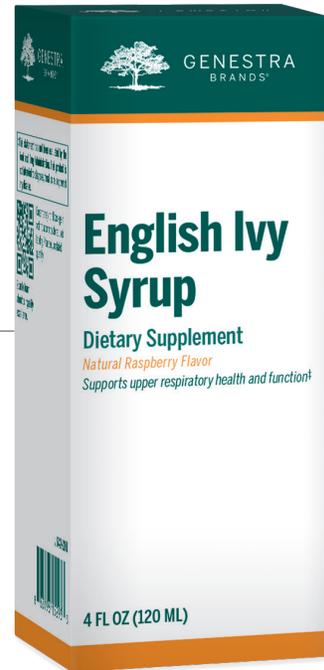




GENESTRA
BRANDS®

English Ivy Syrup

Dietary Supplement



Herbal combination supporting upper respiratory immune health[‡]

- Includes a soothing blend of English ivy, marshmallow and European elder extracts
- Supports upper respiratory health and function[‡]
- Promotes oropharyngeal mucosal health and comfort[‡]
- Delicious natural raspberry flavor
- Convenient liquid formula suitable for the entire family

English Ivy Syrup is a great-tasting combination of herbs traditionally used to support upper respiratory and immune health. It provides English ivy, an important source of α -hederin, which has been shown to support surfactant secretion and bronchiole function in preclinical research. Clinical trials have also demonstrated the beneficial effects of English ivy on supporting respiratory function in both adults and children. A mucilaginous herb, marshmallow contains polysaccharides that coat the mucosal lining of the respiratory tract. Clinical research supports its traditional use as a demulcent, promoting oropharyngeal mucosal health and providing soothing comfort to the airway. English Ivy Syrup also includes European elder, an herb well-recognized for its high anthocyanin content. European elder is traditionally used to help maintain a healthy immune system, providing specific support to the upper respiratory tract. Available in a delicious natural raspberry flavor, English Ivy Syrup is a convenient way of supporting upper respiratory function and mucosal comfort in both adults and children.[‡]

Supplement Facts

Serving Size 1 Teaspoon (5 ml)
Servings per Container 24

	Amount Per Serving	% DV
Calories	10	
Total Carbohydrate	2 g	1% [^]
Marshmallow (<i>Althaea officinalis</i>) Root Extract (4:1)	125 mg	*
English Ivy (<i>Hedera helix</i>) Leaf Extract (4-7:1)	40 mg	*
European Elder (<i>Sambucus nigra</i> subsp. <i>nigra</i>) Fruit Extract (16:1)	25 mg	*

* Daily value (DV) not established

[^] Percent daily values are based on a 2,000 calorie diet

Other ingredients: Purified water, glycerin, xylitol, natural flavors, citric acid, xanthan gum, potassium sorbate

Recommended Dose: Take 1 teaspoon 3 times daily or as recommended by your healthcare practitioner. Take a few hours before or after taking medications or other supplements

Product Size: 4 fl oz (120 ml)

Product Code: 07642



Non
GMO



Gluten
Free



Dairy
Free



Vegan

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The information contained herein is for informational purposes only and does not establish a doctor-patient relationship. Please be sure to consult your physician before taking this or any other product. Consult your physician for any health problems.

[‡] These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

English Ivy Syrup

Dietary Supplement

Scientific Rationale:

English ivy (*Hedera helix*) has a long history of traditional use.^{1†} It is primarily known for its ability to support upper respiratory tract health and function.^{1†} 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.^{1†}

Saponins are the primary bioactive ingredient in English ivy.¹ One important saponin known as hederacoside C is converted to α -hederin after it is reabsorbed into the blood.^{1,2} *In vitro* research suggests that α -hederin targets cells in the lung to increase the secretion of surfactant (a lipoprotein complex required for the elastic properties of the lung).^{1†} α -Hederin may also support respiratory function by promoting smooth muscle relaxation in the bronchioles.^{2,3†} In addition, the phenolic acids and flavonoids present in English ivy may help target regulatory pathways in the airway to further support respiratory health.^{1†}

Clinical trials have evaluated the beneficial effects of English ivy extract on respiratory health in adults and children.[‡] A recent review article reported that supplementation with English ivy extract in children significantly supported respiratory function when compared to a placebo.^{4†} Similarly, daily supplementation with English ivy extract was also reported to support respiratory function in adults.^{5,6†} Additional studies have 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.^{7†} As this mucilaginous herb coats the mucosal lining of the respiratory tract, it is primarily used as a demulcent to support oropharyngeal mucosal health and comfort, as well as respiratory function.^{7,8†}

