Dietary Supplement Information for Physicians with Naturokinetics®

PRODUCT CODE: P3034

CATEGORY: IMMUNE SUPPORT*

AHCC® 600 mg

TECHNICAL SUMMARY

AHCC® is a unique extract produced by cultivation and enzymatic modification of the mycelia of the *Basidiomycota* group of mushrooms. Clinical studies have demonstrated that AHCC® may help support a healthy and balanced immune system response, as well as maintain healthy cell cycle function.* AHCC® also has been shown to promote proper liver function as well as a healthy response to typical everyday stress.* This formula includes 300 mg beta-glucans per serving for added immune support.*

Structure formula:

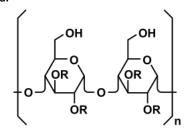


Figure 1: alpha-glucans

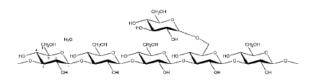


Figure 2: 1,3/1,6 beta-glucans structure

Chemical name: alpha-glucans: Acylated alpha-1,4 glucans

beta-glucans: Beta-1,3/1,6-D-glucan

Allergen and Additive Disclosure: Not manufactured with wheat, soy, milk, egg, fish, shellfish, tree nut or sesame ingredients. Produced in a GMP facility that processes other ingredients containing these allergens.

Delivery Form: Vegetable capsule

ROLE AS NUTRIENT/FUNCTION

AHCC® is a proprietary blend of fermented mushroom mycelia extract with naturally occurring low molecular weight oligosaccharides, alpha-glucans, and other polysaccharides. These bioactive compounds play a role in modulating the innate and adaptive immune responses.* AHCC® has been shown to enhance dendritic cell and natural killer (NK) cell activity, promote T-cell proliferation and cytokine regulation, support immune surveillance by increasing interferon-gamma and tumor necrosis factoralpha (TNF- α) production, improve host defense mechanisms under stress or seasonal immune variations.* These immunomodulatory effects contribute to the maintenance of immune balance and support the body's natural defenses against environmental and physiological stressors.*

Beta-1,3/1,6-D-Glucan (Beta-Glucans) are bioactive non-digestible carbohydrates derived from the cell wall of *Saccharomyces cerevisiae*.

Supplement Facts

Serving Size 3 Veg Capsules Servings Per Container 20

Servings Per Container 20		
	Amount Per Serving	% Daily Value
Calories	10	
Total Fat	0.5 g	< 1%**
Total Carbohydrate	1 g	< 1%**
AHCC® 1.8 g (1,800 mg) † (Proprietary Blend of Mushroom Mycelia Extract, Carnauba Wax, Microcrystalline Cellulose, Dextrin, Cyclodextrin)		
Beta-1,3/1,6-D-Glucan Powder (from Saccharomyces cerev		†
** Percent Daily Values are based on a 2,000 calorie diet. † Daily Value not established.		

Other ingredients: Hypromellose (cellulose capsule), Ascorbyl Palmitate and Silicon Dioxide.

- Plus Beta-Glucan
- Supports Healthy Immune System Response*

SUGGESTED USAGE: Take 3 capsules 1 to 2 times daily, or as directed by your healthcare practitioner.

Beta-glucans support a healthy immune system through their ability to maintain several aspects of the body's normal immune functions, notably by interacting with the gut-associated lymphoid tissue (GALT).* Particulate beta-glucan is taken up by GALT-associated macrophages, which transport it to various sites throughout the body (lymph node, spleen, bone marrow) and slowly degrade it, and then release a bioactive, smaller soluble glucan into the bloodstream.* Beta-glucans also enhance maturation of dendritic cells (DC) with significant increases in interleukin production, and a strong antigen-presenting capacity to T-cells for activation of immune responses.*

NATUROKINETICS®

Liberation: Capsule disintegrates within 60 minutes using a USP validated disintegration method.

Absorption: Low molecular weight oligosaccharides and alpha-glucans are expected to be absorbed through the gastrointestinal tract. Although human pharmacokinetic data is lacking, animal models suggest rapid absorption.

Distribution: Absorbed oligosaccharides are thought to circulate systemically, influencing immune activity in blood and lymphatic tissues.*

Metabolism: AHCC® is partially hydrolyzed and may be metabolized in the liver, although specific pathways are not fully defined.



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Elimination: Unabsorbed or unmetabolized AHCC® is presumed to be excreted through renal and fecal routes, consistent with other dietary polysaccharides.

CLINICAL VALIDATION

The structure and function benefits of AHCC® are supported by human clinical studies evaluating its effects on immune function, liver health, and response to everyday stress.* These studies were conducted using daily oral doses from 1.5 to 3 g/day.

Immune System Support*: Several randomized, double-blind, placebo-controlled studies have demonstrated that daily intake of AHCC® enhances immune system function through multiple mechanisms.* These include increased number and activity of dendritic cells (DC1 and DC2), which are critical for antigen presentation and immune activation.* Maintenance of natural killer (NK) cell activity and overall immunological vigor during seasonal fluctuations have been observed.* Enhanced parasympathetic nervous activity at rest, supporting immune balance under physical and mental stress has also been demonstrated.*

Liver Function Support*: In a 12-week randomized, placebo controlled clinical trial, individuals with mild liver enzyme elevation receiving either 1g/d or 3g/d AHCC® experienced significant reductions of ALT -23.89 +/-20.59% and -24.09 +/- and cytokine (TNF- α and IL-1 β) levels after daily intake of AHCC® vs. placebo.* An increase in adiponectin, a hormone linked to improved liver metabolic regulation, was also observed.* These effects suggest AHCC® may help promote proper liver function.*

Adaptation to Everyday Stress*: Short-term administration of AHCC® in individuals exposed to various stressors was shown to improve autonomic nervous system balance (increased parasympathetic tone at rest and regulated sympathetic activity under stress).* Improved subjective sleep quality under chronic stress conditions was also observed.* Support NK cell activity during stress exposure was demonstrated.*

SAFETY INFORMATION

Tolerability: AHCC® has demonstrated a good safety profile in human and animal studies. No serious adverse effects have been reported. Mild, transient GI discomfort may occur at higher-than-recommended doses.

Contraindications: Due to its immunomodulatory properties, caution is advised for individuals using immunosuppressive agents or in those with autoimmune conditions.

INTERACTIONS

Drug Interactions: AHCC® may induce CYP450 2D6 (a specific enzyme involved in drug metabolism), potentially altering metabolism of drugs like tamoxifen, doxorubicin, or ondansetron. Caution and healthcare consultation are advised when using such medications.

Supplement Interactions: No known interactions with dietary supplements have been reported.

Interaction with Lab Tests:.There is no evidence that AHCC® interferes with common laboratory tests based on current data.

STORAGE

Store in a cool, dry place after opening.