AHCC Extract - Granule

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Extracted: 2025-08-26T06:30:08.821426

AHCC EXTRACT - Granule Help on accessing alternative formats, such as Portable Document Format (PDF), Microsoft Word and PowerPoint (PPT) files, can be obtained in the alternate format help section. (PDF Version - 83 KB) This monograph is intended to serve as a guide to industry for the preparation of Product Licence Applications (PLAs) and labels for natural health product market authorization. It is not intended to be a comprehensive review of the medicinal ingredient. Notes Text in parentheses is additional optional information which can be included on the label at the applicant's discretion. The solidus (/) indicates that the terms and/or statements are synonymous. Either term or statement may be selected by the applicant on the label. For products in powder form, refer to the "AHCC Extract - Powder" monograph. Date October 25, 2024 Proper name(s), Common name(s), Source information Table 1. Proper name(s), Common name(s), Source information Proper name(s) Common name(s) Source information Source material(s) Part(s) Preparation(s) AHCC 1 AHCC Lentinula edodes Cultured mycelium Extract References: Proper name: Spierings et al. 2007, Matsui et al. 2002; Common name: Spierings et al. 2007, Matsui et al. 2002; Source information: Fujii et al. 2011, Sumiyoshi et al. 2010. 1 AHCC is a specific standardized extract of cultured Lentinula edodes mycelia. See 'Specifications' section for identity testing. Route of Administration Oral Dosage Form(s) The acceptable dosage form is limited to capsules. This monograph excludes foods or food-like dosage forms as indicated in the Compendium of Monographs Guidance Document. Use(s) or Purpose(s) Source of antioxidants/Provides antioxidants (Ye et al. 2004, 2003; Wang et al. 2001). Source of antioxidants/Provides antioxidants that help fight/protect (cell) against/reduce (the oxidative effect of/the oxidative damage caused by/cell damage caused by) free radicals (Ye et al. 2004, 2003; Wang et al. 2001). Dose(s) Subpopulation(s) Adults 18 years and older Quantity(ies) Not to exceed 6 grams of AHCC extract (granule), per day (Fujii et al. 2011; Cowawintaweewat et al. 2006; Uno et al. 2000). Direction(s) for use No statement required. Duration(s) of Use No statement required. Risk Information Caution(s) and warning(s) No statement required. Contraindication(s) No statement required. Known adverse reaction(s) Stop use if symptoms such as nausea and diarrhea occur (Sumiyoshi et al. 2010; Matsui et al 2002). Non-medicinal ingredients Must be chosen from the current Natural Health Products Ingredients Database (NHPID) and must meet the limitations outlined in the database. Storage conditions Must be established in accordance with the requirements described in the Natural Health Products Regulations . Specifications The finished product specifications must be established in accordance with the requirements described in the Natural and Non-prescription Health Products Directorate (NNHPD) Quality of Natural Health Products Guide. The medicinal ingredient must comply with the requirements outlined in the NHPID. AHCC® is a specific standardized extract of cultured Lentinula edodes mycelia, and as such, although it has in the past been referred to in the literature as 'active hexose correlated compound', AHCC is not a single compound but contains several constituents including the fraction called 'active hexose correlated compound'. AHCC® should be identity-tested to confirm its authenticity. Example of Product Facts: Consult the Guidance Document, Labelling of Natural Health Products for more details. References Cited Cowawintaweewat S, Manoromana S, Sriplung H, Khuhaprema T, Tongtawe P, Tapchaisri P, Chaicumpa W. Prognostic improvement of patients with advanced liver cancer after active hexose correlated compound (AHCC) treatment. Asian Pacific Journal of Allergy and Immunology 2006;24(1):33-45. Fujii H, Nishioka N, Simon RR, Kaur R, Lynch B, Roberts A. Genotoxicity and subchronic toxicity evaluation of Active Hexose Correlated Compound (AHCC). Regular Toxicology and Pharmacology 2011;59(2):237-250. Matsui Y, Uhara J, Satoi S, Kaibori M, Yamada H, Kitade H, Imamura A, Takai S, Kawaguchi Y, Kwon AH, Kamiyama Y. Improved prognosis of postoperative hepatocellular carcinoma patients when treated with functional foods: a prospective cohort study. Journal of Hepatology 2002;37(1):78-86. Spierings EL, Fujii H, Sun B, Walshe T. A Phase I study of the safety of the nutritional supplement, active hexose correlated compound, AHCC, in healthy volunteers. Journal of Nutritional Science and Vitaminology (Tokyo) 2007;53(6):536-539. Sumiyoshi Y, Hashine K, Kakehi Y, Yoshimura K, Satou T, Kuruma H, Namiki S, Shinohara N. Dietary administration of mushroom mycelium extracts in patients with early stage prostate cancers managed expectantly: a phase II study. Japanese Journal of Clinical Oncology 2010;40(10):967-972. Uno K, Kosuna K, Sun B, Fujii H, Wakame K, Chikumaru S, Hosokawa G, Ueda Y. Active Hexose Correlated Compound (AHCC) improves immunological parameters and

