



# Health benefits of olive products:

Tips and resources for  
communication

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# Outline

- What is the Olive Wellness Institute (OWI)?
- Recent activity
- Health benefits
- Tips for how to communicate



# Olive Wellness Institute background



- Funded by Hort Innovation
- Launched in 2018
- Target audience = health professionals
  - Food service professionals
  - Growers and processors

# About the Olive Wellness Institute

The Olive Wellness Institute is a science repository on the nutrition, health and wellness benefits of olives and olive products, which is all subject to extensive peer review. The institute is guided by scientific experts that specialise in the nutrition, health and wellness benefits related to olive products



## CREDIBILITY

All information developed and distributed by the Olive Wellness Institute is subject to extensive review by the Advisory Panel as a result of our evidence based, science-first approach.



## EVIDENCE BASED

The Olive Wellness Institute is strictly committed to delivering evidence-based information informed by high-level research standards.



## EXPERTISE

The Olive Wellness Institute is guided by leading scientists, researchers and health professionals who have research expertise in olives, olive oil and its uses in traditional diets.

## Downloadable resources

How to look for a **GOOD QUALITY EXTRA VIRGIN OLIVE OIL**

With an endless choice of oils at your local supermarket or food store, how do you know what is the best quality Extra Virgin Olive Oil (EVOO) and essentially the healthiest oil for you? EVOO is the highest grade of Olive Oil and the fresh juice of the olive with a wide range of well-evidenced health benefits.

**WHAT YOU SHOULD LOOK FOR ON YOUR EXTRA VIRGIN OLIVE OIL BOTTLE LABEL:**

The label should state **"EXTRA VIRGIN"**

As a result of its high quality and minimal processing, EVOO is high in natural phenols, vitamin E and phytonutrients from the olive leaf.<sup>1,2</sup>

The label should include a **BEST BEFORE DATE AND HARVEST DATE**

The fresher the EVOO, the higher the phenol content. You should always look for the harvest date to make sure you are getting the fresh season EVOO.

The bottle should be a **DARK COLOUR AND GLASS**

Good quality EVOO doesn't last forever and the degradation of oil will happen more quickly when exposed to light and oxygen. If EVOO is stored in a dark coloured bottle away from heat and light, it will stay fresher for longer.

Showing the total **PHENOL CONTENT**

Some EVOOs will state on the Nutrition Information Panel the total phenol content. The activity and actions of these phenolic compounds contribute to the health benefits of EVOO.

Choose an oil that is **CERTIFIED**

Olive oil is one of the topmost adulterated food products worldwide and the food product most vulnerable to food fraud. Standards exist nationally and internationally to prevent EVOO adulteration, and to guarantee the quality.<sup>3,4</sup>

1. Standards Australia, Australian Standard Olive Oil and olive pomace oils, 48-008:2011, November, Australia, London 2011. <http://www.standards.org.au/standards/norms/standards.nsf/ProductID-143734>

2. Bialini D, Olive Oil: More constituents and health. *Food Science & Technology*. CRC Press, 2009

3. Search for Research, Evidence and Practice, comprehensively review the international, national and comparative evidence on the antioxidant, phenolic and polyphenolic content of olive oil according to their chemical composition and availability to their chemical constituents. <http://www.euro.who.int/en/health-topics/food-and-nutrition/foods-and-nutrients/olive-oil>

4. Moore J, Spink J, Lipp M. Development and Application of a Database of Food Fraud: Fraud and Economically Motivated Adulteration from 1980 to 2010. *Food Sci*. 2015; doi: 10.1111/1751-2220.12282

5. De Linger E. Dark Report on the Food Fraud Issue in the Food Chain and the Food Fraud Panel (2010) (EU). Committee on the Environment, Public Health and Food Safety. European Parliament. 2010. <http://www.europarl.europa.eu/press-portal/122822>



## Extensive information on:

- ✓ Health benefits
- ✓ Extra virgin olive oil
- ✓ Olive leaf extract
- ✓ Olive leaf tea
- ✓ The Mediterranean Diet
- ✓ Cooking with EVOO

## Latest research



The anti-inflammatory effects of a Mediterranean Diet: a review

• Cardiovascular Health • Inflammation • Mediterranean Diet



Extra virgin olive oil: A comprehensive review of efforts to ensure its authenticity, traceability, and safety

• Extra Virgin Olive Oil

## Recipes



Baked Truffle Cauli Mac and Cheese

• Vegetarian



Lemon Almond Bliss Balls

• Desserts • Quick & Easy • Vegetarian

## Blogs



Busting the myth that the Mediterranean Diet is too expensive

• Extra Virgin Olive Oil • Mediterranean Diet



What is the best cooking oil for endometriosis?

