



## FLAVOXALE® FOR IMMUNITY

### Effective immunomodulator based on propolis, honey and Manuka essential oil

FLAVOXALE® is a unique ingredient derived from the combination of an **exclusive propolis extract** (M.E.D. propolis), **manuka honey** and **manuka essential oil**. With documented and proven functional activities such as **antibacterial**, **anti-inflammatory** and **wound-healing**, it offers an exotic chance to enrich the content and image of food and pharmaceutical products in an innovative way.

**WHY FLAVOXALE®** is a synergy product of beekeeping products with documented and proven functional characteristics such as antibacterial, anti-inflammatory and wound-healing activities. It offers an exotic chance to enrich the content and image of food and pharmaceutical products in a easy and innovative way. Manuka essential oil gives the product the ability to **improve the functionality of the upper respiratory tract**, since it **liquefies the bronchial secretions** and it has a **balsamic effect**. \*(Available claim for BEL/FR/IT Countries).



### M.E.D. PROPOLIS (MULTI DYNAMIC EXTRACTION)

Propolis is a resinous matrix that bees (*Apis mellifera*) collect from gums, exudates and plants, resulting in a heterogeneous mixture of many substances; among the most representative metabolites of propolis there are **flavonoids**, **terpenoids**, **phenolic acids**, **phenolic esters and sugars** in different proportions, that are responsible for the **functional antioxidative, anti-inflammatory and antimicrobial properties**.

M.E.D. Propolis from Bnatural is supported by double blind clinical studies.

The possibility to standardize M.E.D Propolis in active Polyphenols for a guaranteed activity is what makes the product unique.



### MANUKA HONEY

Manuka honey is a world reference for its exceptional **antibacterial, antiseptic, anti-infective, anti-inflammatory and antioxidant properties**, as well as having vitamins and minerals that will help us increase our energy naturally and boost our immune system. It also contains **vitamins** A, C, D, B1, B2, B3, B5, and B6, as well as **minerals and trace elements**, including calcium, copper, iron, phosphorus, magnesium, sulfur, manganese, iodine, sodium, and potassium.



## MANUKA ESSENTIAL OIL

Manuka essential oil is **rich in terpenes** (primary monoterpenes, sesquiterpenes, methyl cinnamate and triketones) that can be considered responsible for its activity through activation of several pathways, whose results is the **inhibition on inflammation induced** by LPS.

Available Claim for BEL/FR/IT countries **improve the functionality of the upper respiratory tract, since it liquefies the bronchial secretions and it has a balsamic effect.**



## APPLICATIONS

ideal for formulations

FLAVOXALE® is a **water soluble, free flowing** powder, ideal for formulation of both **solid** and **liquid** dosage forms as well as any kind of **food products**.

**SOLID APPLICATIONS:** Effervescent tablets, chewable tablets, capsules, etc.

**LIQUID APPLICATIONS:** Sprays, syrups, etc.



## PRODUCT FEATURES

Combination of an exclusive propolis extract and manuka honey


- **ASPECT:** Ivory-beige impalpable powder
- **FUNCTIONAL SUBSTANCES:**
  - >3% Total polyphenols (Expressed as Galangine UV/Folin-Ciocalteau-HPLC-ESI-MS)
  - Manuka honey MGO 100+: > 17%
  - Manuka essential oil
- **HYDRODISPERSIBLE**
- **ORIGIN:** Italy
- **PHYSICAL-CHEMICAL FEATURES:** It is obtained by spray-drying process to have a single ingredient, well-balanced and homogenous. Easy to mix with other food grade dry products.

## STUDY DETAILS

Standardized Polyphenol Complex in **Upper Respiratory Tract Infections:**

A Monocentric, Randomized, Double-Blind, Placebo-Controlled Clinical Trial (Esposito C. et al., Phytomedicine Vol. 80) (2020)

### Trial Design

 122 Healthy volunteers with mild symptoms of URTI



Subject's Age: 18-77 years Duration: **8 weeks**

### Aim of the study

Evaluate the efficacy of standardised polyphenol complex from **Propolis M.E.D.®** on the remission of symptoms associated with mild URTIs.

## FUNCTIONAL ACTIVITIES



(1-3)



(4-5)



(6-7)



(8)

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