



Innate Immune Support

Introduced 2018



What Is It?

Innate Immune Support contains a blend of astragalus, biologically standardized andrographis, and reishi mushroom extracts to support innate immunity by promoting healthy cellular immune response.[‡]

Features

- Part of the PureResponse™ Immune Protocol for healthy immune balance and function[‡]
- Clinically researched andrographis extract standardized for andrographolide and other bioactive diterpene lactones; each batch is biologically standardized (lipoxygenase inhibition assay) to ensure efficacy[‡]
- Astragalus extract with a variety of active constituents including saponins and flavonoids that contribute to its long tradition of immune and cytokine balance support[‡]
- Highly purified yeast-free beta 1,3/1,6-D glucan and lectins derived from reishi mushroom, combined with reishi extract to ensure powered and well-rounded support[‡]

Natural Defense and Mucosal Support: The PureResponse™ formula Innate Immune Support is designed to promote cell-mediated immune response, including NK cell and macrophage activity. Astragalus contains a variety of active constituents, including saponins and flavonoids, that contribute to its long tradition of immune and cytokine balance support. In vitro and animal studies suggest that astragalus supports NK cell activity, as well as IgA and IgG levels in serum, key antibodies that play a critical role in mucosal immune defense. In a randomized, double-blind, placebo-controlled study, supplementation with 200 mg of AP-Bio® Andrographis for five days promoted immune function and supported respiratory comfort. In vitro assays suggest it helps modulate IL-1, IL-6 and MCP-1 to support macrophage function. Reishi mushroom and reishi beta 1,3/1,6-D glucan extracts offers a rich source of polysaccharides to promote cell-mediated immunity.[‡]

What is the Source?

AP-Bio™ andrographis extract is derived from *Andrographis paniculata* leaf. Reishi mushroom beta glucan extract is derived from *Ganoderma lucidum* mycelia. Reishi extract is derived from *Ganoderma lucidum* fruiting body. Astragalus extract is derived from *Astragalus membranaceus* root.

Recommendations

Pure Encapsulations® recommends 1 capsule, 1-2 times daily, between meals, or as directed by a health professional.

Are There Any Potential Side Effects or Precautions?




If pregnant or lactating, consult your physician before taking this product. There have been reports of mild G.I. upset, dry mouth, dizziness, or nosebleeds with the use of reishi mushroom. Andrographis has had reports of heart palpitations, skin rash, headache and G.I. upset. Consult your physician for more information.

Are There Any Potential Drug Interactions?

Reishi mushroom and andrographis may be contraindicated with blood thinning medications. Individuals on blood pressure medications may require blood pressure monitoring due to a potential additive effect from Andrographis. Consult your physician for more information.

(continued)

Innate Immune Support

each vegetarian capsule contains    v 00

astragalus (*Astragalus membranaceus*) extract (root)..... 240 mg
 AP-Bio™ andrographis..... 200 mg
 (*Andrographis paniculata*) extract (leaf)
 (standardized to contain 31.5% andrographolide)
 mushroom beta glucan..... 100 mg
 (from reishi (*Ganoderma lucidum*) extract (mycelia))
 (standardized to contain 70% beta 1,3/1,6 glucan)
 reishi (*Ganoderma lucidum*) extract (fruiting body)..... 100 mg
 other ingredients: vegetarian capsule (cellulose, water), hypoallergenic
 plant fiber (cellulose)

1 capsule, 1-2 times daily, between meals, or as directed by a
 health professional.

AP-Bio™ is a registered trademark of Natural Remedies PVT. LTD.