• Antioxidant • Inflammation • Mediterranean Diet

Introduction to Olive Oil

### GRADES OF OLIVE OIL

**Natural olive oils**

EXTRA VIRGIN OLIVE OIL	VIRGIN OLIVE OIL	LAMPANTE OLIVE OIL
Highest grade of olive oil. Free acidity 0.8g/kg or less and no defects. High in natural antioxidants and polyphenols.	Lower grade than EVOO. Free acidity 0.7g/kg greater. Slight defects. Moderately high in natural antioxidants.	Not fit for consumption without further processing. Only intended for refining or technical use.

**Refined olive oils**

REFINED OLIVE OIL	OLIVE OIL
Obtained from natural olive oils and then refined. No natural antioxidants and low in fat-soluble vitamins.	Composed of refined olive oil and 0.5% EVOO and/or VOO. Low in flavor and antioxidants. High in trans fats.

**Olive-pomace oils**

CRUDE OLIVE-POMACE OIL	REFINED OLIVE-POMACE OIL	OLIVE-POMACE OIL
Obtained from pressing olive pomace with subsequent treatments. Not fit for human consumption without further processing.	Oil produced from refining crude olive pomace oil. High in trans fats. No natural antioxidants.	Blend of refined olive pomace oil and EVOO or VOO.

Grade definitions are based on the Australian Standard for Olive oils and olive pomace oils. Information is provided for general information only and does not constitute a recommendation. These definitions are not permitted in the standards as they are misleading. These terms refer to refined olive oils, and are not lighter in calories.

• EVOO = Extra Virgin Olive Oil • VOO = Virgin Olive Oil



# Recent OWI Activities

# Virtual Sensory Kit



# What factors influence the sensory characteristics of EVOO?

Influences

Flavour

Detecting poor quality

Conducting a tasting

Types of EVOO

## What factors influence the sensory characteristics of EVOO

### Variety of olive

- Different varieties of olives have different sensory characteristics, and the type of olive that is used to make an oil has the biggest impact on the flavour.
- Some varieties of olives taste more bitter or peppery, while some taste grassy and others buttery
- The combination and blending of different olive varieties into extra virgin olive oil can form new aromas, tastes and ultimately the overall flavour.

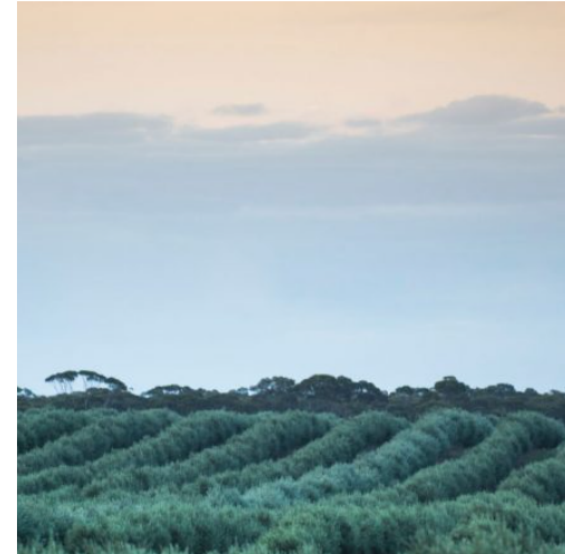
### Maturity at harvest

- An olive that is unripe when harvested will likely have more pungency and bitterness, and will develop greener flavours
- Olives that are ripe when harvested are generally less bitter and have a milder and more buttery flavour with riper fruit notes

### Climate and weather

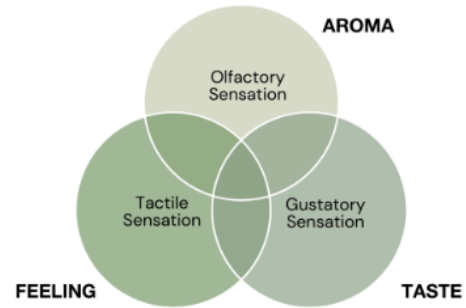
- Where the olives are grown can also affect the sensory characteristics of an oil, although not as much as other factors.
- Different climates have different levels of moisture in the air, and the soil composition and moisture levels may also be different. Temperatures during oil accumulation period is arguably the most important environmental factor affecting olive oil characteristics.

Other factors that can affect the sensory characteristics of extra virgin olive oil include the irrigation practices, and the process of extraction including the method and the temperatures used





The overall flavour of an extra virgin olive oil is influenced by a combination of sensory factors, including the aroma, the taste and the 'mouthfeel' or 'feeling'. The flavour of extra virgin olive oil can vary significantly between different products and may range from light through to robust. No matter the style of extra virgin olive oil, the flavour should always be fresh, and it should never leave your mouth feeling fatty or oily.



# Flavour

## Aroma

Aroma refers to the pleasant sensations perceived by the olfactory organ when tasting food.

