Agaricus blazei Murill - immunomodulatory properties and health benefits

Biedron R\textsuperscript{1,2}, Tangen JM\textsuperscript{3}, Maresz K\textsuperscript{1}, and Hetland G\textsuperscript{4}

\textsuperscript{1}International Science and Health Foundation, Cracow, Poland, \textsuperscript{2}Department of Immunology, Jagiellonian University Medical College, Cracow, Poland, and \textsuperscript{3}Department of Hematology and \textsuperscript{4}Cellular Therapy, Oslo University Hospital, Oslo, Norway

Correspondence: Geir Hetland, MD, PhD, Department of Cellular Therapy, Oslo University Hospital, Oslo, Norway

Submission date: August 27, 2012, Acceptance date: November 15, 2012; Publication date: November 17, 2012

Abstract

The Agaricus blazei Murill (AbM), also known as Agaricus brasiliensis L. due to its origin in Brazilian rain forest, is an edible mushroom of the Basidiomycetes family, which also comprises medicinal mushrooms such as Hericium erinaceus and Grifola frondosa. AbM has been used in traditional medicine locally and also recently as a health food worldwide. Since it has been found to possess immunomodulatory properties, its biological and health-related effects, as well as its isolated active ingredients e.g. beta-glucans, have been examined by scientists. Other investigations have been performed with mixed mushroom products, such as AndoSan\textsuperscript{TM}, which contains mostly AbM, but also the two other mushrooms above. AbM-related benefits reviewed here include effects against cancer, infections, inflammation, allergy/asthma and diabetes. Effects of AndoSan\textsuperscript{TM} and other AbM-based extracts have been compared in a bacterial sepsis model.

Keywords: Agaricus blazei, AndoSan\textsuperscript{TM}, allergy, asthma, cancer, infection, inflammation, immunomodulation.