

Potenziale der Vitalpilze

Eine gezielte Anwendung von Vitalpilzen, mit ihren vielfältigen gesundheitsfördernden Eigenschaften, bei der Behandlung des Long Covid- und Post Vac-Syndroms

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Literatur

- [*] Wormer, E.J. (2022). Mit Pilzen heilen - Immunaktivierung durch Vitalpilze. *Die Naturheilkunde* 05/2022, 31-34
- [1] Simard, S. W., Perry, D. A., Jones, M. D., Myrold, D. D., Durall, D. M., & Molina, R. (1997). Net transfer of carbon between ectomycorrhizal tree species in the field. *Nature*, 388(6642), 579–582. <https://doi.org/10.1038/41557>
- [2] Merckx, V. S. F. T., Gomes, S. I. F., Wang, D., Verbeek, C., Jacquemyn, H., Zahn, F. E., Gebauer, G., & Bidartondo, M. I. (2024). Mycoheterotrophy in the wood-wide web. *Nature Plants*, 10(5), 710–718. <https://doi.org/10.1038/s41477-024-01677-0>
- [3] Panda SK, Luyten W. Medicinal mushrooms: Clinical perspective and challenges. *Drug Discov Today*. 2022 Feb;27(2):636-651. doi: 10.1016/j.drudis.2021.11.017. Epub 2021 Nov 22. PMID: 34823005.
- [4] Venturella G, Ferraro V, Cirlincione F, Gargano ML. Medicinal Mushrooms: Bioactive Compounds, Use, and Clinical Trials. *Int J Mol Sci*. 2021 Jan 10;22(2):634. doi: 10.3390/ijms22020634. PMID: 33435246; PMCID: PMC7826851.
- [5] Łysakowska P, Sobota A, Wirkijowska A. Medicinal Mushrooms: Their Bioactive Components, Nutritional Value and Application in Functional Food Production-A Review. *Molecules*. 2023 Jul 14;28(14):5393. doi: 10.3390/molecules28145393. PMID: 37513265; PMCID: PMC10384337.
- [6] Yang J, Lim KH, Lim KT, Woods JT, Mohabbat AB, Wahner-Roedler DL, Ganesh R, Bauer BA. Complementary and alternative medicine for long COVID: a systematic review of randomized controlled trials. *Ther Adv Chronic Dis*. 2023 Oct 11;14:20406223231204727. doi: 10.1177/20406223231204727. PMID: 37841213; PMCID: PMC10571674.
- [7] Xiaoying M, Peng Z, Hong W, Na G, Jun X, Ying Z, Xun C, Guoli L. From functional foods to immunotherapeutic agents: mechanistic insights into medicinal mushroom bioactives in chronic inflammation management. *Front Nutr*. 2025 Dec 8;12:1725297. doi: 10.3389/fnut.2025.1725297. PMID: 41445832; PMCID: PMC12722879.
- [8] Baruah, P., Patra, A., Barge, S., Khan, M. R., & Mukherjee, A. K. (2023). Therapeutic Potential of Bioactive Compounds from Edible Mushrooms to Attenuate SARS-CoV-2 Infection and Some Complications of Coronavirus Disease (COVID-19). *Journal of Fungi*, 9(9), 897. <https://doi.org/10.3390/jof9090897>
- [9] Szychowski KA, Skóra B, Pomianek T, Gmiński J. *Inonotus obliquus* - from folk medicine to clinical use. *J Tradit Complement Med*. 2020 Aug 22;11(4):293-302. doi: 10.1016/j.jtcme.2020.08.003. PMID: 34195023; PMCID: PMC8240111.
- [10] Wang Y, Gu J, Wu J, Xu Y, Liu Y, Li F, Liu Q, Lu K, Liang T, Hao J, Li L, Cao X, Jiang J. Natural Products and Health Care Functions of *Inonotus obliquus*. *Curr Issues Mol Biol*. 2025 Apr 10;47(4):269. doi: 10.3390/cimb47040269. PMID: 40699669; PMCID: PMC12026145.
- [11] Ern PTY, Quan TY, Yee FS, Yin ACY. Therapeutic properties of *Inonotus obliquus* (Chaga mushroom): A review. *Mycology*. 2023 Oct 20;15(2):144-161. doi: 10.1080/21501203.2023.2260408. PMID: 38813471; PMCID: PMC11132974.
- [12] Xin X, Qu J, Veeraghavan VP, Mohan SK, Gu K. Assessment of the Gastroprotective Effect of the Chaga Medicinal Mushroom, *Inonotus obliquus* (Agaricomycetes), Against the Gastric Mucosal Ulceration Induced by Ethanol in Experimental Rats. *Int J Med Mushrooms*. 2019;21(8):805-816. doi: 10.1615/IntJMedMushrooms.2019031154. PMID: 31679287.
- [13] Wu Y, Cui H, Zhang Y, Yu P, Li Y, Wu D, Xue Y, Fu W. *Inonotus obliquus* extract alleviates myocardial ischemia/reperfusion injury by suppressing endoplasmic reticulum stress. *Mol Med Rep*. 2021 Jan;23(1):77. doi: 10.3892/mmr.2020.11716. Epub 2020 Nov 25. PMID: 33236154; PMCID: PMC7716405.
- [14] Wang Y, Gu J, Wu J, Xu Y, Liu Y, Li F, Liu Q, Lu K, Liang T, Hao J, Li L, Cao X, Jiang J. Natural Products and Health Care Functions of *Inonotus obliquus*. *Curr Issues Mol Biol*. 2025 Apr 10;47(4):269. doi: 10.3390/cimb47040269. PMID: 40699669; PMCID: PMC12026145.
- [15] Zhang HW, Lin ZX, Tung YS, Kwan TH, Mok CK, Leung C, Chan LS. *Cordyceps sinensis* (a traditional Chinese medicine) for treating chronic kidney disease. *Cochrane Database Syst Rev*. 2014 Dec 18;2014(12):CD008353. doi: 10.1002/14651858.CD008353.pub2. PMID: 25519252; PMCID: PMC10632742.