In extra virgin olive oil, the aroma should be very pleasant and enticing; predominantly of olive fruitiness, the sensation reminiscent of healthy fresh fruit collected at the optimum harvesting time. The aroma can be intense, like dark greens, sorrel, grassy, herbaceous, green banana or tomato, or it can be softer such as apple, pear, fresh nuts and tropical fruit.

The aroma should be balanced and harmonious. See below for a list of aromas commonly found in extra virgin olive oil.

### List of Aromas

- Almond/Walnut
- Apple/Banana
- Artichoke
- Chamomile
- Citrus fruit
- Eucalyptus
- Fig leaf
- Flowers
- Grass
- Exotic fruits
- Soft fruits
- Green pepper
- Herbs
- Olive leaf
- Pear
- Pine kernel
- Ripe fruitiness
- Tomato
- Vanilla
- Candies
- Green fruitiness

# How to detect poor quality EVOO

Bad quality olive oil will display what is known as 'defects', which are commonly caused by poor handling of the olives before and during processing and/or poor handling of the oil after processing/storage.

Common causes of defects include:

- 🕒 The length of time and the temperature the fruit is stored before processing
  - Ideally the fruit should be processed within 4 to 6 hours of harvest
  - Defects caused = Fusty, musty, winey
- ✂️ The condition of the fruit or any damage to the fruit
  - Defects caused = wet hay, stewed fruit, grubby
- 🔥 The time and temperature during processing
  - Defects = burnt, overheated, cooked
  - The nature of the storage container and the good practices in the storage process
    - Defects = muddy, rancid, metallic

It's important to note that if an oil contains any of the defects listed below, it cannot be called extra virgin olive oil.

# How to conduct an EVOO tasting

## **Step 1: Choose the right glass**

- In professional oil tastings, an opaque blue glass is used in order to hide the colour of the oil.
- This is because contrary to popular belief, the colour of the oil does not influence the flavour or the quality
- For at home tasting, it's not necessary to use a blue glass – you can use any small glass or even a wine glass

## **Step 2: Prepare the oil**

- Pour roughly 1 tablespoon of the oil into your glass
- Hold the base of the cup in one hand and use the other to cover the opening
- Swirl the oil gently a few times
- This warms the oil and allows the aroma to be released

## **Step 3: Smell**

- Uncover the top of the glass, and take slow deep breaths to evaluate the aroma of the oil
- Sniff gently for no longer than 30 seconds
- For a list of common aromas see the 'flavour' tab.

## **Step 4: Taste**

- Take a small sip of oil and distribute around the mouth. Allow it to spread slowly over the back of the tongue and throat

# Extra virgin olive oil varieties

Many people are unaware that there are different 'flavours' or 'varietals' of extra virgin olive oil, but in fact there is a rich diversity of colour, flavour and aroma. Generally, extra virgin olive oil is categorised into three different styles – light, medium and robust. Each of these styles have unique sensory characteristics and can be used for different culinary occasions.

## ☉ Light/delicate

A light EVOO has a lighter and more subtle taste, and usually uses olives harvested in the later stages of ripeness. The lower polyphenol content means it is less bitter, and less likely to give a 'hard' aftertaste.

- Flavours and aromas:
  - Ripe fruit and tropical notes
- Absence of "hard" character in the aftertaste
- Light bitterness and pungency
- Polyphenols <100ppm

Lighter varieties of extra virgin olive oil are perfect for use in baking, as a butter substitute, or when you want the flavour of the other ingredients in the dish to be the star.

## ☉☉ Medium/Classic

A medium EVOO generally uses a combination of olives harvested in earlier and mid-stages of ripeness. You may feel a light tingling in the back of the throat when tasting, and the flavour will be more pronounced than in light varieties.

- Flavours and aromas:
  - Fruity
  - Mix of ripe and green fruit
- Medium/moderate bitterness and pungency
- Phenols 100-250ppm

# Webinar series



**FOOD AND MOOD**  
How extra virgin olive oil and the Mediterranean Diet can impact mental health

DR WOLF MARX      DR HANNAH MAYR

 Olive Wellness INSTITUTE™



**Nutrition for Women:**  
The role of the Mediterranean Diet and extra virgin olive oil in general health, and in conditions such as PCOS and endometriosis



 

