



Lymphomax®

Stock #4077-6 (100 capsules)

Lymphomax is an herbal formula that promotes healthy functioning of the lymphatic system. Lymphomax contains herbs that are known to help improve lymphatic circulation; reduce inflammation and prevent infection; and eliminate accumulated fluids and wastes from tissues, thereby clearing lymphatic congestion.

The human body is comprised of approximately 60 to 70% fluid. Keeping fluids clean and properly flowing throughout the body is the function of the lymphatic system, a complex network of lymph nodes and connecting lymphatic vessels. The lymphatic system also includes lymphatic tissues in the mucous membranes of the digestive, respiratory and urinary systems. The lymphatic system plays a vital role not only in waste elimination and fluid distribution, but also in immune function and metabolic regulation. Long-term lymphatic stagnation has been linked to numerous conditions involving tissue swelling, including appendicitis (inflammation and infection of the appendix), tonsillitis and fibrocystic breast disease (the formation of benign fluid-filled cysts in the breasts).¹⁻³

Each capsule of Lymphomax contains:

Mullein has been used for the treatment of inflammatory diseases, diarrhea, asthma, spasmodic coughs and other pulmonary (lung) problems. Mullein acts as an expectorant to encourage elimination of respiratory tract mucus; as an antitussive to suppress coughing; and as a demulcent to soothe irritated tissues. Mullein is reported to help tone the mucous membranes of the respiratory tract and increase fluid production to relieve dry, unproductive coughs and soothe irritation in the throat and bronchial passages. Mullein is often combined with lobelia to treat bronchitis. Various extracts of mullein have demonstrated antibacterial activity against *Klebsiella pneumonia*, *Staphylococcus aureus*, *Staphylococcus epidermidis* and *Escherichia coli*. Furthermore, an alcoholic extract of mullein has exhibited antiviral activity.⁴⁻⁸

Bayberry has long been used in folk medicine for its antibiotic, antipyretic (fever-reducing) and astringent (tissue-tightening) effects. Bayberry contains myricitrin, a flavonoid glycoside that demonstrates antibacterial activity. Bayberry also enhances circulation and acts as a mild diaphoretic—a substance that helps to increase perspiration to detoxify the body, as well as lower fever. Bayberry is considered a natural remedy for colds and coughs, excess mucus, fevers and flus. In addition, a recent study found that an extract of bayberry demonstrated marked antithrombin (prevents blood from coagulating) activity. Bayberry is not recommended during pregnancy or lactation.^{5,6,9-12}

Clivers, also known as Cleavers, is well-regarded for its eliminative properties and action as a renal (kidney) and lymphatic tonic—cleavers helps drain excessive fluid buildup and provides diuretic and mild astringent effects. Cleavers has traditionally been used as an alterative (blood cleanser) for treating skin diseases typically associated with toxemia (a condition caused by the spread of bacterial products by the bloodstream) or septicemia (blood poisoning), including some types of acne and furunculosis (a *Staphylococcal* skin infection that causes a tender, painful inflammatory nodule in the skin, often referred to as a boil), as well as eczema, psoriasis, urticaria (hives) and skin rashes. Cleavers has also been used for connective tissue diseases, joint problems, rhinitis (inflammation of the nasal mucous membranes), chronic sinusitis (sinus inflammation), secretory otitis media (inflammation of the middle ear, often accompanied by fluid build-up), lymphadenitis (inflammation of lymph nodes), and specifically for enlarged lymph nodes.^{2,9-11,13-15}

Plantain has been used for centuries in nearly all parts of the world for wound-healing and for the treatment of digestive, reproductive, respiratory and urinary ailments, circulatory problems, pain relief, skin diseases and infections. Numerous biological properties have been demonstrated by plantain extracts including anti-inflammatory, analgesic (pain-relieving), antioxidant, weak antibiotic, bronchodilatory (enlarges the bronchial airways), diuretic, immunomodulatory, mild laxative, and wound-healing activity. Plantain contains an iridoid glycoside called aucubin, which exhibited antibiotic activity against *Micrococcus flavus*, *Staphylococcus aureus* and *Streptococcus pneumoniae* in animal studies. Aucubin is also believed to be responsible for the herb's hepatoprotective (liver-protecting) effect. In addition, a preliminary Brazilian study found that plantain significantly inhibited inflammation and relieved pain in animals given an oral extract. Plantain's soothing effect on inflammation and irritation may be due, in part, to its mucilage content. Plantain is approved by the German Commission E and is commonly used to suppress coughs associated with chronic bronchitis, colds and upper respiratory inflammation. Excessive doses of plantain may exert laxative and hypotensive (blood pressure-lowering) effects, thus excessive use should be avoided during pregnancy. Plantain is not recommended for individuals with a history of intestinal obstruction.^{6,10,16-21}

