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A Guide to Purchase

The Right Olive Oil for You



Literature Review by

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The scholarly literature review is available upon request for ease of reading | June 2023

Olive oil, renowned for its health benefits and culinary versatility, has long been a popular choice for consumers worldwide. However, understanding the different types of olive oil and their qualities can be a daunting task for those unfamiliar with its origins. In the past, I too was unaware of the distinctions between virgin, extra virgin, and light extra virgin olive oil, often relying on the cheapest option without considering its true value.

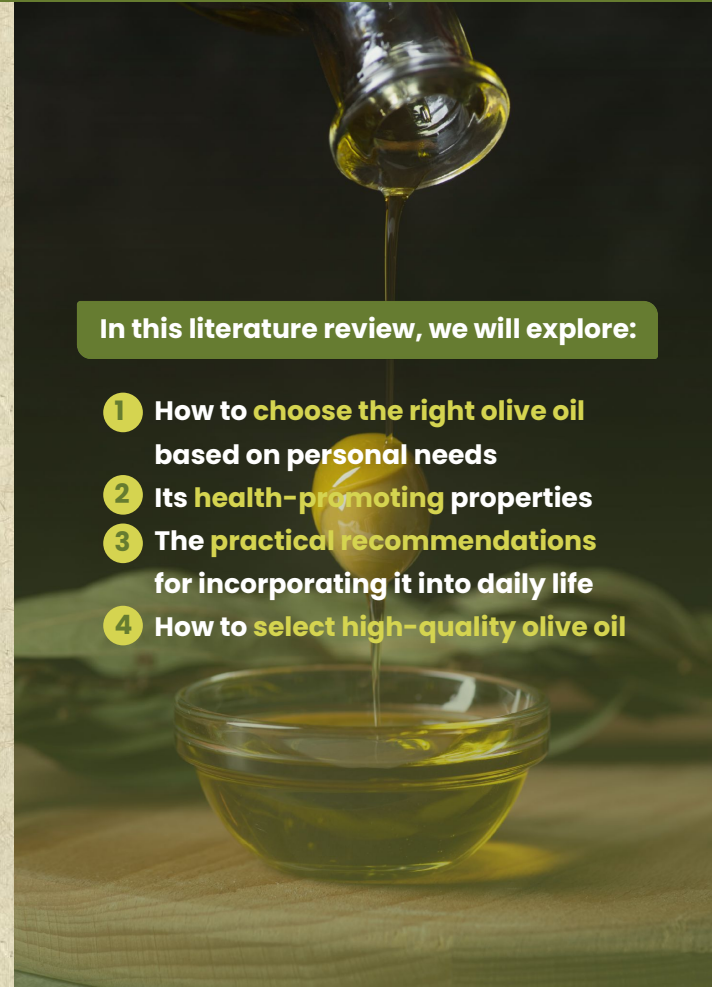
As I delved into the world of holistic nutrition and connected with my husband, who grew up in an olive production country, I gained access to valuable insights and reliable information. Recognizing that many individuals share the same uncertainties I once had and rely on internet searches for guidance,

I felt compelled to provide a comprehensive overview of olive oil selection, its health benefits, and proper usage.



In this literature review, we will explore:

- 1 How to **choose the right olive oil** based on personal needs
- 2 Its **health-promoting** properties
- 3 The **practical recommendations** for incorporating it into daily life
- 4 How to **select high-quality olive oil**



Packaging



Inadequate packaging and storage can impact the quality of olive oil, causing changes in its composition and exposure to oxidative factors, such as light and oxygen. Prolonged exposure to light can lead to degradation and the development of undesirable characteristics in the oil. Therefore, **purchasing olive oil with a suitable packaging such as dark glass bottle, can provide protection against oxidation and minimize flavor changes caused by light exposure.**



Studies by Jaime et al. (2018) have found that **storing extra virgin olive oil (EVOO) in clear glass bottles exposed to light can result in a significant decrease in chlorophyll content, one of the important minor components in EVOO.** It is recommended to avoid short-term exposure to light, particularly at high temperatures and in the presence of oxygen, to prevent oxidative degradation of the oil.



Plastic PET-based containers are permeable to gases and water vapor, and they can also facilitate the migration of compounds between the container and the oil, which can impact its quality. Additionally, their transparency makes them susceptible to light exposure.