SUSIE BURRELL      STEFANIE VALAKAS


 Olive Wellness INSTITUTE™



**From Tree to Table:**  
The journey of extra virgin olive oil

CLAUDIA GUILLAUME      EMMA STIRLING

 Olive Wellness INSTITUTE™

<https://olivewellnessinstitute.org/resources/webinars/>

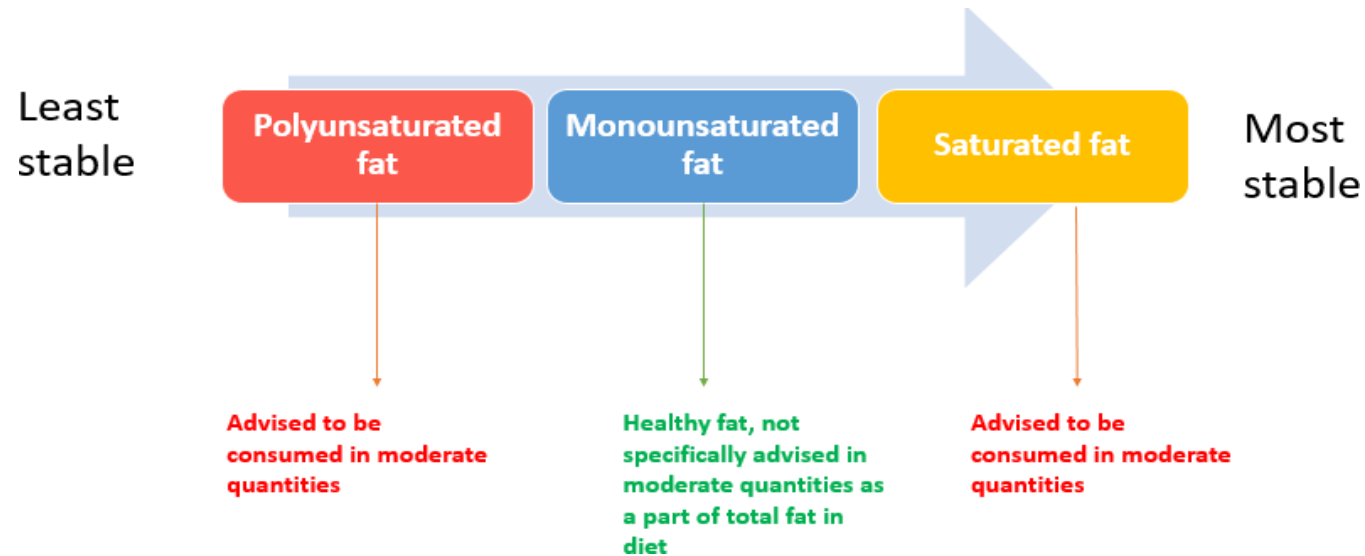


# Health benefits of EVOO – a recap

# Why is EVOO healthy?

Healthy fat profile = important for cardiovascular health

- High in monounsaturated fats
- No trans fats



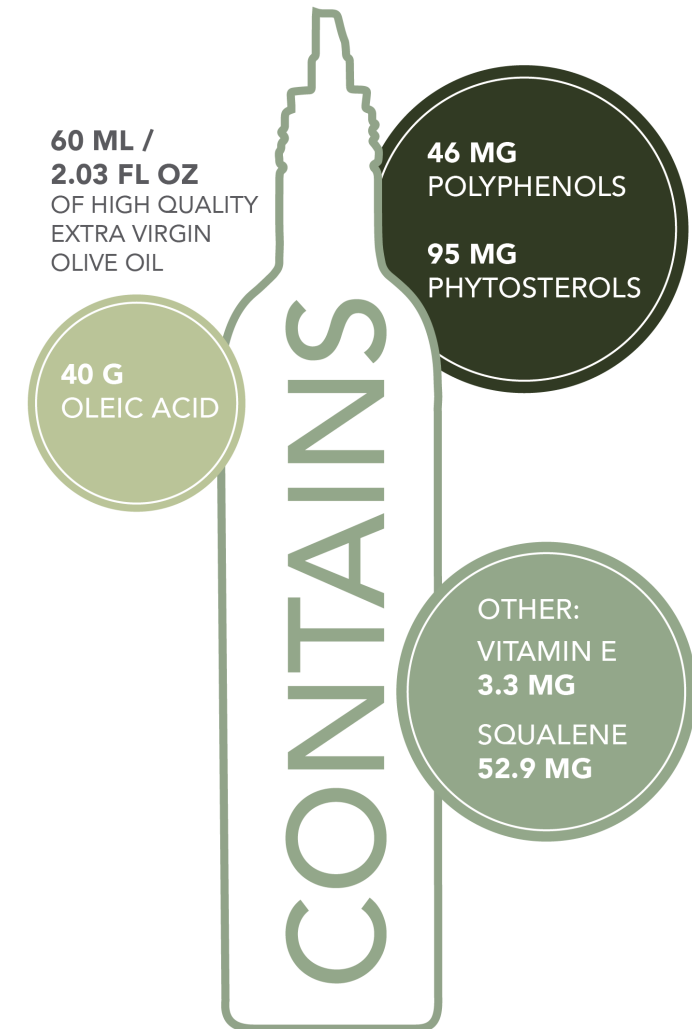
# Why is EVOO healthy?