Alfalfa is regarded by many herbal professionals as a nutritious food more than an herbal medicine. Nevertheless, alfalfa was utilized by Eclectic physicians (turn-of-the-century doctors in North America who used herbs as their primary medicine) as a tonic for digestive disorders, anemia, loss of appetite and poor assimilation of nutrients; as a diuretic for edema (water retention) and arthritis; and to stimulate lactation (breast-milk production) in nursing mothers. Alfalfa is a rich source of protein and vitamins A, B1, B6, B12, E and K. Alfalfa also contains appreciable amounts of minerals such as calcium, magnesium and potassium, as well as plant enzymes that help enhance digestion and absorption of nutrients. In addition, animal studies indicate that saponins found in alfalfa leaves block the absorption of cholesterol and may help prevent the formation of atherosclerotic plaques. Individuals with a history of systemic lupus erythematosus (SLE) should avoid using alfalfa. Furthermore, excessive doses of alfalfa may interfere with anticoagulant medications and hormonal therapy, including birth control and hormone replacement therapy, due to the herb's oestrogenic activity.^{5,7,9,10,22}

Chamomile provides antibacterial, antifungal, anti-inflammatory, antispasmodic (relaxes muscle spasms), analgesic, mild sedative, and wound-healing activity. Chamomile contains volatile oils that are primarily responsible for the herb's analgesic, anti-inflammatory and antispasmodic effects. However, chamomile flavonoids also possess significant anti-inflammatory activity. Certain chamomile compounds have been reported to stimulate liver tissue regeneration in animal studies, while other chamomile constituents have shown antitumor activity against human cells in vitro. Chamomile is approved by the German Commission E for use primarily for the treatment of stomach disorders, including gastrointestinal spasms and inflammatory diseases of the gastrointestinal tract such as colitis (inflammation of the colon), gastritis (inflammation of the stomach lining) and Crohn's disease. Chamomile is also approved for bacterial and inflammatory disorders of the skin and mucous membranes, as well as inflammation and irritation of the respiratory tract.^{6,10,19,22}

Echinacea demonstrates antibacterial, antiviral, anti-inflammatory, immunostimulant and wound-healing properties. Echinacea root extracts have also demonstrated free radical scavenging activity. As a detoxifying herb, echinacea helps reduce disease-producing waste material in the lymphatic system by stimulating macrophage activity to help keep the lymphatic system operating efficiently. Macrophages are large cells in the lymph nodes that locate, filter out and destroy foreign particles, bacteria and toxins in the lymph fluid. Clinical studies support the use of echinacea for preventing and treating colds, flus and upper respiratory infections, as well as increasing general immune system function. For example, a recent animal study showed that powdered *Echinacea purpurea* root significantly reduced or resolved typical clinical symptoms of seasonal upper respiratory infections, including enlarged lymph nodes, nasal secretions, dry cough and dyspnea (difficulty breathing). Likewise, a study involving 180 individuals with flu-like symptoms or feverish upper respiratory infections confirmed that those receiving 900mg of *E. purpurea* root daily experienced statistically significant improvement of cold symptoms over the placebo group, as well as the group receiving only 450mg of echinacea daily.^{2,19,22-27}

