

TECHNICAL DATA SHEET

Acute Immune Formula



*Colds, cough and flu are three of the most common ailments presented in doctors offices everywhere. Bacterial and viral infections are ubiquitous. Usually we find ourselves on the receiving end of at least one these cold or flu-like conditions at least once a year. In formulating Acute Immune used the basic ingredients of a formula created by Dr. William Turska of Mist, Oregon an old naturopathic physician who was one of my mentors in the early 1980's. Taking into consideration the rapid rise in viral infections over the past 25 years, we decided to add Olive leaf extract, Lomatium dissectum, Oregano extract and blend of six organic mushrooms to strengthen the anti-viral effectiveness of the formula. Acute immune formula works quickly and efficiently, often reducing the recovery time in half. **If taken at the first sign of an infection, it may even keep the infection at bay.***

INGREDIENTS

Vitamin A Retinol Palmitate

Vitamin A is a fat-soluble vitamin that includes a family of molecules containing a 20-carbon structure with various chemical groups at the 15-carbon position. The liver maintains vitamin A concentrations within a relatively narrow range by storage and release of vitamin A (1). Maintaining sufficient levels of natural killer cells, increasing the production of cytokines, such as interleukin 1 (IL-1), and B lymphocyte growth, differentiation, and activation are all dependent on retinal (2). Maternal-fetal transmission of HIV is higher in presence of low vitamin A status.

Vitamin C Poly C Ascorbate

Vitamin C is a water-soluble vitamin best known for its effects as an antioxidant, free radical scavenger and its role in maintaining proper immune function (3). Taking 250 mg daily in combination with vitamin A, beta-carotene, vitamin E selenium and coenzyme Q10 improves markers of oxidative defense and oxidative stress in men with human immunodeficiency virus (HIV) disease (4).

B-6 Pyridoxine HCl

Pyridoxine is required for amino acid metabolism and also involved in carbohydrate and lipid metabolism. Pyridoxine has some antioxidant and free radical scavenging activities and a deficiency of pyridoxine has been associated with a suppressed immune system (5).

Magnesium-Glycinate

Magnesium is the second most plentiful cation in the intracellular fluid and the most plentiful cation in the body. Magnesium is involved with more than 300 enzyme systems and plays an essential role in more than 300 cellular reactions (6). Magnesium is required for the formation of cyclic AMP (cAMP) and is involved in ion movements across cell membranes.

Zinc

Zinc is a biologically essential trace element and is the second most abundant trace element in the body. About 30% of cellular zinc is found within the nucleus. Zinc is found in more than 300 enzymes. Zinc is responsible for neutrophil, natural killer cell, and T-lymphocyte function (7). Plasma zinc levels are low in people with HIV infection.

Copper

Copper is an essential trace mineral that is absorbed primarily in the small intestine with lesser absorption in the stomach. Biochemically, copper acts as a catalytic agent via the many copper metalloenzymes which act as oxidases (8).

Echinacea Purpurea

The applicable parts of echinacea are the roots and the above ground parts. Echinacea is used for upper respiratory tract infections such as the common cold and influenza infections because it is reported to have antiviral, antibacterial, and immune system stimulatory effects (9). Echinacea increases phagocytosis and increases lymphocyte activity, possibly by promoting the release of tumor necrosis factor (TNF), interleukin-1 (IL-1), and interferon (10).

Olive Leaf Extract

The active constituent in the olive leaf is oleuropein, a phenolic glycoside that is structurally classified as an iridoid. The olive leaf also contains the bioflavonoid rutin, luteolin, and hesperidin, which work synergistically with oleuropein to enhance its natural activity. This pharmaceutical grade olive leaf extract is from Euromed® (as is our Echinacea) and contains the highest concentration (17-23%) of oleuropein available. This provides natural protection and a healthy environment for cells without suppressing immune system function or harming beneficial microflora (11).

Mushroom Blend

We included 6 immune specific organic mushrooms to increase the effectiveness of our Chronic Immune formula. Cordyceps sinensis stimulate immune function by increasing the number of T helper cells (12). Coriolus contains polysaccharide peptide (PSP) and polysaccharide krestin (PSK) that have been shown to have antitumor and immunomodulating effects (13). Maitake mushroom contains beta-glucan, which has been shown to possess antitumor activity. Shiitake contains lentinan, which also has antitumor effects. Split-gill and white wood-ear mushrooms contain immunomodulating properties.

