



HTEssence® – A POWERFUL ANTIOXIDANT FOR LDL-CHOLESTEROL REDUCTION

Hydroxytyrosol is a bioactive compound found in olives and is considered one of the most powerful antioxidants, with numerous beneficial health effects. A recent human clinical study demonstrated a new function of WACKER's HTEssence®: it is able to significantly reduce LDL (low-density lipoprotein) cholesterol.

In turn, this might lower the risk of coronary heart disease. With the global trend towards healthier lifestyles and disease prevention, hydroxytyrosol is seeing rapid growth in market demand, especially for dietary supplements.

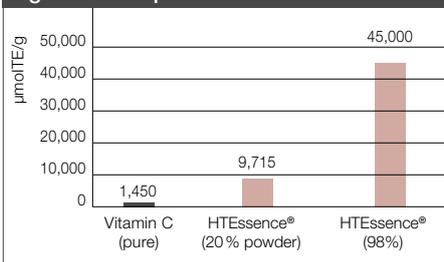
Broad Range of Health Effects

There is growing interest in the various health benefits of phenolic compounds derived from the olive plant, especially hydroxytyrosol. It functions as a highly active antioxidant in the human body. Hydroxytyrosol has been studied extensively in recent years and, aside from benefiting cardiovascular health, it has also been linked to many other positive effects on the immune system, bones and muscles.

HTEssence®: 30 Times More Powerful Than Vitamin C

HTEssence®'s oxygen radical absorbance capacity (ORAC) is about 45,000 µmolTE/g, which makes it over 30 times more powerful than vitamin C (see Figure 1). Even after spray drying (20% hydroxytyrosol powder on maltodextrin), HTEssence® is 6.5 times more active than vitamin C.

Figure 1: Comparison of ORAC Values



Clinically Proven: Significant LDL-Cholesterol Reduction

HTEssence® has been shown to significantly reduce LDL cholesterol after 4 weeks of supplementation. In a randomized, double-blind, placebo-controlled crossover study, 30 healthy volunteers consumed 30 mg hydroxytyrosol per day, either as HTEssence® or as olive extract, and in comparison to placebo.

Results show a significant reduction of LDL cholesterol by 9.4 mg/dL (-8%) with HTEssence® after 4 weeks' supplementation in relation to the initial value (see Figure 2). High LDL-cholesterol levels are one main factor in the appearance of coronary heart diseases and atherosclerosis.

Figure 2: Change in LDL Cholesterol after 4 Weeks

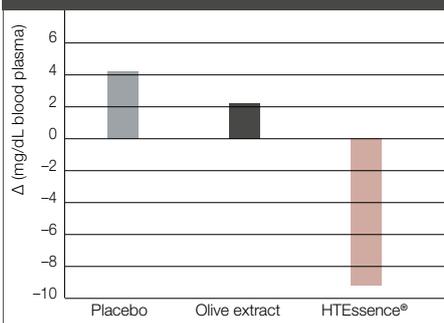
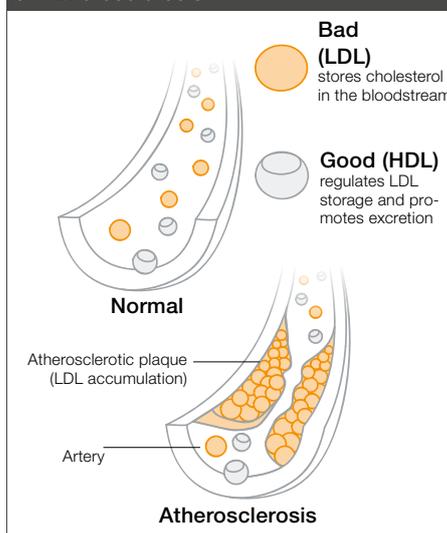


Figure 3: Impact of LDL Cholesterol on Atherosclerosis



The US NCEP* estimates that each 1% reduction in LDL cholesterol reduces the risk of heart disease by 1–2%. Accordingly, a reduction of 8% by HTEssence® could limit the risk of heart disease by more than 10%.

*NCEP = National Cholesterol Education Program (a program managed by the US National Institute of Health)

Key Benefits of HTEssence®:

- Highly pure, well-defined product with consistent technical properties
- Exceptional ORAC value of 45,000 µmolTE/g
- Significantly reduces LDL cholesterol levels by 8% (clinically proven)
- Therefore might reduce the risk of atherosclerosis
- Vegan

**High Quality**

WACKER complies with the HACCP regulations and has implemented strict internal quality controls to ensure the continuous product quality and safety of HTEssence®.

Defined Content

There are no undefined byproducts that could interfere with your formulation.

Attractive Cost-Benefit Ratio

With the new process, WACKER can offer the best cost-benefit ratio on the market.

Supply Security

In comparison to olive extracts, HTEssence® is continuously available without depending on harvest conditions.

Ready Solubility

The availability as powder and liquid enable a broad range of dietary supplement formulations. Hydroxytyrosol is stable upon heating and at low pH.

HTEssence® Product Forms

- Spray-dried powder with 20 % hydroxytyrosol content on maltodextrin, available in 5 kg and 20 kg packaging.
- Liquid form with highly pure 98 % hydroxytyrosol, available in 5 kg and 20 kg packaging (upon request).



HTEssence® / 20% hydroxytyrosol spray-dried on maltodextrin, Fine white powder without taste or odor.



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**HTEssence®**

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