

Echinacea-C™

Contains Both *Echinacea Purpurea* and *Echinacea Angustifolia* Roots for Optimal Immunity

The Native Americans used purple coneflower, *Echinacea purpurea*, to strengthen the immune system and for general well-being. Early settlers soon adopted the plant as a home remedy. Cultivated purple coneflower is usually *Echinacea purpurea*, although *Echinacea angustifolia* is considered more potent by some herbal practitioners. *Echinacea's* immune system effects have been studied for almost 70 years, but only now, with recent advances in immunology, have scientists begun to uncover the mechanisms for *echinacea's* effectiveness.†

How Echinacea-C Keeps You Healthy

Echinacea helps white blood cells engulf microscopic invaders

Echinacea supports the immune system, particularly nonspecific cellular immunity, by helping various types of white blood cells in phagocytosis, the process by which they engulf, destroy, and clean up unwanted organisms or defective host cells. *Echinacea* stimulates an increase in the sheer numbers of neutrophils, the body's prime engulfing white blood cell. *Echinacea* also increases the phagocytic activity of macrophages, polymorphonuclear neutrophil granulocytes, and natural killer cells.†

Echinacea may stimulate the body's protective actions

In the laboratory, *echinacea* has been shown to stimulate the release of powerful immune controllers called cytokines, substances that initiate and control many aspects of the immune response, including redness, swelling, and increased body temperature. These cytokines are important tools that the body uses to marshal its defenses.†

In the face of microscopic invaders, echinacea maintains normal connective tissue by inhibiting hyaluronidase

One of the tools used by microscopic intruders in their attack on the body is the release of the enzyme hyaluronidase, which breaks down connective tissue, or collagen. In this way, the microscopic invaders clear a path for further intrusion into the body. The polysaccharides in *echinacea* are believed to inhibit hyaluronidase.†

Recent studies suggest that echinacea is a safe seasonal protector

The value of *echinacea* as a seasonal protector has been controversial, primarily because good studies were lacking. Now, however, scientifically rigorous, double-blind, placebo-controlled studies published in prestigious European medical journals seem to support *echinacea's* protective effect.†

Please copy for your patients.



Introduced in 1998



Content:

90 tablets

Suggested Use: One tablet per meal, or as directed.

Supplement Facts:

Serving Size: 1 tablet

Servings per Container: 90

	Amount per Serving	%DV
Calories	2	
Vitamin C	5.4 mg	8%

Proprietary Blend: 198 mg

Echinacea angustifolia (root), *Echinacea purpurea* (root), dried buckwheat (leaf) juice, and buckwheat (seed).

Other Ingredients: Rose hips, acerola (berry), honey, maltodextrin, and calcium stearate.

Caution: Contraindicated in known allergy to plants of the daisy family.

Sold through health care professionals.

†These statements have not been evaluated by the Food & Drug Administration. These products are not intended to diagnose, treat, cure, or prevent any disease.



Echinacea-C™

How Echinacea-C Keeps You Healthy (continued)

Vitamin C maintains normal immune function in the face of physical and environmental stress

As a key antioxidant and a participant in many body reactions, vitamin C is needed to maintain immune function. Vitamin C protects leukocytes against their own poisons emitted in their immune functioning.†

What Makes Echinacea-C Unique

Product Attributes

Contains vitamins and minerals to support immune system health

- › It is formulated with vital nutrients from a variety of food sources
- › It contains acerola powder, rose hip powder, and buckwheat juice and seed, which contain calcium, copper, iron, manganese, phosphorus, potassium, many of the B-complex vitamins, and the vitamin P complex
- › The vitamin P complex, a bioflavonoid, is essential for the proper absorption and use of the vitamin C complex, as well as helping to maintain capillary and connective-tissue health†

Certified Organic Farming

A healthy ecosystem is created by using organic farming techniques, such as rotating crops, fertilizing the soil with nutrient-rich cover crops and byproducts from our processing, practicing strict weed-control standards, and continually monitoring the health of our plants

- › Assures the soil is laden with minerals and nutrients
- › Ensures plants are nutritionally complete and free from synthetic pesticides

