SeasonALL[™] Seasonal Support for Environmental Changes†

DESCRIPTION

SeasonALL[™] is a special combination of phytonutrients designed to support the body's immune response to seasonal changes in the environment throughout the year. Ingredients such as Nettle leaf, bromelain, isoquercetin, *Tinospora cordifolia*, and elderberry help to maintain healthy immune function in response to the environment, including healthy mast cell function, cytokine balance and immune cell function.⁺ The special addition of Longvida® Optimized Curcumin with SLCP[™] technology for enhanced curcumin absorption, works to modulate healthy cytokine levels.⁺

FUNCTIONS

Environmental agents, or antigens, are all around us indoors and outdoors and can trigger the body's normal immune response to produce antibodies (IgE) in response to these foreign substances. IgE antibodies trigger mast cell and basophil activation. Mast cells are scattered throughout the connective tissue of the body and store a number of different chemical mediators, including histamine, interleukins, proteoglycans, and various enzymes which participate in the innate and adaptive immune responses. Specific herbal properties, flavones, and vitamins can help support a healthy immune system response to antigens.⁺

TINOFEND® extract derived from *Tinospora cordifolia* used in Ayurvedic medicine contains polysaccharides and polyphenols that promote optimal immune health.⁺ This combination works through three actions; by regulating several immune mediators to stimulate the activity of white blood cells such as macrophages, by reducing the number of histamine-containing eosinophils, and lastly through the reduction of oxidative stress.⁺ A clinical study using Tinofend® extract in individuals with IgE antibodies that bind to high affinity receptors on mast cells and basophils, resulted in more favorable responses to antigens in the nasal passages, supporting the efficacy and tolerability of *Tinospora cordifolia* for immune support.⁺

Curcumin modulates the body's response to immune triggers by down-regulating the activity of cyclooxygenase-2 (COX-2), lipoxygenase, and inducible nitric oxide synthase (iNOS) enzymes and the production of cytokines and interleukins as measured in nasal homogenates. SeasonALL contains **Longvida® Optimized Curcumin** for enhanced absorption and increased bioavailability at a low dose. Longvida's Solid Lipid Curcumin Particle (SLCP) Technology meets all three requirements for bioavailability-solubility, permeability, and stability as evidenced by therapeutic levels of free curcumin detected in the bloodstream and target tissues.[†]

Nettles leaf, also called stinging nettle, offers a rich history of clinical and traditional use for maintaining healthy immune function in response to environmental triggers. Some researchers believe that stinging nettle might be beneficial for immune health due to the natural quercetin content. Quercetin is thought to have regulatory and mast-cell stabilizing effects. In a Japanese study of mast cells from nasal mucosa of individuals with environmental triggers, quercetin was shown to help maintain a healthy immune response.[†]

Quercetin (aglycone) is currently among the most popular flavonoid supplements. It is not, however, the dominant form appearing in nature, and its bioavailability is poor. Quercetin glucosides, such as **isoquercetin**, occur naturally and have the same therapeutic effects *in vivo* as quercetin (aglycone), but with better bioavailability. Studies estimate that isoquercetin is 3–5 times more bioavailable than its natural form, and therefore it is anticipated that a lower dose of isoquercetin might reach comparable efficacy and be supplemented in a ratio of 1:5 relative to quercetin aglycone.[†]

Bromelain, a proteolytic enzyme from pineapple, may thin nasal secretions and has been shown to be an effective enzyme to help regulate mucous production.⁺ This is in addition to bromelain's proteolytic activity,

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which may promote the inhibition of prostaglandin biosynthesis and the initiation of prostaglandin E1 accumulation.⁺ Preliminary research suggests boswellic acids in **Boswellia** may help stabilize mast cells.⁺ The action of boswellic acids on 5-lipoxygenase (5-LO) inhibition leading to a decreased production of leukotrienes has received a high level of attention from the scientific community.

Studies using **black elderberry** fruit have indicated that it may have immuno-protective abilities, including support of a balanced production of cytokines. **Vitamin D** is a key factor linking innate and adaptive immunity due to the T-cells direct response to 1,25-dihydroxyvitamin D, which may be compromised under conditions of vitamin D insufficiency. The major role of **vitamin C** is the protection of the immune cells against free radical damage. Vitamin C concentrations in the plasma and leukocytes rapidly decline during acute immune reactions and stress.⁺

INDICATIONS

SeasonALL is a dietary supplement indicated for individuals that desire immune support during the seasonal changes in the environment.⁺

FORMULA (#202126-60X)

Other Ingredients: Hydroxypropyl methylcellulose (capsule), phosphatidylcholine (from soy), stearic acid, maltodextrin, ascorbyl palmitate, vegetable stearate, silica.

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SUGGESTED USE

Adults take 2 capsules daily with or without food. May increase to 2 capsules twice daily as needed for acute seasonal support⁺. Please check with pediatrician prior to use for children.

WARNING: Pregnant or lactating women should consult a physician prior to use. This product is contraindicated with immunosuppressive medications. Caution use in individuals with autoimmune disorders.

SIDE EFFECTS No adverse effects have been reported. STORAGE Store in a cool, dry place, away from direct light. Keep out of reach of children.

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For more information on SeasonALL[™], visit douglaslabs.com

† These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

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