

# OPHIO CS4

A Premium, Safe & Eco-friendly Choice for Health-conscious Consumers

Ophio CS4 is a premium-grade clean room cultivated *Cordyceps sinensis* mycelium, harvested from a controlled environment that closely resembles the conditions of the Himalayas. It is derived from a proprietary strain, CS4, developed by Kyushu University, Japan. With a genetic makeup closely resembling wild *Cordyceps sinensis*, our advanced cultivation methods ensure it contains higher concentrations of potent active ingredients, guaranteeing safe consumption and delivering faster, more effective results in boosting energy and overall health.



## Properties of *Cordyceps sinensis*

*Cordyceps sinensis* has a history of over 1,500 years and was traditionally consumed by emperors, royalty, and Tibetan herders for its health benefits, particularly for enhancing vitality and stamina.

Recent scientific research highlights its significant improvements in various aspects:



### Endurance & Energy

Regulate Cardiac Function  
Improve Blood Flow  
Increase Oxygen Supply  
Energy Production  
Reduced Fatigue



### Adaptogenic Effects

Neuroprotective Effects  
Stress Reduction  
Analgesic Effects  
Anti-inflammatory Properties  
Regulate Sleep-wake Cycle



### Immunity & Repair

Immunomodulatory Effects  
Antioxidant Properties  
Anti-inflammatory Properties  
Antibiotic Properties  
Regenerative Properties

## References

- Ashraf, S. A., Elkhaila, A. E. O., Siddiqui, A. J., Patel, M., Awadelkareem, A. M., Snoussi, M., Ashraf, M. S., Adnan, M., & Hadi, S. (2020). Cordycepin for health and wellbeing: A potent bioactive metabolite of an entomopathogenic medicinal fungus *Cordyceps* with its nutraceutical and therapeutic potential. *Molecules*, 25(12), 2735.
- Hu, Z., Lee, C., Shah, V. K., Oh, E., Han, J., Bae, J., Lee, K., Chong, M., Hong, J. T., & Oh, K. (2013). Cordycepin increases nonrapid eye movement sleep via adenosine receptors in rats. *Evidence-based Complementary and Alternative Medicine*, 2013, 1–8.
- Liu, W., Gao, Y., Zhou, Y., Yu, F., Li, X., & Zhang, N. (2022). Mechanism of *Cordyceps sinensis* and its extracts in the treatment of diabetic kidney disease: A Review. *Frontiers in Pharmacology*, 13, 881835.
- Liu, Z., Li, P., Zhao, D., Tang, H., & Guo, J. (2010). Protective effect of extract of *Cordyceps sinensis* in middle cerebral artery occlusion-induced focal cerebral ischemia in rats. *Behavioral and Brain Functions*, 6(1).
- Savioli, F. P., Zogaib, P., Franco, E., De Salles, F. C. A., Giorelli, G. V., & Andreoli, C. V. (2022). Effects of *Cordyceps sinensis* supplementation during 12 weeks in amateur marathoners: A randomized, double-blind placebo-controlled trial. *Journal of Herbal Medicine*, 34, 100570.
- Shashidhar, M., Giridhar, P., Sankar, K. U., & Manohar, B. (2013). Bioactive principles from *Cordyceps sinensis*: A potent food supplement – A review. *Journal of Functional Foods*, 5(3), 1013–1030.
- Yu, L., Zhao, J., Li, S. P., Fan, H., Hong, M., Wang, Y. T., & Zhu, Q. (2006). Quality evaluation of *Cordyceps* through simultaneous determination of eleven nucleosides and bases by RP-HPLC. *Journal of Separation Science*, 29(7), 953–958.
- Zhang, X., Wang, M., Qiao, Y., Shan, Z., Yang, M., Li, G., Xiao, Y., Wei, L., Bi, H., & Gao, T. (2022). Exploring the mechanisms of action of *Cordyceps sinensis* for the treatment of depression using network pharmacology and molecular docking. *Annals of Translational Medicine*, 10(6), 282.

# Why OPHIO CS4?

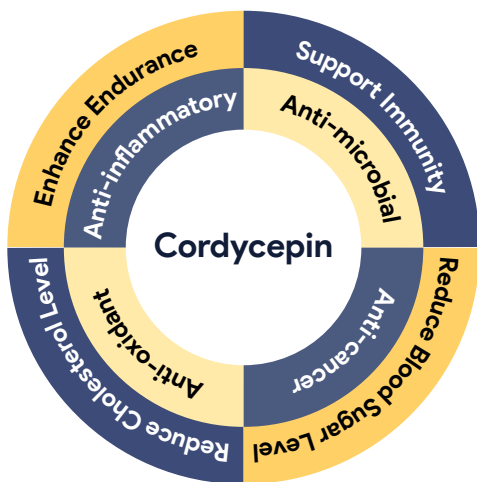
- **100% pure Cordyceps Mycelium:** Suitable for vegetarians and Muslims.
- **Safe and Hygienic Production:** Free from heavy metals and pesticides.
- **High Purity and Quality:** Ensures stability and effectiveness of active compounds.
- **Cost-Effective:** More affordable compared to wild-harvested *Cordyceps*.
- **Sustainable Supply:** Available year-round, promoting environmental sustainability.



————— Daily Dose: —————

< 18 yrs old: 250 mg  
≥ 18 yrs old: 500 mg

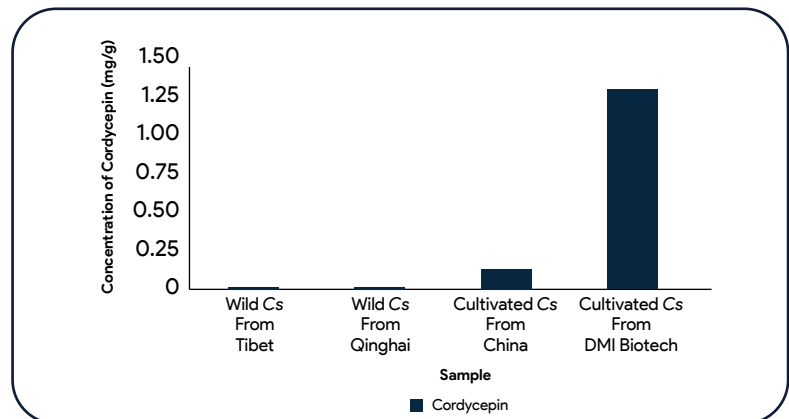
## Key Active Compound of *Cordyceps sinensis*



**Cordycepin** is a major active compound found in most *Cordyceps* species. It exhibits a variety of biological activities, including anti-tumor, immunomodulatory, antioxidant, and anti-aging effects. Due to these properties, cordycepin has potential applications in various fields, including health products, medicine, and cosmeceuticals.

The content of bioactive compounds in indoor-cultivated *Cordyceps sinensis* from DMI Biotech

Bioactive Compound	Adenosine (mg/g)	Cordycepin (mg/g)	Cordycepic Acid (%)	SOD Activity (U/mL)
Ophio CS4	> 4.5	>1.0	>7.0	>350.0



The content of cordycepin in wild-harvested versus indoor-cultivated *Cordyceps sinensis*

## Versatile Application



Beverage



Instant Beverage



Herbal Soup



Nutritional Powder



Supplement Sachet



Supplement Capsule / Tablet



Gummy



Personal Care