Dimethylglycine DMG

Dimethylglycine (DMG) is built from the simplest amino acid, glycine, where two hydrogen atoms have been replaced with methyl (CH₃) groups on its nitrogen atom. Because DMG is a methyl donor, it enhances the immune response and increases disease resistance. DMG strengthens both the cell-mediated (T lymphocytes) immunity and humoral immunity (B lymphocytes that produce antibodies or immunoglobulins, IgA, IgG, IgM, IgD and IgE) (14).

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Garlic

The applicable part of garlic is the bulb that contains alliin, ajoene, and other organosulfur constituents such as S-allyl-L-cysteine. Garlic stimulates T-cell proliferation, restores suppressed antibody responses, stimulates macrophage cytotoxicity and phagocytosis of tumor cells and induces the release of interleukin-2 (IL-2) tumor necrosis factor-alpha (TNF-alpha) and gamma interferon (15).

Beta 1,3 Glucan

Beta glucans are polysaccharides that consist of (1-3)-beta-D-linked polymers of glucose that are either non-branched or with 1-6-beta branches. Laboratory findings indicate beta glucans specifically bind to monocyte and macrophage cell lines, increase the proliferation and activation of cytokine interleukin-1 (IL-1) by macrophages which in turn promotes the release of IL-2 by T-cells.

Oregano

The applicable part of oregano is the leaf and oil. Research at Cornell University found oregano was one of the few natural substances that killed all 30 germs against which it was tested. Authors publishing in the International Journal of Food Microbiology found that of all spices tested, oregano proved most powerful for halting the growth of fungi.

Quercetin

Quercetin is a dietary flavonoid found in many plants. The most common form of quercetin is rutin, in which quercetin is bound to a glucose-rhamnose moiety. Quercetin has antioxidant, anti-inflammatory, nitric oxide inhibitor, and tyrosine kinase inhibitor (leading to inhibition of the division and growth of T-cells, and some cancer cells) activity (16).

Ginger Root

The applicable parts of ginger are the rhizome and root. Ginger contains active constituents known as gingerol, gingerdione, and shogaol. These constituents seem to have a variety of pharmacological properties including antipyretic, analgesic, antitussive, antibiotic, antifungal and other properties (17).

Grapefruit Seed Extract

Grapefruit seed extract (20:1) detoxifies and normalizes the digestive tract, inhibits the growth of bacteria, yeasts, and molds (Streptococcus species, Staph. Aureus, enterococci, Enterobacter, E coli, Candida, Geotrichum, Aspergillus, and Penicillium species) (18).

This formula is designed to be safely used with Ultra High Formula.

Cayenne (Capsicum)

The applicable part of capsicum is the fruit and contains the active constituent capsaicin, which accounts for its hot taste. Capsicum is an anodyne (pain reliever), stimulates circulation in debilitated patients, and an excellent synergist.

Acute Immune Formula

Quantity: 60 capsules

Serving size: 2 capsules

Directions: 2 capsules, every 2 to 4 hours, or as directed by your healthcare professional.

Each 2 capsules contain:

Vitamin A (as Palmitate)	10,000 IU
Vitamin C (as Poly C Ascorbate)	250 mg
Vitamin B6 (as Pyridoxyl-5-Phosphate)	25 mg
Magnesium (as Glycinate)	25 mg
Zinc (as Methionate)	10 mg
Echinacea Purpurea Extract (4% Phenolics)	350 mg
Olive Leaf Extract (18% Oleuropein)	350 mg
Mushroom Blend (Organic)	200 mg
Cordyceps Sinensis (Caterpillar)	
Coriolus Versicolor (Turkey-Tail)	
Grifola Frondosa (Maitake)	
Letinula Edodes (Shiitake)	
Schizophyllum Commune (Split Gill)	
Tramella Fuciformis (White Wood-Ear)	
DMG (as Dimethylglycine)	100 mg
Garlic Extract (10 % Allicin)	75 mg
Ginger Root Extract (5% Gingerol)	50 mg
Grapefruit Seed Extract (20:1)	50 mg
Beta 1,3 Glucan (60%)	50 mg
Oregano Extract (4:1)	50 mg
Quercetin	50 mg
Cayenne (as Capsicum) (90 HU/gm)	20 mg

Other ingredients: Vegetarian capsules.

Contains no: wheat, dairy, corn or preservatives.
No binders, fillers or flowing age

Patients: Consult with your healthcare professional for the proper dosage and use of this formula.

For more information about this and other Condition Specific Formulas®, please visit our website at:

www.mpn8.com.



Portland, OR 97225

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