Monograph #7 Herbal Selection: Echinacea

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Common Names:

American Cone Flower, Black Samson, Black Susans, Cock-Up-Hat, Comb Flower, Cone Flower, Echinacea Care Liquid, Hedgehog, Indian Head, Kansas Snake Root, Missouri Snake Root, Narrow-Leaved Purple Cone Flower, Purple Cone Flower, Purple Kansas Cone Flower, Red Sunflower, Scurvy Root, Snake-Root

Common trade names:

Cone flower extract, Echinacea, Echinacea Augustifolia Herb, Echinacea Fresh Freeze-Dried, Echinacea Glycerite, Echinacea Herb, Echinacea Herbal Comfort Lozenges, Echinacea Purpurea.

Common forms:

Capsules: 125 mg, 355 mg (85mg herbal extract powder), 500 mg

Tablets: 335 mg

Source:

Echinacea based dietary supplements are obtained from the freeze-dried rhizomes and roots of *Echinacea augustifolio* or *E. pallida*, and from the fresh juice of the roots or aboveground parts of the *E. purpurea*.

Chemical components:

The herb Echinacea contains alkylamides, caffeic acids, polysaccharides, essential oils, and other constituents, including polyacetylene flavonoids and glycoproteins. The plant also contains three classes of compounds that exhibit activity, which has been classified as being nonspecific immunostimulatory in their mannerisms. These compounds are alkylamides, chicoric acids and related glycosides, and high molecular-weight polysaccharides.

Pronounced: (Ek-In-A-She-Ah)

Actions:





This herb is probably the most substantially graced herb in the line of immunostimulatory and anti-inflammatory Polysaccharide based herbs that we have in as far as being available. The most potent immune-enhancing property is the proponent inulin. Found in the *E. augustifolio* root it weights in at a high concentration of 5.9 percent of the total of the herb. Inulin also consists of some fructose units.

The leaves and stems contain a great number of additional flavonoids, Rutoside being the most abundant. Also the herb has an energizing effect given off due to the high amounts of caffeic acids within the herb.

Historically, Native Americans have been known to use this herb extensively. In point of fact, American Indians use Echinacea more than any other plant in the treatment of illness. The root is

used primarily in the treatment of infections, toothache, joint pain, and is an antidote for snakebites (Specifically Rattlesnakes).

In 1909 The Council on Pharmacy and Chemistry began a long research period on the herb. Ironically, it was deemed to be unworthy of extensive research, however it remained on the books of the National Formulary of the United States until 1950.

The fresh pressed juice of *E. Purpurea*, as well as the polysaccharide components of the Echinacea species, promotes tissue regeneration and has been shown to reduce inflammation. Echinacea has also been shown to exert mild, direct, cortisone-like effect and excretes adrenal cortex hormones.

The immune system is the first and foremost target of this herb. It will help stimulate the repairs in this area and strengthen it as well. It has been shown to have prominent results in studies regarding the infections of and problems resulting from cancers. It is also possible, though not specifically pointed out that this herb can be a useful addition to a treatment course for those who are HIV+. This has yet to be determined, however, with the benefits to the immuno-system it stands to reason that it could have direct positive effects in the building up of this area.

Due to the positive effects, Echinacea has on the immuno system; it would be highly recommended that any individual who suffers from even occasional colds and infectious problems of this nature, to take this herb as a regular treatment. This herb can be found now, in lozenge, capsule and tea formulations.

Dosage:

Expressed juice: 6 to 9 ml daily

Capsules containing the powdered herb: equivalent to 900 mg to 1-g three times daily; the doses can vary.

Tincture: 0.75 to 1.5 ml (15 to 30 drops) given 2 to 5 times daily.

Tea: two teaspoons of coarsely powdered herb simmered in 1 c. of boiling water for 10 minutes avoid this method of administration because some active compounds are water-insoluble.

Adverse reactions:

Adverse reactions are uncommon. Allergies may occur in-patients allergic to plants belonging to the daisy family. Studies using large doses and animals demonstrated no toxic effects.

Interactions:

None reported.

Contraindications and precautions:

Contraindicated in-patients with severe illnesses including HIV infection (including AIDS), collagen disease, glucosis, multiple sclerosis, and tuberculosis or other autoimmune diseases. Avoid use of the herb in pregnant or breast feeding patients; effects are unknown.

References:

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- Lersch, C., et al. "Stimulation of the Immune Response in Outpatients with Hepatocellular Carcinomas by Low Doses of Cyclophosphamide (LDCY), *Echinacea purpurea* Extracts (Echinacein), and Thymostimulin," _Arch Gescwulstforsch 60:379-83, 1990.
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