- [16] Ko KM, Leung HY. Enhancement of ATP generation capacity, antioxidant activity and immunomodulatory activities by Chinese Yang and Yin tonifying herbs. *Chin Med*. 2007 Mar 27;2:3. doi: 10.1186/1749-8546-2-3. PMID: 17386115; PMCID: PMC1847515.
- [17] Singh M, Tulsawani R, Koganti P, Chauhan A, Manickam M, Misra K. *Cordyceps sinensis* increases hypoxia tolerance by inducing heme oxygenase-1 and metallothionein via Nrf2 activation in human lung epithelial cells. *Biomed Res Int*. 2013;2013:569206. doi: 10.1155/2013/569206. Epub 2013 Aug 26. PMID: 24063008; PMCID: PMC3770031.
- [18] Ma, B., Shen, J., Yu, H., Ruan, Y., Wu, T., & Zhao, X. (2010). Hericenones and erinacines: stimulators of nerve growth factor (NGF) biosynthesis in *Herichium erinaceus*. *Mycology: an International Journal on Fungal Biology*, 1(2), 92–98. <https://doi.org/10.1080/21501201003735556>
- [19] Shi S, Yin L, Shen X, Dai Y, Wang J, Yin D, Zhang D, Pan X. β -Glucans from *Trametes versicolor* (L.) Lloyd Is Effective for Prevention of Influenza Virus Infection. *Viruses*. 2022 Jan 25;14(2):237. doi: 10.3390/v14020237. PMID: 35215831; PMCID: PMC8880503.
- [20] Stamets P. *Trametes versicolor* (Turkey Tail Mushrooms) and the Treatment of Breast Cancer. *Glob Adv Health Med*. 2012 Nov;1(5):20. doi: 10.7453/gahmj.2012.1.5.007. Epub 2012 Nov 1. PMID: 27257526; PMCID: PMC4890100.
- [21] Xu X, Pan C, Zhang L, Ashida H. Immunomodulatory beta-glucan from *Lentinus edodes* activates mitogen-activated protein kinases and nuclear factor-kappaB in murine RAW 264.7 macrophages. *J Biol Chem*. 2011 Sep 9;286(36):31194-8. doi: 10.1074/jbc.M111.246470. Epub 2011 Jul 20. PMID: 21775433; PMCID: PMC3173062.
- [22] Chihara G, Hamuro J, Maeda YY, Shiio T, Suga T, Takasuka N, Sasaki T. Antitumor and metastasis- inhibitory activities of lentinan as an immunomodulator: an overview. *Cancer Detect Prev Suppl*. 1987;1:423- 43. PMID: 3319150.
- [23] Rahman MA, Abdullah N, Aminudin N. *Lentinula edodes* (shiitake mushroom): An assessment of in vitro anti-atherosclerotic bio-functionality. *Saudi J Biol Sci*. 2018 Dec;25(8):1515-1523. doi: 10.1016/j.sjbs.2016.01.021. Epub 2016 Feb 8. PMID: 30581314; PMCID: PMC6302894.
- [24] Baptista F, Campos J, Costa-Silva V, Pinto AR, Saavedra MJ, Ferreira LM, Rodrigues M, Barros AN. Nutraceuical Potential of *Lentinula edodes*' Spent Mushroom Substrate: A Comprehensive Study on Phenolic Composition, Antioxidant Activity, and Antibacterial Effects. *J Fungi (Basel)*. 2023 Dec 15;9(12):1200. doi: 10.3390/jof9121200. PMID: 38132800; PMCID: PMC10744564.
- [25] Rašeta, M., Kebert, M., Šarac, D. P., Mišković, J., Berežni, S., Kulmány, Á. E., Zupkó, I., Karaman, M., & Jovanović-Šanta, S. (2025). Bioactive Potential of Balkan *Fomes fomentarius* Strains: Novel Insights into Comparative Mycochemical Composition, Antioxidant, Anti-Acetylcholinesterase, and Antiproliferative