## Antioxidants and plant compounds:

- Phenolic compounds
- $\alpha$ -tocopherols
- Squalene

## Antioxidants in EVOO have been associated with:

- Heart health
- Reducing inflammation
- Anti aging
- Improvements in mental health





# Benefits of EVOO/Mediterranean Diet



- ✓ Heart health
- ✓ Anti ageing
- ✓ Anti inflammatory
- ✓ Weight control
- ✓ Mental health
- ✓ Gut health



# Tips for communicating

# Highlight new research

Randomized Controlled Trial > Am J Clin Nutr. 2022 Aug 4;116(2):572-580.  
doi: 10.1093/ajcn/nqac106.

## The effect of a Mediterranean diet on the symptoms of depression in young males (the "AMMEND": A Mediterranean Diet in MEN with Depression" study): a randomized controlled trial

Jessica Bayes<sup>1</sup>, Janet Schloss<sup>2</sup>, David Sibbritt<sup>1</sup>

Affiliations + expand  
PMID: 35441666 DOI: 10.1093/ajcn/nqac106

### Abstract

**Background:** Depression is a common mental health condition that affects 1 in 8 males each year, especially young adults. Young adulthood offers an opportunity for early dietary interventions, with research suggesting that a Mediterranean diet (MD) could be beneficial in treating depression.

**Objectives:** This study aimed to determine if an MD can improve depressive symptoms in young males with clinical depression.

**Methods:** A 12-wk, parallel-group, open-label, randomized controlled trial was conducted to assess the effect of an MD intervention in the treatment of moderate to severe depression in young males (18-25 y). Befriending therapy was chosen for the control group. Assessments were taken at baseline, week 6, and week 12. MD adherence was measured with the Mediterranean Diet Adherence Score (MEDAS). The primary outcome measure was the Beck Depression Inventory Scale-version II (BDI-II) and secondary outcome was quality of life (QoL).

**Results:** A total of 72 participants completed the study. After 12 wk, the MEDAS scores were significantly higher in the MD group compared with the befriending group (mean difference: 7.8; 95% CI: 7.23, 8.37; P < 0.001). The mean change in BDI-II score was significantly higher in the MD group compared with the befriending group at week 12 (mean difference: 14.4; 95% CI: 11.41, 17.39; P < 0.001). The mean change in QoL score was also significantly higher in the MD group compared with the befriending group at week 12 (mean difference: 12.7; 95% CI: 7.92, 17.48; P < 0.001).

**Conclusions:** Our results demonstrate that compared with befriending, an MD intervention leads to significant increases in MEDAS, decreases in BDI-II score, and increases in QoL scores. These results highlight the important role of nutrition for the treatment of depression and should inform advice given by clinicians to this specific demographic population. The trial was registered with Australia and New Zealand Clinical Trials Registry (trial ID ACTRN12619001545156) and has also been registered with the WHO International Clinical Trials Registry Platform (Universal Trial Number U1111-1242-5215).



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followers  
Sep 28, 2022 5:00:00 PM

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New research alert 🌟 Rich in extra virgin olive oil, the Mediterranean diet may help to improve depression symptoms in young men!

A recent study of men aged 18-25 confirmed the benefits of the Mediterranean diet as part of a treatment plan - positively affecting those with clinically diagnosed depression.

Proper nutrition plays a crucial role in mental health and should inform clinical advice given to patients looking to improve their quality of life 🌿

To read more about this study, click the link:  
[bit.ly/MentalHealthAndTheMediterraneanDiet](https://bit.ly/MentalHealthAndTheMediterraneanDiet)



> J Am Coll Cardiol. 2022 Jan 18;79(2):101-112. doi: 10.1016/j.jacc.2021.10.041.

## Consumption of Olive Oil and Risk of Total and Cause-Specific Mortality Among U.S. Adults

Marta Guasch-Ferré<sup>1</sup>, Yanping Li<sup>2</sup>, Walter C Willett<sup>3</sup>, Qi Sun<sup>4</sup>, Laura Sampson<sup>5</sup>, Jordi Salas-Salvado<sup>6</sup>, Miguel A Martínez-González<sup>6</sup>, Meir J Stampfer<sup>3</sup>, Frank B Hu<sup>7</sup>

Affiliations + expand  
PMID: 35027106 PMCID: PMC8851878 (available on 2023-01-18) DOI: 10.1016/j.jacc.2021.10.041

### Abstract

**Background:** Olive oil consumption has been shown to lower cardiovascular disease risk, but its associations with total and cause-specific mortality are unclear.

**Objectives:** The purpose of this study was to evaluate whether olive oil intake is associated with total and cause-specific mortality in 2 prospective cohorts of U.S. men and women.

