Ultimate Echinacea

Stock #3181-2 (2 fl. oz.)

As a result of much scientific research and many clinical studies, echinacea is now considered one of the best-known and extremely safe immune strengtheners available. This humble annual herb has been shown to fight bronchitis, colds, flu, infection, strep throat, and other immune and respiratory problems. Taking echinacea at the first sign of cold or flu can arrest the problem and shorten the duration of symptoms. In fact, Dr. Gail Mahady, Ph.D., who assisted the World Health Organization in reviewing the world's scientific literature on this powerful herb, reports that echinacea will shorten the duration of a cold even if it is taken after an individual has become sick.[1]

The mechanism by which echinacea strengthens the immune system to counter bacterial and viral infection is remarkable. Echinacea contains polysaccharides which resemble bacteria, causing the immune system to regard them as foreign invaders. The immune system then builds up its defenses against echinacea, increasing the body's production of white blood cells, thereby becoming stronger and more capable of fighting a real bacterial invasion. Even if an individual is exposed to a virus, echinacea can block virus receptors on the surface of cells, thus preventing a virus from "taking hold."

Echinacea polysaccharides also produce an anti-hyaluronidase effect—the ability to protect hyaluronic acid from being dissolved by a foreign enzyme. Hyaluronic acid forms a protective gel around cells to prevent viral penetration. In addition, echinacea contains a caffeic acid ester called echinacoside, which functions as a natural antibiotic, enabling the herb to fight and even prevent infection in much the same way as penicillin. Furthermore, echinacea contains fat-soluble substances called alkylamides which provide additional antibacterial and antifungal activity, as well as mild anesthetic effects.[2,3]

Research has confirmed echinacea's ability to increase the immune system's production of interferon—the substance which fights viral infections in the body—as well as it's ability to increase production of T-lymphocytes (T-cells) and other white blood cells which fight bacterial toxins. 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]

German researchers published a study in *Planta Medica* which demonstrated that *E. purpurea* increased viral resistance 80% in mouse cells which had been treated with the herb 4 to 6 hours before exposure. Additionally, the treated cells remained resistant for roughly 24 hours. Another study, involving 180 individuals with flu-like symptoms or feverish upper respiratory infections, concluded that those receiving 900mg of *E. purpurea* root daily experienced significant improvement of cold symptoms over both the placebo group and the group receiving a daily dose of only 450mg of echinacea.[3,4,5]

Echinacea is also a blood and lymph cleanser and has been shown to be quite effective against *Streptococcus*—a genus of bacteria which can cause gastrointestinal, respiratory and urinary tract infections, among others. Echinacea is also useful for blood poisoning, chronic infections, fungal problems, gingivitis, laryngitis, pyorrhea, sinusitis, skin disorders, swollen glands, tonsillitis, and postviral fatigue syndrome, also known as myalgic encephalomyelitis (ME). Echinacea is even being studied as a possible treatment for HIV and AIDS.[6]

Numerous studies have been conducted to determine the various active constituents in the different echinacea species. *Echinacea angustifolia* and *E. purpurea* have been found to contain higher amounts of alkylamides—which provide mild anesthetic effects—than *E. pallida*; while *E. angustifolia* and *E. pallida* provide greater amounts of caffeic acid derivatives—which exhibit anti-bacterial activity. A lipid-soluble constituent derived from the root of *E. angustifolia* and *E. pallida* has been found to demonstrate direct anticancer activity in vivo. Nevertheless, according to Dr. Rudy Bauer, Ph.D., professor of pharmaceutical biology at Heinrich-Heine University in Dusseldorf, Germany, all three species of echinacea are effective for enhancing immunity and counteracting the common cold and flu.[1,3]

Echinacea pallida is quite similar to *E. angustifolia* with larger, more dense roots which are easier to gather than the latter. It is believed that much of the *E. angustifolia* root sold in the United States may in fact be *E. pallida*.

According to Dr. Mahady, both pregnant and lactating women should avoid taking echinacea, as well as individuals with allergies to daisies, as some allergic reactions have been reported. Avoid applying an echinacea tincture directly to inflamed tissues: for throat infections, take the tincture with warm water as a gargle; for topical application, dilute

the tincture approximately 1:6.[1,5]
The official German echinacea monographs suggest possible contraindication in cases of “progressive systemic diseases like tuberculosis, leukosis, collagen disorders, or multiple sclerosis,” thereby suggesting the exercise of caution with any autoimmune condition. However, there seems to be a lack of valid scientific evidence to support the worsening of such conditions with echinacea use.[5]

NSP’s Ultimate Echinacea contains root extracts of *Echinacea purpurea*, *Echinacea angustifolia*, and *Echinacea pallida*, in an alcohol-free glycerin base.

References:

1 McCarthy, Paul. “Natural Remedies: Echinacea for Dummies.” *Natural Health*, January/February 1998.
2 Mowrey, Daniel B. *The Scientific Validation of Herbal Medicine*. New Canaan, CT: Keats Publishing Inc., 1986.
3 Murray, Michael T. *The Healing Power of Herbs*. Rocklin, CA: Prima Publishing, 1995.
4 Wacker, A. and Hilbig, W. “Virus-inhibition by *Echinacea purpurea*.” *Planta Medica;*1978, Vol. 33, 89-102.
5 Bergner, Paul. *The Healing Power of Echinacea, Golden seal, and Other Immune System Herbs*. Rocklin, CA: Prima Publishing, 1997.
6 Chevallier, A. *The Encyclopedia of Medicinal Plants*. NY, NY: Dorling Kindersley, 1996.