**Echinacea/Golden Seal**  
Stock #835-2 (100 capsules)

A popular herbal duo for combating infections, Echinacea/Golden seal provides a two-fold approach to restoring health. While echinacea directly improves immunity, stimulating the activity of infection-fighting cells, golden seal increases the flow of mucus to neutralize and wash away foreign invaders.

**Echinacea** has been proven to increase the immune system’s production of interferon—the substance which fights viral infections in the body—as well as increase production of T-lymphocytes (T-cells) and other white blood cells which fight bacterial toxins. In fact, scientists at the University of Munich found echinacea stimulates infection-fighting T-cells more than 30% in comparison to other pharmaceutical immune stimulants. Echinacea also stimulates macrophage activity to help keep the lymphatic system operating efficiently. Macrophages are large cells in the lymph nodes which locate, filter out and destroy foreign particles, bacteria and toxins in the lymph fluid—a process known as phagocytosis. Such immunostimulating activity enables echinacea to effectively protect the body against virus-related diseases, including canker sores, herpes, and influenza.²,³

Taking echinacea at the first sign of cold or flu can arrest the problem and shorten the duration of symptoms. Dr. Mahady, Ph.D., who assisted the World Health Organization in reviewing the world’s scientific literature on this herb, reports that echinacea will shorten the duration of a cold even if it is taken after an individual has become ill. For example, 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 significant improvement of cold symptoms over both the placebo group and the group receiving only 450mg of echinacea daily.¹,³,⁴

Additional research shows echinacea is quite effective against *Streptococcus*—a genus of bacteria which can cause gastrointestinal, respiratory and urinary tract infections, among others. Echinacea is also considered beneficial for abscesses, blood poisoning (sepsis), boils, chronic infections, diphtheria, fungal problems, gangrene, gingivitis, laryngitis, malaria, meningitis, pyorrhea, sinusitis, skin diseases (applied externally for acne, herpes, and psoriasis), swollen glands, tonsillitis, typhoid, slow-healing wounds, venereal diseases, and postviral fatigue syndrome, also known as myalgic encephalomyelitis (ME). Echinacea is currently being studied as a possible treatment for HIV and AIDS.⁵,⁶

Recent studies show echinacea reduces inflammation, perhaps owing to the cortisone-like activity identified in the plant and its ability to stimulate production of adrenal cortex hormones. Echinacea also acts as a blood and lymph cleanser and inhibits the discharge of fluid and other materials from cells and tissues, usually resulting from inflammation or injury.³,⁵,⁶

Furthermore, an extensive review of both published and unpublished research was conducted to determine the safety of echinacea usage. Results of the review confirmed that echinacea is safe for use by individuals of all ages, “from infants to adults.” However, individuals with allergies to daisies should avoid taking echinacea, as some allergic reactions have been reported.¹,⁷

**Golden seal** is an herb native to North America, with a long history of use among Native Americans for its ability to soothe tissue irritation or inflammation caused by allergens or infectious microorganisms. Today, golden seal may be the most popular herbal remedy for infections affecting the mucous membranes of the body, particularly the linings of the oral cavity, sinuses, throat, bronchi, and gastrointestinal and genito-urinary tracts.²,³,⁵,⁸

Golden seal is a bitter tonic, stimulating digestive secretions and promoting the flow of antibody-laden mucus to fight infection and help heal irritated or inflamed tissues. Contrary to popular usage, golden seal is more accurately recommended in small doses for short periods of time. Higher doses can actually have a drying effect on mucous membranes, inhibiting the body’s natural immune response to foreign substances (mucus), and potentially prolonging illness.²,⁵,⁸

Much of the misinformation surrounding golden seal use stems from a lack of credible research on the whole herb and the combined actions of its ingredients—the effects of isolated constituents, namely berberine, have been the primary focus of the scientific community.³,⁴

Golden seal is often regarded as a “natural antibiotic” due to its high content of isoquinoline alkaloids, particularly berberine. Numerous studies have confirmed berberine’s antimicrobial, anti-infective, and immunostimulatory activity. In vitro studies have demonstrated berberine’s effectiveness against various bacteria, fungi and protozoa, including
Staphylococcus species, Streptomyces species, Chlamydia species, Escherichia coli, Salmonella typhi, Vibrio cholerae, Diplococcus pneumoniae, Neisseria gonorrhoeae and N. meningitis, Giardia lamblia, Shigella dysenteriae, and Candida albicans. In fact, berberine’s action against several of these disease-causing organisms (pathogens) was determined to be stronger than that of commonly-prescribed antibiotics. Furthermore, berberine-containing herbs, such as golden seal, inhibit Candida and the proliferation of yeast—a common side-effect of prescription antibiotic use—without disrupting the balance of healthy intestinal flora.2,3,5,6

Each capsule contains a 400mg blend of *Echinacea purpurea* herb, *E. angustifolia* root and golden seal root.

Golden seal should not be used during pregnancy, as it contains the alkaloid canadine, which stimulates uterine muscles. However, golden seal can be used following childbirth to arrest postpartum hemorrhage. Long-term or high-dosage use of golden seal may reduce absorption of some nutrients, such as B-vitamins.3,5

References: