Consulting in Human Health, Toxicology & Regulatory Affairs

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Summary for the Product *LARYNGOMEL*

LARYNGOMEL is a product from Zuf, recommended as a dietary supplement to support the body in cases of laryngitis. Laryngitis rarely causes serious problems in adults. It is usually caused by a cold or other virus and goes away by itself within 2 to 3 weeks. The blend of herbs which comprise the bees' feed used in the production of *LARYNGOMEL* possess bioactive substances, established as antioxidants which diminish states of inflammation as well as viral infections of the upper respiratory airways.

LARYNGOMEL improved the quality of life of numerous people who have tried it by supporting in an optimal way the healthy upper respiratory tract. These biological activities are recorded on the WHO monographs and are corroborated by peer-reviewed scientific publications.

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The main biological activities of *LARYNGOMEL* related to its herbal components is listed below:

1) *Melissa officinalis*

The major groups of compounds found in this herb are hydroxycinnamic acids, terpenoids, flavonoids and tannins. Isolated tannins have been shown to have potent anti-viral activity against a various range of viruses.
In addition, some scientific reports support the use of these compounds for treating gastric and digestive discomfort.

2) *Laurus nobilis*

the major components of this tree leaves are alkaloids, sesquiterpene lactones, flavonoids and proanthocyanidins: which provides potent anti-oxidant and anti-inflammatory effects. In addition, these compounds present an immunostimulant activity, as well as anti-bacterial and anti-viral activities.

3) *Sambucus nigra*

Flavonoids represent the major characteristic constituents, mainly
kaempferol, astragalin, quercetin, rutin, isoquercitrin and hyperoside. In addition, triterpenes, sterols and phenolic acids are also present. These components have strong anti-inflammatory and diuretic activity. A recent study reports an anti- influenza activity (the common flu virus)

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4) *Beta vulgaris*

Beta Vulgaris displays potent antioxidant, anti-inflammatory and chemo-preventive activity *in vitro* and *in vivo*. In addition, as a source of nitrate, it can be beneficial in increasing nitric oxide (NO) availability in pathologies such as hypertension.

5) *Origanum majorana*

The main compounds found are Terpinen-4-ol, α-Terpinene. Other compounds include flavonoid glycosides, tannins and phenolic acids. These compounds are been used for the treatment of mild inflammatory states of nasal mucosa due to their potent antioxidant, anti-inflammatory and anti-microbial properties.

6) Calendula officinalis

The major constituents of this herb are triterpene saponins (2–10%) based on oleanolic acid (i.e. calendulosides) and flavonoids (3-O-glycosides of isorhamnetin and quercetin).

Polysaccharides isolated from Calendula were reported to enhance phagocytosis by human granulocytes, thus supporting the immune system.

7) *Foeniculum vulgaris*

The main compounds identified are Trans-anethole, Fenchone and Estragole. These compounds exhibit antispasmodic, anti-inflammatory and anti-bacterial effects.

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Bibliographic References in addition to the WHO monographs regarding the herbal substances in the formula.

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