Manufacturing and Quality-Control Processes

Upon harvesting, nutrient-rich plants are immediately washed and promptly processed

- › Preserves nutritional integrity

Low-temperature, high-vacuum drying technique

- › Preserves the enzymatic vitality and nutritional potential of ingredients

Not disassociated into isolated components

- › The nutrients in Echinacea-C are processed to remain intact, complete nutritional compounds

Degreed microbiologists and chemists in our on-site laboratories continually conduct bacterial and analytical tests on raw materials, product batches, and finished products

- › Ensures consistent quality and safety

Vitamin and mineral analyses validate product content and specifications

- › Assures high-quality essential nutrients are delivered

Whole Food Philosophy

Our founder, Dr. Royal Lee, challenged common scientific beliefs by choosing a holistic approach of providing nutrients through whole foods. His goal was to provide nutrients as they are found in nature—in a whole food state where he believed their natural potency and efficacy would be realized. Dr. Lee believed that when nutrients remain intact and are not split from their natural associated synergists—known and unknown—bioactivity is markedly enhanced over isolated nutrients. Following this philosophy, even a small amount of a whole food concentrate will offer enhanced nutritional support, compared to an isolated or fractionated vitamin. Therefore, one should examine the source of nutrients rather than looking at the quantities of individual nutrients on product labels.

Studies on nutrients generally use large doses and these studies, some of which are cited below, are the basis for much of the information we provide you in this publication about whole food ingredients. See the supplement facts for Echinacea-C™.

- Bauer R. 1996. Echinacea Drugs—Effects and Active Ingredients. *Z Arztl Fortbild (Jena)* 90(2): 111-115.
- Bauer R., Wagner H. 1991. *Econ Med Plant Res* 5: 253-321.
- Bukovsky M., Kostalova D., Magnusova R., et al. 1993. Immunomodulatory Activity of Ethanol-Water Extracts From the Aerial Parts of the Plants. *L Cesk Farm* 42(5): 228-231.
- Burger R.A., Torres A.R., et al. 1997. Echinacea-Induced Cytokine Production By Human Macrophages. *Int J Immunopharmacol* 19(7): 371-379.
- Dorsch W. 1996. Clinical Application of Extracts of *Echinacea purpurea* or *Echinacea pallida*. Critical Evaluation of Controlled Clinical Studies. *Z Arztl Fortbild (Jena)* 90(2): 117-122.
- Hemila H. 1996. Vitamin C and Common Cold Incidence: A Review of Studies with Subjects Under Heavy Physical Stress. *Int J Sports Med* 17(5): 379-383.
- Melchart D., Linde K. 1994. *Phytotherapy* 1: 245-254.
- Melchart D., Linde K., et al. 1995. Results of Five Randomized Studies on the Immunomodulatory Activity of Preparations of Echinacea. *J Altern Complement Med* 1(2): 145-160.
- Peters E.M. 1997. Immunology and Upper Respiratory Tract Infections. *Int J Sports Med* 18(Suppl 1): S69-S77.
- Peters-Futre E.M. 1997. Vitamin C, Neutrophil Function, and Upper Respiratory Tract Infection Risk in Distance Runners: The Missing Link. *Exerc Immunol Rev* 3: 32-52.
- Scaglione F. 1995. Efficacy in the Treatment of the Common Cold of a Preparation Containing an Echinacea Extract. *Int J of Immunotherapy* 11(4): 163-166.
- Schmidt K. 1997. Interaction of Antioxidative Micronutrients With Host Defense Mechanisms, A Critical Review. *Int J Vitam Nutr Res* 67(5): 307-311.
- Schoneberger D. 1992. *Immunologie* 8: 2-12.
- See D.M., Broumand N., Sahl L. 1997. *In Vitro* Effects of Echinacea and Ginseng on Natural Killer and Antibody-Dependent Cell Cytotoxicity in Healthy Subjects and Chronic Fatigue Syndrome or Acquired Immunodeficiency Syndrome Patients. *Immunopharmacology* 35(3): 229-235.
- Wagner V., et al. 1985. Left Subclavian Artery Trauma: In Situ Vs. Rib Interspace Mobilization for Primary Anastomosis. *Arzneim Forsch* 35: 1069-1075.

