

In its natural habitat, Cordyceps sinensis is a small fungus that parasitizes on one particular species of caterpillar at high elevations of the Tibetan plateau. Below, the dark Cordyceps sinensis can be seen growing out of the caterpillars which have served as both domain and life source.



Cordyceps (*Cordyceps sinensis* Berk.) is another of the medicinal mushrooms well recognized for its many and wide ranging health-enhancing benefits.¹ Among such benefits, it: 1) demonstrates immunomodulating activity;² 2) augments NK cell activity;³ 3) demonstrates regulatory effects on some immunoglobulin and cytokine production;⁴ 4) plays role in activating innate immune function;⁵ 5) evokes a balanced immune response;⁶ 6) demonstrates regulatory effect on Th1 and Th2 dendritic cell function according to the presence or absence of inflammatory signs;⁷ 7) evidence of anti-hyperglycemic effects;^{8,9} 8) evidence of anti-depressant effects;¹⁰ 9) demonstrates antioxidant effects;¹¹ and 10) evidence of potential antiaging benefits.¹²

¹ **The scientific rediscovery of an ancient Chinese herbal medicine: Cordyceps sinensis: part I.** Zhu JS, Halpern GM, Jones K. *J Altern Complement Med.* 1998 Fall;4(3):289-303. **Part II.** *J Altern Complement Med.* 1998 Winter;4(4):429-57. <http://www.ncbi.nlm.nih.gov/pubmed/9764768>

² **Medicinal mushrooms as a source of antitumor and immunomodulating polysaccharides** Wasser SP. *Appl Microbiol Biotechnol.* 2002 Nov; 60(3):258-74. <http://www.ncbi.nlm.nih.gov/pubmed/12436306>

³ **Enhanced Transfer Factor, 3rd Edition**, p 23. Hennen, William J., Ph. D. Woodland Publishing, 2005. <http://www.discovertransferfactor.com/ebooks.htm>

⁴ **Immunoglobulin and cytokine production from mesenteric lymph node lymphocytes is regulated by extracts of Cordyceps sinensis in C57B1/6N mice.** Park DK, Choi WS, Park PJ, et al. *J Med Food.* 2008 Dec;11(4):784-8. <http://www.ncbi.nlm.nih.gov/pubmed/19053874>

⁵ **Activation of innate immunity to reduce lung metastases in breast cancer.** Jordan JL, Nowak A, Lee TD. *Cancer Immunol Immunother.* 2010 May;59(5):789-97. Epub 2009 Dec 3. <http://www.ncbi.nlm.nih.gov/pubmed/19956948>

⁶ **Cordycepin is an immunoregulatory active ingredient of Cordyceps sinensis.** Zhou X, Luo L, Dressel W, et al. *Am J Chin Med.* 2008;36(5):967-80. <http://www.ncbi.nlm.nih.gov/pubmed/19051361>

⁷ **Two-sided effect of Cordyceps sinensis on dendritic cells in different physiological stages.** Li CY, Chiang CS, Tsai ML, et al. *J Leukoc Biol.* 2009 Jun;85(6):987-95. <http://www.ncbi.nlm.nih.gov/pubmed/19261928>

⁸ **Hypoglycemic activity of polysaccharide, with antioxidation, isolated from cultured Cordyceps mycelia.** Li SP, Zhang GH, Zeng Q, et al. *Phytomedicine.* 2006 Jun;13(6):428-33. <http://www.ncbi.nlm.nih.gov/pubmed/16716913>

⁹ **A Contemporary Treatment Approach to Both Diabetes and Depression by Cordyceps sinensis, Rich in Vanadium.** Guo JY, Han CC, Liu YM. *Evid Based Complement Alternat Med.* 2009 Nov 30. <http://www.ncbi.nlm.nih.gov/pubmed/19948751>; Free full text download: <http://ecam.oxfordjournals.org/cgi/reprint/nep201v1>.

¹⁰ **A Contemporary Treatment Approach to Both Diabetes and Depression by Cordyceps sinensis, Rich in Vanadium.** Guo JY, Han CC, Liu YM. *Evid Based Complement Alternat Med.* 2009 Nov 30. <http://www.ncbi.nlm.nih.gov/pubmed/19948751>; Free full text download: <http://ecam.oxfordjournals.org/cgi/reprint/nep201v1>.

¹¹ **[Antioxidant activity of natural and cultured Cordyceps sp].** Gu YX, Song YW, Fan LQ, Yuan QS. *Zhongguo Zhong Yao Za Zhi.* 2007 Jun;32(11):1028-31. [Article in Chinese] <http://www.ncbi.nlm.nih.gov/pubmed/17672334>

¹² **Antiaging effect of Cordyceps sinensis extract.** Ji DB, Ye J, Li CL, Wang YH, et al. *Phytother Res.* 2009 Jan;23(1):116-22.
<http://www.ncbi.nlm.nih.gov/pubmed/18803231>