**Methods:** The authors used multivariable-adjusted Cox proportional-hazards models to estimate HRs for total and cause-specific mortality among 60,582 women (Nurses' Health Study, 1990-2018) and 31,801 men (Health Professionals Follow-up Study, 1990-2018) who were free of cardiovascular disease or cancer at baseline. Diet was assessed by a semiquantitative food frequency questionnaire every 4 years.

**Results:** During 28 years of follow-up, 36,856 deaths occurred. The multivariable-adjusted pooled HR for all-cause mortality among participants who had the highest consumption of olive oil (>0.5 tablespoon/day or >7 g/d) was 0.81 (95% CI: 0.78-0.84) compared with those who never or rarely consumed olive oil. Higher olive oil intake was associated with 19% lower risk of cardiovascular disease mortality (HR: 0.81; 95% CI: 0.75-0.87), 17% lower risk of cancer mortality (HR: 0.83; 95% CI: 0.78-0.89), 29% lower risk of neurodegenerative disease mortality (HR: 0.71; 95% CI: 0.64-0.78), and 18% lower risk of respiratory disease mortality (HR: 0.82; 95% CI: 0.72-0.93). In substitution analyses, replacing 10 g/d of margarine, butter, mayonnaise, and dairy fat with the equivalent amount of olive oil was associated with 8%-34% lower risk of total and cause-specific mortality. No significant associations were observed when olive oil was compared with other vegetable oils combined.

**Conclusions:** Higher olive oil intake was associated with lower risk of total and cause-specific mortality. Replacing margarine, butter, mayonnaise, and dairy fat with olive oil was associated with lower risk of mortality.

**Keywords:** cause-specific mortality; nutrition; olive oil; plant oils; total mortality.



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News just in! A thought-provoking new study has just been conducted by the School of Public Health at Harvard, evaluating whether olive oil intake is associated with total and cause-specific mortality in U.S. adults.

Some of the interesting results include:

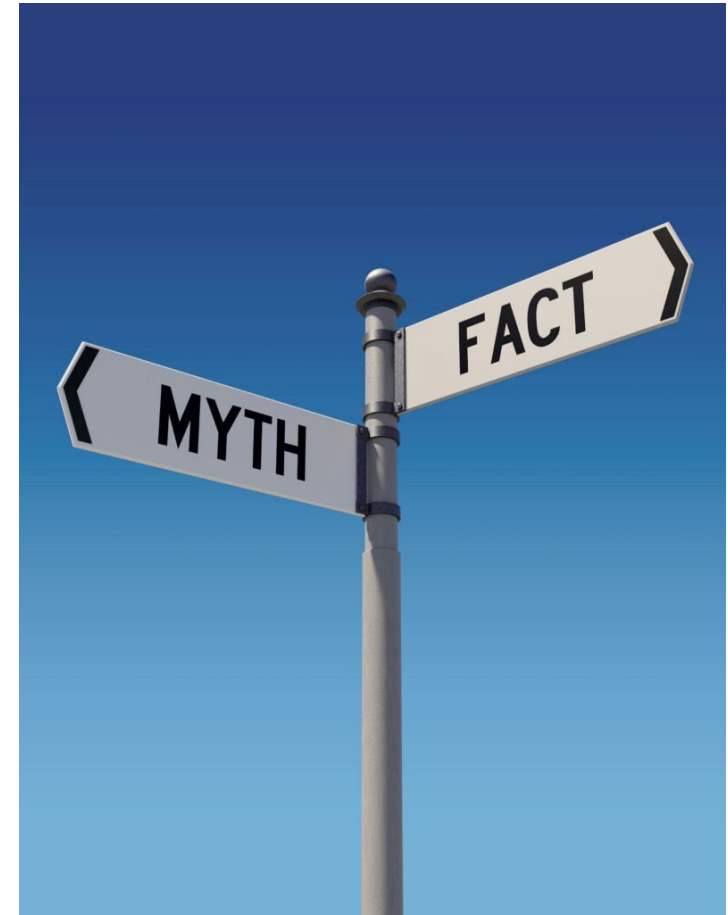
- ▲ Consuming more than 1/2 tbsp of olive oil per day is associated with lower risk of death from cardiovascular disease, cancer, neurodegenerative disease and respiratory disease.
- ▲ Substituting 10 grams/day of other fats, such as margarine, butter & mayonnaise with olive oil is associated with up to a 34% lower risk of death.

Click the link for the findings: [https://lnkd.in/g7\\_pvEqb](https://lnkd.in/g7_pvEqb)



# Myth Busting

- Explain the myth
- Use research to back up your points
- Be clear and concise
- Ensure you **repeat the facts** more than the myth!