In vitro research suggests that marshmallow contains a variety of polysaccharides that can adhere to epithelial tissue.^{8†} These

polysaccharides form a protective layer on the mucosa to support mucosal comfort.^{8†} One type of polysaccharide known as rhamnogalacturonan was also shown to support upper respiratory function in guinea pigs.^{9†} Preclinical research suggests that this polysaccharide may support the respiratory system by regulating the serotonergic 5-HT₂ receptor, which is present on airway smooth muscle and sensory nerves, and may have a role in respiratory control.^{9†} Furthermore, research in animals suggests that marshmallow polysaccharides may have immunomodulatory effects, such as stimulating phagocytic activity in macrophages.^{8†}

Clinical research has demonstrated the soothing effects of marshmallow extracts on respiratory health in both adults and children.^{8†} One randomized, placebo-controlled trial reported that daily supplementation with marshmallow for four weeks significantly supported upper respiratory function in adults.^{10†} Similarly, supplementation with marshmallow root in children was found to significantly support upper respiratory health and function within three days.^{8†} Collectively, these studies support the traditional use of marshmallow in supporting oral and pharyngeal mucosal comfort and upper respiratory function.^{8†}

European elder (*Sambucus nigra* subsp. *nigra*) has been traditionally used since ancient times.^{11†} It is used to help maintain immune health, particularly in the upper respiratory tract.^{11†} Two placebo-controlled trials have demonstrated that European elder supplementation helped maintain immune health and was well-tolerated by participants.^{11†} Similarly, a recent review concluded that European elder is a promising supplement for supporting immune health.^{12†} European elder is well-known for its high concentration of anthocyanins and flavonols, such as cyanidin 3-glucoside and cyanidin 3-sambubioside.¹¹ In addition to their antioxidant effects, preliminary evidence suggests that these flavonoids may contribute to supporting a healthy immune response.^{11,13-14†}

REFERENCES

- Schmidt, S. *SAPA*. 2017; 17(2): 5-6.
- Greunke, C, Hage-Hülsmann, A, Sorkalla, T, Kessel, N, Häberlein, F, Häberlein, H. *Pulm Pharmacol Ther*. 2015; 31: 92-8.
- Lang, C, Röttger-Lüer, P, Staiger, C. *Planta Med*. 2015; 81(12-13): 968-74.
- Hofmann, D, Hecker, M, Volp, A. *Phytomedicine*. 2003; 10(2-3): 213-20.
- Fazio, S, Pouso, J, Dolinsky, D, Fernandez, A, Hernandez, M, Clavier, G, et al. *Phytomedicine*. 2009; 16:17-24.
- Böechi, S, Vögelin, R, von Eiff, MM, Ramos, M, Melzer, J. *Forsch Komplementarmed Klass Naturheilkd*. 2005; 12(6): 32832.
- Basch, E, Ulbricht, C, Hamneress, P, Vora, M. *J Herb Pharmacother*. 2003; 3(3): 71-81.
- European Medicines Agency. (2016). Assessment report on *Althaea officinalis* L., radix. Retrieved from: http://www.ema.europa.eu/docs/en_GB/document_library/Herbal_-_HMPA_assessment_report/2016/11/WC500215642.pdf
- Šutovská, M, Nosáková, G, Šutovský, J, Fraňová, S, Prisenžňáková, L, Capek, P. *Int J Biol Macromol*. 2009; 45(1): 27-32.
- Rouhi, H, Ganji, F. *Pakistan J Nutr*. 2007; 6(3): 256-8.
- European Medicines Agency. (2014). Assessment report on *Sambucus nigra* L., fructus. Retrieved from: http://www.ema.europa.eu/docs/en_GB/document_library/Herbal_-_HMPA_assessment_report/2014/04/WC500165894.pdf
- Porter, RS, Bode, RF. *Phyther Res*. 2017; 31(4): 533-54.
- Kinoshita, E, Hayashi, K, Katayama, H, Hayashi, T, Obata, A. *Biosci Biotechnol Biochem*. 2012; 76(9): 1633-8.
- Chen, C, Zuckerman, DM, Brantley, S, Sharpe, M, Childress, K, Hoiczky, E, et al. *BMC Vet Res*. 2014; 10(1): 24.

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