



## Herbal combination to help reduce cough and cold symptoms

- Includes a soothing blend of English ivy, marshmallow and European elder extracts
- Helps relieve coughs, promote expectoration (loosens and expels mucus) and
  improve respiratory function in patients with chronic bronchitis
- Marshmallow is used in Herbal Medicine as a demulcent to relieve the irritation of the oral and pharyngeal mucosa and associated dry cough
- Delicious natural raspberry flavour
- Convenient liquid formula

English Ivy Cough and Cold is a great-tasting combination of herbs traditionally used to help relieve symptoms associated with coughs and colds. It provides English ivy, which has been demonstrated in clinical trials to help relieve coughs, promote expectoration and improve respiratory function in patients with chronic bronchitis.<sup>1-3</sup> A mucilaginous herb, marshmallow contains polysaccharides that coat the mucosal lining of the respiratory tract.<sup>4</sup> Clinical research supports its traditional use in Herbal Medicine as a demulcent to relieve the irritation of the oral and pharyngeal mucosa and associated dry cough.<sup>4</sup> English Ivy Cough and Cold also includes European elder, an herb well-recognized for its high anthocyanin content.<sup>5</sup> Available in a delicious natural raspberry flavour, English Ivy Cough and Cold is a convenient way to provide soothing relief of cough and cold symptoms.

REFERENCES

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#### ONE TEASPOON (5 ml) CONTAINS:

Marshmallow ( <i>Althaea officinalis</i> ) Root Extract (4:1) 125 mg 500 mg Dried Equivalent
English Ivy ( <i>Hedera helix</i> ) Leaf Extract (4-7:1)
European Elder ( <i>Sambucus nigra</i> subsp. <i>nigra</i> ) Fruit Extract (16:1)
Non-Medicinal Ingredients: Purified water, glycerin, xylitol, natural flavours,

citric acid, xanthan gum, potassium sorbate

**Recommended Adult Dose:** Take 1 teaspoon 3 times daily or as recommended by your healthcare practitioner. Take a few hours before or after taking other medications or natural health products. Consult your healthcare practitioner for use beyond 4 weeks.

Product Size: 120 ml Syrup

Product Code: 07642

NPN 80082264



# **English Ivy**

**Cough and Cold** 

### Scientific Rationale:

English ivy (Hedera helix) has a long history of traditional use.<sup>1</sup> It is primarily known for its expectorant actions (helping loosen and expel mucus) and to help relieve symptoms associated with bronchitis, such as cough and shortness of breath.<sup>1</sup> It contains a wide variety of bioactive compounds, including flavonoids, phenolic acids and saponins, which contribute to the beneficial effects of the herb on the respiratory system.<sup>1</sup>

Saponins are the primary bioactive ingredient in English ivy.<sup>1</sup> One important saponin known as hederacoside C is converted to  $\alpha$ -hederin after it is reabsorbed into the blood.<sup>1,2</sup>  $\alpha$ -Hederin targets cells in the lung to increase the secretion of surfactant (a lipoprotein complex required for the elastic properties of the lung), which decreases the viscosity of viscous mucus.<sup>1</sup> α-Hederin may also support respiratory function by promoting airway relaxation and bronchiole dilation, which may help relieve respiratory symptoms of bronchitis.<sup>1</sup> The phenolic acids and flavonoids present in English ivy may help decrease the airway inflammation associated with bronchitis to further support respiratory health.<sup>1</sup>

Clinical trials have evaluated the beneficial effects of English ivy extract in patients with bronchitis. Research involving this population has reported that English ivy supplementation for seven days helped improve symptoms such as cough, expectoration and respiratory function.<sup>3,4</sup> Additional studies have also noted the high tolerability and compliance associated with English ivy supplementation.5-7

Marshmallow (Althaea officinalis) has been used traditionally in Europe for more than 2,000 years.<sup>8</sup> As this mucilaginous herb coats the mucosal lining of the respiratory tract, it is primarily used in Herbal Medicine as a demulcent to relieve the irritation of the oral and pharyngeal mucosa and associated dry cough.8,9

*In vitro* research suggests that marshmallow contains a variety of polysaccharides that can adhere to epithelial tissue.<sup>9</sup> These polysaccharides form a protective layer on the mucosa to help relieve mucosal irritation.<sup>9</sup> One type of polysaccharide known as rhamnogalacturonan was also shown to help suppress coughs in guinea pigs.<sup>10</sup> Preclinical research suggests that this polysaccharide may work by regulating the serotonergic 5-HT<sub>2</sub> receptor, which is present on airway smooth muscle and sensory nerves, and may have a role in the cough reflex.<sup>10</sup> Furthermore, research in animals suggests that marshmallow polysaccharides may have immunomodulatory effects, such as stimulating phagocytic activity in macrophages.<sup>9</sup>

Clinical research has demonstrated the soothing effects of marshmallow extracts on oral and pharyngeal mucosa.<sup>9</sup> One randomized, placebocontrolled trial reported that daily supplementation with marshmallow for four weeks significantly improved mean cough scores in adults experiencing dry cough.<sup>11</sup> Similarly, supplementation with marshmallow root in participants with mucous membrane irritation in the mouth and pharynx and associated dry cough was found to strongly reduce cough intensity and frequency within three days.<sup>9</sup> Collectively, these studies support the traditional use of marshmallow in supporting oral and pharyngeal mucosal comfort and relieving dry cough.9

European elder (Sambucus nigra subsp. nigra) has been traditionally used since ancient times.<sup>12</sup> It has been long considered a highly valued plant, as nearly all of its parts were used for food or in European folk medicine.<sup>12</sup> European elder is also well-known for its high concentration of anthocyanins and flavonols, such as cyanidin 3-glucoside and cyanidin 3-sambubioside.12

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