



### Research Article

## OLIVE LEAF EXTRACT – A NATURAL AID

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ARTICLE INFO	ABSTRACT
<p><b>Article History:</b>                      Received 05<sup>th</sup> January, 2015                      Received in revised form 08<sup>th</sup> February, 2016                      Accepted 10<sup>th</sup> March, 2016                      Published online 28<sup>st</sup> April, 2016</p> <p><b>Keywords:</b>                      Olive tree, Health benefits, Grades of oil, Safety and Toxicity</p>	<p>The olive leaves have a good history of medical uses and pharmacological effects. The plant is cultivated widely in the Mediterranean region. Olive leaf extract have anti-hypertensive, anti-oxidant, antimicrobial, anti thrombotic and anti-tumor properties. This have been reported in various studies. In this review paper, we would like to make people aware about the multi tasking ability of olive leaf extract which would help them to add this magic nutrient in their eating pattern.</p>

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### INTRODUCTION

#### The olive Tree

The **Olive** (*Olea europaea*) belongs to the family oleaceae, species of a small tree. The olive tree is an evergreen tree or native to the Mediterranean shrub, Asia and Africa. It is short and squat in dimension, and is rarely of 26 to 49 feet in height. The silvery green leaves are oblong in shape, measuring 4–10 centimeters long and 1–3 centimeters wide. No doubt olive leaves are identified for its flavor and health benefits but it is also used medicinally. Olives are harvested in the green to purple stage.

#### Harvest dates in Northern hemisphere

- White flowers bloom in olive trees in April, as per countries and weather conditions
- In June, the color of olive changes from green to violet and black finally. The fruit is partly filled with oil
- In September, green olives are harvested
- Later, in December, black olives are cropped. (1,2)

Olive yields are very variable from a year to another depending on how the tree is treated and by nature olive tree production changes by threefold every two years. Olive tree (*Olea europea*) is a robust tree that may survive for years. The parts

of olive tree such as leaves, bark and fruits contain compounds which act as powerful plant antioxidants and also protect the tree from parasites and disease. Because of these powers the olive tree can survive for thousands of years and also makes the olive leaf so special.

It needs less water and is generally grown in dry land. The tree can resist to cold weather but it might be affected by long frost resulting in leaf buds spoilage and hence decrease production considerably. A n olive tree can start producing olives after 5 years if cultivated properly. However, the yield is optimum only after tens of years.(3,4)

#### Grades of Oil

**Extra-virgin olive oil** (EVOO) extracted by the first pressing of the olives, containing not more than 0.8% acidity, and is expected to have a unique and high level taste. No refining of oil in extra-virgin olive oil.

**Virgin olive oil** contains acidity not more than 2%, and has a good taste. No refining of oil in virgin olive oil.

**Olive oil** is a mixture of virgin oil and refined virgin oil, having not more than 1% acidity. It usually does not have a strong flavor

**Olive- pomace oil** is a mixture of refined pomace olive oil and little of virgin oil. It is fit for consumption, but it cannot be called *olive oil*. Olive- pomace oil is not easily found in a

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grocery store; it is usually used for certain kinds of cooking in restaurants.

**Lampante oil** is olive oil not used for human consumption; it is used as fuel in oil-burning lamps. Lampante oil is mostly used in the industrial market.

#### *Benefits of Olive Leaf*

- It is beneficiary as per the Mediterranean diet in aiding to prolong life and in turn improving health.(5)
- Oleuropein – an unique compound is responsible for the properties such as antioxidant, anti-inflammatory, disease-fighting characteristics. Because of this compound it adds the biting and astringent taste to the oil which is its characteristic.(6)
- Olive leaves contain oleuropein in high amounts making its extract a valuable source of this nutrient. So in short there is no need to consume olive oil in large amount to seek this benefit.
- Olive leaf extracts helps in preventing hypertension, heart disease, diabetes, cancer, stroke, Alzheimer's, and arthritis.(7)
- They help prevent inflammation another major promoter of tumor growth.
- In breast cancer cell specifically, oleuropein reduce malignant cells depend on for their survival.
- Oleuropein inhibits the production of the "Protein melting" enzymes that cancer cell need in order to invade healthy tissue and metastasize to distant parts of the body.(8)

#### *The Safety and toxicity of olive leaf extracts*

Olive leaves are safe and non toxic. Leaves are well tolerated by the majority of population. No adverse reactions or toxicity is reported or documented and no drug interactions are yet known. Olive leaf may stimulate the thyroid so if you suffer from hypertension conditions or goiter you should use olive leaf with care. Olive leaf decreases blood sugar and may interact with diabetic medications.

#### **CONCLUSION**

Olive leaves extract can be applied as safely treating variety of health problems like microbial infections, oxidatives stress, hypertension, inflammatory diseases, hypercholestermeae, type II diabetes, thrombosis and cancer.

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