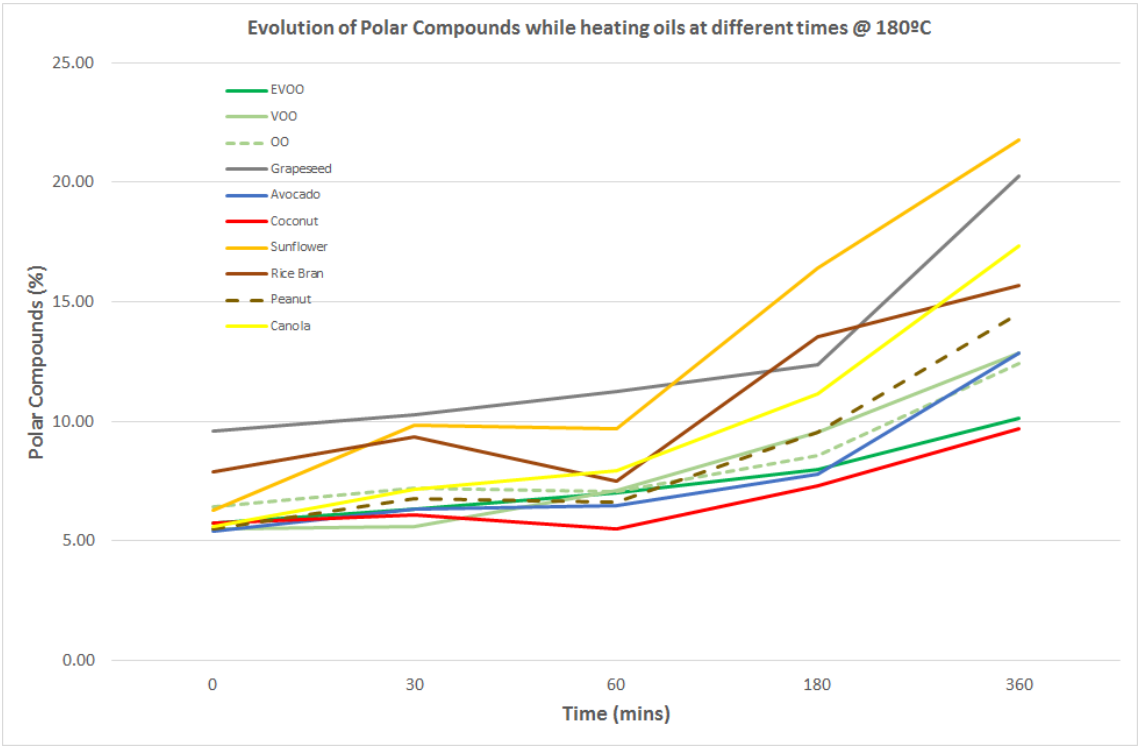
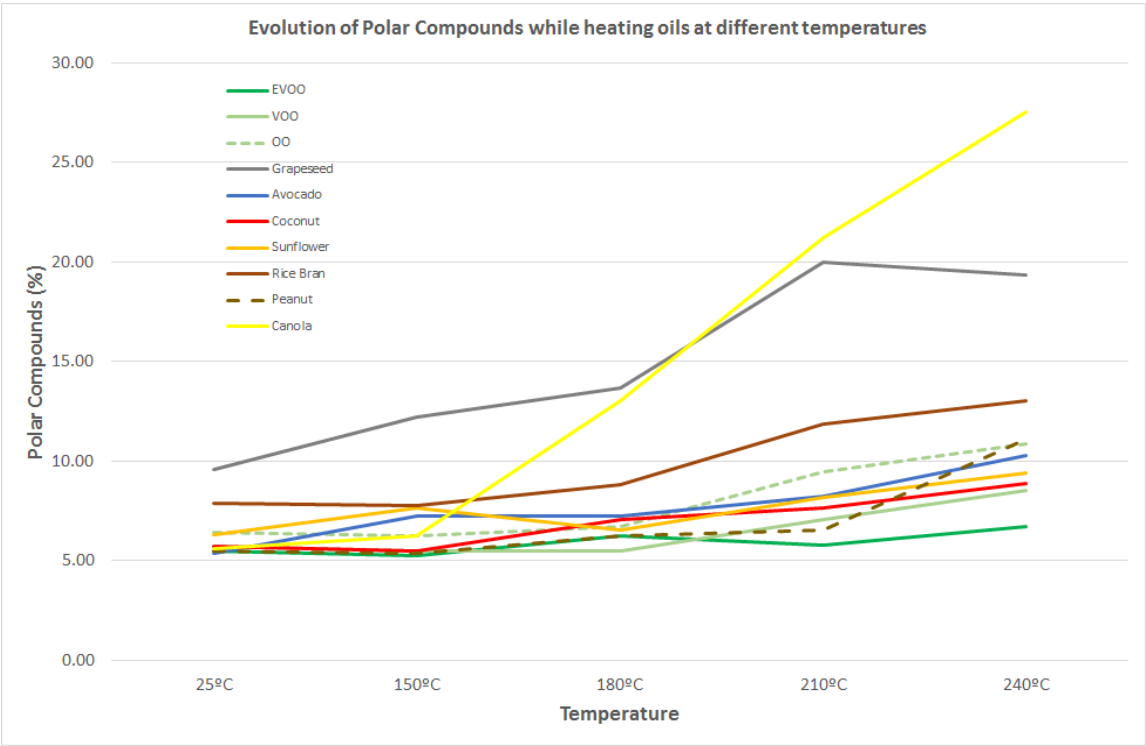