Yarrow exhibits diaphoretic, antipyretic and antibacterial properties, supporting its use for treating colds and flus accompanied by fever, and as a blood cleanser to remove toxins from the body via perspiration. Yarrow was once even a popular substitute for quinine for treating malaria—an infectious disease marked by high fever and flu-like symptoms that can potentially cause death. Moderate antibacterial activity has been documented for an extract of yarrow against *Staphylococcus aureus*, *Streptococcus pneumoniae*, *Candida albicans* and *Escherichia coli*. In addition, yarrow provides anti-inflammatory, astringent and diuretic activity, and acts as a styptic and antiseptic to stop bleeding and help heal wounds. The German Commission E has focused primarily on yarrow's choleric (bile flow-increasing), antibacterial, astringent and antispasmodic activity, approving its use for loss of appetite and dyspeptic (relating to indigestion) ailments such as mild, spastic discomforts of the gastrointestinal tract.^{10,19,22,28}

Garlic possesses antibacterial, antiviral, antifungal and antiprotozoal activity, and provides beneficial effects on the immune system. One of the active components in garlic is allicin, the substance responsible for garlic's pungent odor. Allicin has been shown to exhibit antiviral activity; antibacterial activity against a wide range of Gram-negative and Gram-positive bacteria; antiparasitic activity against various major human intestinal protozoan parasites; and antifungal activity, particularly against *Candida albicans*. In addition, garlic has been shown to be effective in respiratory infections and catarrhal (inflammation of the nose and throat with increased mucus production of mucus) conditions, including cough, colds and rhinitis (inflammation of the nasal mucous membranes). Garlic has also been shown to be an effective antibacterial agent against pneumonia-causing bacteria such as *Streptococcus pneumoniae* and *Klebsiella pneumoniae* in vitro. Furthermore, garlic is a natural source of anticancer compounds. Garlic is not recommended during lactation (breast-feeding) and may increase bleeding times in patients on warfarin therapy.^{6,19,24,29-31}

Red root is classified as an alterative or "blood cleanser." Alteratives primarily assist detoxification and aid the body's eliminatory and cleansing functions to reduce accumulating metabolic waste products and improve the 'quality' of the blood. Red root is recommended for swollen tissues, catarrh and excessive secretions and thus, has been used for fevers, colds and chills, asthma, bronchitis, coughs and sore throats. Recent research has confirmed that an extract

of red root demonstrates antimicrobial activity against oral pathogens, including *Streptococcus mutans* and *Porphyromonas gingivalis*. Research also shows that red root contains tannins, alkaloids and other substances that are responsible for its actions as an astringent, expectorant, mild antiseptic and stimulant tonic, particularly for lymphatic and liver congestion—red root has been used clinically for acute tonsillitis, enlargement and/or inflammation of the lymph nodes, and pharyngitis (inflammation of the pharynx or throat). Red root also reportedly relieves congestion in the spleen and is said to be specific for splenomegaly (spleen enlargement) and malaria.^{1-3,9,11,13,14,32-34}

Lobelia is regarded as a respiratory stimulant, antasthmatic (a remedy for asthma), antispasmodic, expectorant and mild analgesic. Eclectic physicians considered lobelia one of their most important plant remedies. As an antispasmodic, lobelia relaxes the muscles of the smaller bronchial tubes, allowing the airways to open to enhance breathing, while the herb's expectorant properties encourage the coughing up of phlegm. Therapeutic uses of lobelia include the treatment of coughs and lung spasms associated with bronchitic asthma, chronic bronchitis, and spasmodic asthma with secondary bronchitis. Research indicates that the alkaloid lobeline is responsible for most of lobelia's actions. At low doses, lobeline stimulates respiration, as well as increases gastric acid secretion and gastrointestinal tone and motility. Lobelia is not recommended for children or pregnant or breast-feeding women. Patients with hepatic (liver) or renal (kidney) impairment should use lobelia with caution.^{6,7,10,11,14,20,35}

Sodium copper chlorophyllin is a mixture of water-soluble derivatives of chlorophyll, the substance that gives plants their green color. Traditionally, chlorophyll has been used to eliminate bad breath, as well as reduce the odors of infected wounds, feces and urine. In a randomized, double-blind, crossover, placebo-controlled study, chlorophyllin treatment was associated with a reduction of about 21% in mean urinary odor intensity, whereas odor actually increased approximately 9% with placebo. Research indicates that chlorophyll also provides anti-inflammatory, antioxidant and wound-healing properties. In addition, preliminary evidence shows that chlorophyllin hinders the bioavailability of carcinogens (cancer-causing substances) and promotes their elimination in the feces.^{7,36-40}

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