performance status of patients with solid tumors. Biotherapy 2000;14(3):303-309. Wang S, Ichimura K, Wakame K. Preventive Effects of Active Hexose Correlated Compound (AHCC) on oxidative stress induced by ferric nitrilotriacetate in the Rat. Dokkyo Journal of Medical Sciences 2001;28(2-3):745-752. Ye SF, Ichimura K, Wakame K, Ohe M. Suppressive effects of Active Hexose Correlated Compound on the increased activity of hepatic and renal ornithine decarboxylase induced by oxidative stress. Life Sciences 2003;74(5):593-602. Ye SF, Wakame K, Ichimura K, Matsuzaki S. Amelioration by active hexose correlated compound of endocrine disturbances induced by oxidative stress in the rat. Endocrine Regulations 2004;38(1):7-13. References Reviewed Albers R, Antoine JM, Bourdet-Sicard R, Calder PC, Gleeson M, Lesourd B, Samartín S, Sanderson IR, Van Loo J, Vas Dias FW, Watzl B. Markers to measure immunomodulation in human nutrition intervention studies. British Journal of Nutrition 2005;94(3):452-481. Aviles H, O'Donnell PM, Orshal JM, Sonnenfeld G. Active Hexose Correlated Compound (AHCC) activates immune function to decrease bacteria load in a murine model of surgical wound infection. The Journal of Immunology 2007;178, S73. Aviles H, O'Donnell P, Orshal J, Fujii H, Sun B, Sonnenfeld G. Active hexose correlated compound activates immune function to decrease bacterial load in a murine model of intramuscular infection. American Journal of Surgery 2008;195(4):537-545. Brinker F. Herbal Contraindications and Drug Interactions: Plus Herbal Adjuncts With Medicines, expanded 4th Edition. Sandy (OR): Eclectic Medical Publications; 2010. Gao Y, Zhang D, Sun B, Fujii H, Kosuna K, Yin Z. Active hexose correlated compound enhances tumor surveillance through regulating both innate and adaptive immune responses. Cancer Immunology, Immunotherapy 2006;55(10):1258-1266. Hirose A, Sato E, Fujii H, Sun B, Nishioka H, Aruoma OI. The influence of active hexose correlated compound (AHCC) on cisplatin-evoked chemotherapeutic and side effects in tumor- bearing mice. Toxicology and Applied Pharmacology 2007;222(2):152-158. Hoffman G, Wirleitner B, Fuchs D. Potential role of immune system activation-associated production of neopterin derivatives in humans. Inflammation Research 2003;52(8): 313-321. Iqbal M, Giri U, Athar M. Ferric nitrilotriacetate (Fe-NTA) is a potent hepatic tumor promoter and acts through the generation of oxidative stress. Biochemical and Biophysical Research Communications 1995;212(2):557-563. Kalkan A, Ozden M, Akbulut H. Serum neopterin level in patients with chronic hepatitis B. Japanese Journal of Infectious Diseases 2005;58(2):107-109. Kawaguchi Y. Improved survival of patients with gastric cancer or colon cancer when treated with Active Hexose Correlated Compound (AHCC): Effect of AHCC on digestive system cancer. Natural Medicine Journal 2009;1(1):1-6. Kidd PM. The use of mushroom glucans and proteoglycans in cancer treatment. Alternative Medicine Review 2000;5(1):4-27. Levy AM, Kita H, Phillips SF, Schkade PA, Dyer PD, Gleich GJ, Dubravec VA. Eosinophilia and gastrointestinal symptoms after ingestion of shiitake mushrooms. Journal of Allergy and Clinical Immunology 1998;101(5):613-620. Mach CM, Fugii H, Wakame K, Smith J. Evaluation of active hexose correlated compound hepatic metabolism and