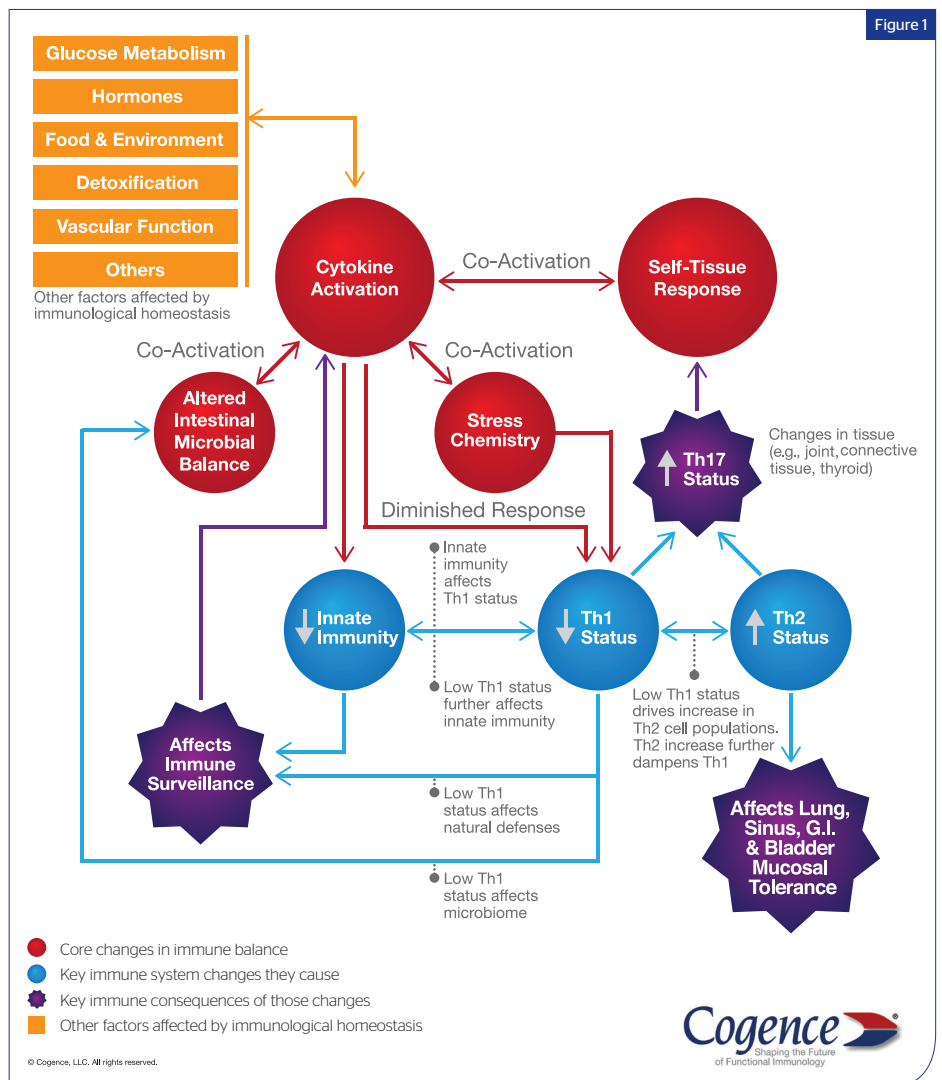
Identifying the Primary Drivers of Immune Balance

PureResponse™ addresses the interrelationships between elements of the immune system, the environment and other biological processes, as overviewed in the roadmap on the next page (Figure 1). Although these basic connections are the same for all patients, each patient's manifestation is unique, with a greater emphasis on some elements compared to others.*

Navigating the Roadmap

The health of organs, connective tissue and other structures in the body is maintained, in part, by a set of immunological feedback loops that connect cell signaling cytokines, stress mediators and T-cell populations with far-reaching effects.

- Cytokine activation and self-tissue response (large red circles) activate each other. Cytokines are chemical messengers that allow the immune system to communicate. Self-tissue response occurs when the immune system mistakes tissue in the body for an immunological threat causing an immune response.
- Metabolic, hormonal, physiological and environmental factors (orange boxes) can influence cytokines. Cytokine balance is important for not only directing the immune response but also for its resolution.
- Stress and intestinal bacteria (smaller red circles) also influence cytokine activity. Persistent or excess cytokine activation may diminish innate immunity and the number of Th1 cells. Reductions in these key immune defenses can influence microorganism populations throughout the body. This is often exemplified by altered intestinal microbial balance. In turn, alterations in microbial balance can drive further cytokine activation.
- Th1/Th2 cell populations (blue circles) are deeply involved in immune system balance, natural defenses and tissue health. Higher Th1 status supports cell-mediated immune defenses and helps maintain innate immunity. Lower Th2 status helps to keep Th1 status strong, while maintaining sinus and respiratory tolerance to environmental particles.
- Th17 status (purple stars) is affected by Th1/Th2 balance and is involved in healthy self-tissue response.



*These statements have not been evaluated by the Food and Drug Administration. These products are not intended to diagnose, treat, cure, or prevent any disease. 800-753-2277 | PureEncapsulations.com