotion of member companies with validated extra virgin olive-oils rich in polyphenols

**Producers, companies that are willing to be part of the Aristoil Mediterranean Healthy Olive Oil Cluster can register in the platform, send their analysis, certify the analysis through the block chain, and promote their product in the showcase.**

**For more information visit:** <https://aristoil.eu/companies>





Project Partners



Project co-financed by the European Regional Development Fund




 [aristoil.interreg-med.eu](http://aristoil.interreg-med.eu)

 [Aristoil Project](https://www.youtube.com/watch?v=...)



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