potential for drug interactions with chemotherapy agents. Journal of the Society for Integrative Oncology 2008;6(3):105-109. Matsushita K, Kuramitsu Y, Ohiro Y, Obara M, Kobayashi M, Li YQ, Hosokawa M. Combination therapy of active hexose correlated compound plus UFT significantly reduces the metastasis of rat mammary adenocarcinoma. Anti Cancer Drugs 1998;9(4):343-350. Milner JA. Functional foods: the US perspective. American Journal of Clinical Nutrition 2000; 71 (suppl):1654S-1659S. Nogusa S, Gerbino J, Ritz BW. Low-dose supplementation with active hexose correlated compound improves the immune response to acute influenza infection in C57BL/6 mice. Nutrition Research 2009;29(2):139-143. Ritz BW, Nogusa S, Ackerman EA, Gardner EM. Supplementation with active hexose correlated compound increases the innate immune response of young mice to primary influenza infection. The Journal of Nutrition 2006;136:2868-2873. Sun B, Wakame K, Sato E, Nishioka H, Aruoma OI, Fujii H. The effect of active hexose correlated compound in modulating cytosine arabinoside-induced hair loss, and 6- mercaptopurine- and methotrexate-induced liver injury in rodents. Cancer Epidemiology 2009;33(3-4):293-299. Terakawa N, Matsui Y, Satoi S, Yanagimoto H, Takahashi K, Yamamoto T, Yamao J, Takai S, Kwon AH, Kamiyama Y. Immunological effect of active hexose correlated compound (AHCC) in healthy volunteers: a double-blind, placebo-controlled trial. Nutrition and Cancer 2008;60(5):643-651. Wang S, Welte T, Fang H, Chang GJ, Born WK, O'Brien RL, Sun B, Fujii H, Kosuna K, Wang T. Oral administration of active hexose correlated compound enhances host resistance to West Nile encephalitis in mice. Journal of Nutrition 2009;139(3):598-602. Yagita A, Maruyama S, Wakasugi S, Sukegawa Y. H-2 haplotype-dependent serum IL-12 production in tumor-bearing mice treated with various mycelial extracts. In Vivo 2002;16(1):49- 54. Yin Z, Fujii H, Walshe T. Effects of active hexose correlated compound on frequency of CD4+ and CD8+ T cells producing interferon-γ and/or tumor necrosis factor-α in healthy adults. Human Immunology 2010;71(12):1187-1190. Report a problem on this page Date modified: 2019-03-01

MEDICINAL INGREDIENT(S)

Must be chosen from the current Natural Health Products Ingredients Database (NHPID) and must meet the limitations outlined in the database. Storage conditions Must be established in accordance with the requirements described in theNatural Health Products Regulations.

RISK INFORMATION

Caution(s) and warning(s) No statement required. Contraindication(s) No statement required. Known adverse reaction(s) Stop use if symptoms such as nausea and diarrhea occur (Sumiyoshi et al. 2010; Matsui et al 2002).

NON-MEDICINAL INGREDIENTS

Must be chosen from the current Natural Health Products Ingredients Database (NHPID) and must meet the limitations outlined in the database. Storage conditions Must be established in accordance with the requirements described in theNatural Health Products Regulations.

STORAGE CONDITION(S)

Must be established in accordance with the requirements described in theNatural Health Products Regulations.

SPECIFICATIONS

Route of Administration Oral

Proper name(s)	Common name(s)	Source information		
Source material(s)	Part(s)	Preparation(s)		
AHCC1	AHCC	Lentinula edodes	Cultured mycelium	Extract