Types of Olive Oil and Acidity

Extra Virgin Olive Oil (EVOO)

To be classified as EVOO, it must be directly obtained from olives without any chemical process (cold pressed/cold extracted), making it pure olive juice, and **it is characterized by having a low acidity level of up to 0.8%.**

Lampante Olive Oil (LOO)

Commonly referred to as "Olive oil" or Lampante Olive Oil, this type is unsuitable for consumption due to **its high acidity level (above 2%) and inedible nature.** It is produced when olives are harvested at a late stage or when the oil is extracted from olives that have fallen from the tree or undergone some form of degradation.

Virgin Olive Oil (VOO)

VOO is obtained through the same process as EVOO, but it is considered a lower quality oil, **exhibiting a free acidity level of up to 2% and/or slight organoleptic defects.**

Adulterated Olive Oil

Adulterated olive oil refers to oil that has been blended or diluted with other oils or substances, typically of inferior quality or different origins, without appropriate labeling or disclosure. Selling Virgin Olive Oil (VOO) and Lampante Olive Oil (LOO) as Extra Virgin Olive Oil (EVOO) is regarded as a fraudulent practice involving the sale of adulterated olive oil.

Early Harvest and Polyphenol Level

The production of the highest quality extra virgin olive oils involves:



**Early harvesting
of the olives**



**Immediate
processing**



**Minimal
water usage**



**Controlled
heat exposure**
to preserve the beneficial
bioactive phenolic compounds

Phenolic compounds, specifically hydrophilic phenols, are the primary group of antioxidants found in EVOO. These compounds play a crucial role in determining the oil's quality, influencing sensory characteristics such as bitterness, pungency, and stability.

The total phenolic content of EVOO typically ranges between

50 and 1000 mg/kg

with concentrations commonly falling between

100 and 300 mg/kg

Given that the human brain is composed of 60% fat and various essential substances like hormones, immune system and neurotransmitters rely on fats, it is crucial to consider the types of fats we consume.

Extra virgin olive oil (EVOO) offers a long list of benefits, including:

- ✓ **Anti-cancer effects**
- ✓ **Antibacterial and antiviral properties**
- ✓ **As well as the improvement of brain cell function**



✓ Use it raw

The relation between PUFA (Polyunsaturated Fat) and MUFA (Monounsaturated Fat) and the low content of saturated fats also makes **EVOO one of the healthiest vegetable oils to be consumed raw because it helps reduce LDL cholesterol levels in the human body.**

As a GAPS nutritionist, I would recommend **pouring it raw on all dishes** (salad, soup, dip, meal) with an approximate serving of

2 tbsp per meal

In 2016, Guzel et al. conducted a study involving 121 patients who followed an olive oil-based ketogenic diet (KD) for the treatment of seizures. My husband has also embarked on a similar journey. He has been diagnosed with a brain malformation that causes seizures and has been prescribed lifelong medication. However, his goal is to become medication-free. By incorporating 85% of his ketogenic diet with extra virgin olive oil, as observed in the study, he is experiencing positive results. He has made significant progress, with only 5% remaining until he achieves his medication-free goal.

✓ Cooking

While numerous peer-reviewed articles acknowledge extra virgin olive oil (EVOO) as a suitable and recommended oil for food frying due to its low polyunsaturated fatty acid (PUFA) content, there are also contrasting viewpoints suggesting that exposing EVOO to heat can compromise its minor yet crucial phenolic components, which act as antioxidants. **We would end up buying premium extra virgin olive oil (EVOO) for its important ingredients, only to diminish its value by subjecting it to heat.**



In summary, when choosing a good quality olive oil, consider the following factors:



Look for Extra Virgin Olive Oil (EVOO) in a dark glass bottle or tin,

obtained through cold pressing or extraction without any chemical processes. EVOO retains more natural flavors and beneficial compounds.



Read the label and pay attention to important information such as the acidity level, expiration date, cultivar, and origin of the olives.

A lower acidity level indicates that the oil was pressed within 24 hours of harvest. A clear cultivar shows that it is not blended with other oil.



Consider the sensory characteristics of the oil.

Pungency, bitterness, and pepperiness indicate higher polyphenol levels, which provide greater health benefits. These flavors are typically acquired during early harvest.



Keep in mind that olives obtained from early harvest produce less oil, resulting in a higher price as more olives are needed to produce the same quantity.

Cheaper olive oils, usually priced below USD 10 per 500 ml, are often from late harvests, which have lower polyphenol levels.



By considering these factors, you can make an informed choice when selecting a high-quality olive oil that meets your preferences and desired health benefits.