

Clinically  
Proven

## Propolis M.E.D.®

Clinically proven propolis extract  
For Upper Respiratory Tract Infections

Propolis is a resinous, balsamic substance, that worker bees harvest from buds and exudates of specific plants. After adding waxy and salivary secretions, they use the propolis to protect the hive.

The bioactive composition of propolis is highly variable, depending on origins, climatic conditions, geographical area, plants, seasonality, and bee varieties, making standardization a challenge.



A unique propolis extract

Propolis M.E.D.® is a patented process that allows to obtain a **standardized propolis** extract containing a **well-characterized polyphenolic complex**, with the same activity in every batch and available on several carriers:

### Propolis M.E.D.® mother extract

- ESIT® - Powder microencapsulated
- GREIT® - Hydroglyceric extract
- EPE® - Hydroalcoholic extract
- POLE® - Oily extract

Propolis M.E.D.® has been extensively studied and is supported by **clinically proven benefits in upper respiratory tract infections (URTIs)**.



The health properties of Propolis M.E.D.<sup>®</sup> have been demonstrated in several in vitro investigations.

### Anti-microbial

Propolis M.E.D.<sup>®</sup> provides efficient anti-microbial activity against *fungi*, Gram+ bacteria, and some Gram- microorganisms and shows very low MIC values.

### Anti-inflammatory

Propolis M.E.D.<sup>®</sup> reduces the production of the proinflammatory cytokine TNF- through an epigenetic mechanism of action.

### Antioxidant

In vivo studies demonstrated that chronic administration of Propolis M.E.D.<sup>®</sup> can increase the endogenous antioxidant defenses.

### Anti-viral

Propolis M.E.D.<sup>®</sup> can act against both DNA and RNA viruses directly and indirectly through immune-enhancing action and immunomodulation.

Propolis M.E.D.<sup>®</sup> provides a holistic approach to protect the metabolism:



**Avoid entrance of microorganisms**



**Modulate the immune system**



**Regulate the local and systemic anti-inflammatory response**

## Clinically proven benefits in URTIs

URTIs are acute infections of the mucosa lining of the upper respiratory tract caused by bacteria and viruses. Invasion of pathogens induces an inflammatory response of the immune system, causing irritation and swelling.

### Randomized, double-blind, placebo-controlled study

**122 subjects**

Age: 18-77 years old

Inclusion with mild URTI symptoms

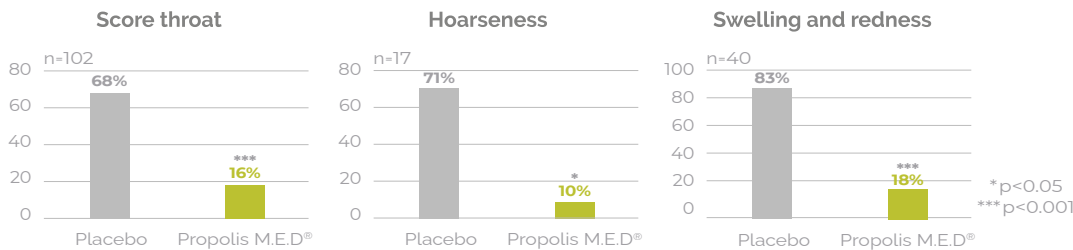
**5 days**

of supplementation

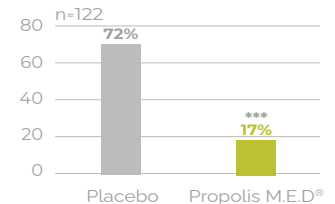


**12-24 mg/day** of polyphenols,  
2-4 oral sprays 3 times daily

**% of subjects positive to symptom**  
(Day 0 to Day 3)



**% of subjects with at least 1 symptom**  
(Day 0 to Day 3)



After 3 days of treatment, 83% of the subjects treated with Propolis M.E.D.<sup>®</sup> in an oral spray had remission of symptoms, compared to 28% in the placebo group.

**Resolution from mild uncomplicated URTIs took place 2 days earlier in the group treated with Propolis M.E.D.<sup>®</sup>.**

References:  
Zaccaria *et al.* (2017)  
Zaccaria *et al.* (2019)  
Curti *et al.* (2019)  
Esposito *et al.* (2020)