

# Upping the Anti on Olive Leaf

## Anti Bacterial~Anti Viral~Anti Fungal~Anti Oxidant

The olive tree has held an important place in the lives of many Mediterranean cultures for centuries. Today however modern medicine is discovering many more uses for the olive tree, with researchers claiming that Mediterranean people have healthier hearts, lower cholesterol and a reduced incidence of heart disease. So it makes sense that other parts of the olive tree, other than the fruit, are now under scrutiny for their benefits to health.

Olive leaves have been traditionally used by the populations of the Mediterranean for their ability to assist in prevention and treatment of an extensive range of infections. However it was only in the 20th century that the reason for this was discovered.

Olive leaves contain around 100 natural compounds, including 12 antioxidants. Oleuropein, is a bitter compound found throughout the olive tree. It is the most abundant polyphenolic antioxidant in olive leaves, but, it is not the only one, and nor is it the most powerful!

Science shows that a complete synergy of the compounds increases effectiveness\*. Modern techniques have enabled these olive leaf compounds to be extracted and provided in the form of olive leaf extract. Only recently has research begun to uncover the full potential of this wide spectrum anti-microbial herbal ingredient.

### Anti Bacterial

With the generally accepted premise that the effectiveness of some antibiotics is diminishing, it is possible that olive leaf could be used as a suitable alternative to fight bacterial infections. In one trial, compounds isolated from olive leaf inhibited the growth of the following bacterial and fungal strains: *Escherichia coli*, *Klebsiella pneumoniae*, *Bacillus cereus*, *Aspergillus flavus* and *Aspergillus parasiticus*.

This could mean that olive leaf may be effective against some of the bacteria that cause many common ailments. These include bronchitis, tonsillitis, gastroenteritis, urinary tract infections and ear infections. It is worthy to note that olive leaf does not harm the beneficial bacteria present in the intestines.

### Anti Viral

We know that if we succumb to a viral infection, the treatments available are only to help reduce the symptoms, and there is no medication available to

actually treat the virus itself. This is the case with such viruses as the herpes virus which is responsible for cold sores where there are medications to alleviate the blisters, but the virus itself stays in the body waiting for the next time our system is compromised enough so it can cause a break out.

A study using, among others, the viruses responsible for herpes (all types), influenza, polio, encephalomyocarditis (heart inflammation), Newcastle's Disease and vaccinia (similar to smallpox) were found to be highly susceptible to olive leaf's timicrobial activity.

### Anti Fungal

As an antifungal, olive leaf has been found to be effective in reducing the incidence of the candida yeast infection which is thought to be the cause of thrush. Other fungal infections such as fingernail infections, athletes foot, jock itch and tinea capitis have also responded well to treatment with olive leaf.

### Anti Oxidant

Olive Leaf is known to contain numerous phenolic compounds, which are responsible for most of the leaf's pharmacological effects. These compounds when combined have strong free-radical scavenging capacity. The most active flavonoids — rutin, catechin and luteolin — exert antioxidant effects almost to 2.5 times more than those of vitamins C and E and are comparable to lycopene, according to invitro tests. In addition, the antioxidant effect produced by olive leaf extract is higher due to the synergy of flavonoids, phenols and the high oleuropein content.

There is a side-effect of taking an olive leaf supplement which some people may experience. It is called the Herxheimer reaction or 'die-off' effect. This can happen when the olive leaf supplement kills off a large number of bacteria in a short space of time. The by-products of these dying micro-organisms are thought to temporarily worsen symptoms. However health practitioners believe that this reaction means that the treatment is working.

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2. Olive Leaf Extract, Kensington Publishing Corp., New York. p. 23, 1997.
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4. Walker, Dr M., Olive Leaf Extract, Kensington Publishing Corp., New York. p.155, 1997.
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6. Benavente-Garcia O, et al. Antioxidant activity of phenolics extracted from *Olea europaea* L. leaves. *Food Chemistry* 2000;68(4):457-62.

\* Benavente-Garcia, O., et al. "Antioxidant activity of phenolics extracted from *Olea europaea* L. leaves", *Food Chemistry* 2000.

\* *Olea europaea* extract." Le Tutour, B., et. al. "Antioxidative Activities of *Olea europaea* Leaves and Related Phenolic Compounds", *Phytochemistry*, Oxford, 1992.