# Myth Busting – smoke point and cooking

- Smoke point is NOT a good indicator of stability
- Research shows the fatty acid profile and antioxidant content are better predictors of stability
- **You can and should cook with EVOO!**
- Mediterranean cultures have been cooking with EVOO for thousands of years



# Myth Busting – smoke point and cooking



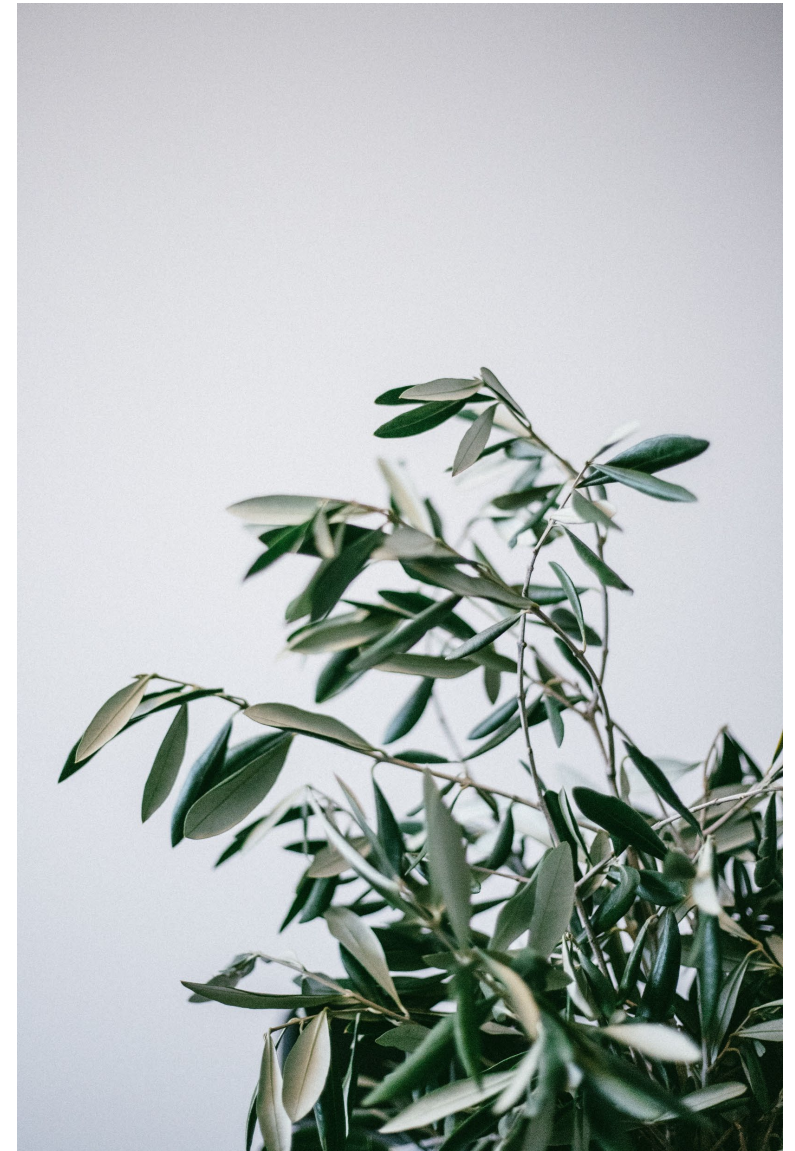
# Myth Busting – smoke point and cooking

- EVOO is the **safest** and most **stable** oil to cook with
  - Produce very few potentially harmful polar compounds – it performed the best in this regard
- Grapeseed oil, canola oil & rice bran oil – performed the worst
- Smoke point - not best predictor of the oil's performance and stability
- Best predictors of an oils behaviour when heated is
  - Oxidative stability
    - More antioxidants = better
  - amount of PUFA fat (lower = better)
  - degree of refining



# Quick tips

- Make sure you always say **Extra virgin olive oil**, not just 'olive oil'
- Remember most people don't know what 'EVOO' is
- Focus on a few key messages:
  - VOLUME – 2-3TB is associated with health benefits
  - You can and should cook with extra virgin olive oil
  - Choose your message based on audience







# Thank you!

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