

The Moss Nutrition Digest

Timely Tidbits to Support Your Practice

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Cordyceps for Pulmonary Hypertension

Pulmonary hypertension (PH) is a specific type of high blood pressure involving the arteries which carry blood from the right side of the heart to the lungs. PH often occurs when cells lining the pulmonary arteries proliferate abnormally, causing these vessels to stiffen, thicken and swell. Because the heart must work extra hard to pump blood through a constricted lumen, the added strain caused by PH can lead to heart failure over time.

Shortness of breath, general fatigue, heart palpitations and lower body edema (ankles, calves) progressing to abdominal swelling (ascites) are symptoms of pulmonary hypertension, a condition whose etiology is often idiopathic and for which there is no known medical cure.

A recent study examined the potential of Cordyceps extract and one of its best known active constituents, *cordycepin*, to address pulmonary hypertension in both animal tissue and *in vitro* models. In isolated mice lungs exhibiting hypoxic pulmonary vasoconstriction, treatment with whole Cordyceps extract resulted in a potent reduction in mean pulmonary arterial pressure. No such vasodilatory benefit was observed following treatment with the cordycepin constituent alone.

Companion research performed *in vitro* found that both whole Cordyceps extract and cordycepin elicited significant anti-proliferative effects on human pulmonary artery smooth muscle cells, but the observed anti-proliferative effects were more pronounced when the whole extract was used.

Cordyceps sinensis, known in Nepal as Yarsagumba, is a uniquely fascinating medicinal fungus first discovered in the Himalayan mountains, where it naturally develops within caterpillar hosts. Revered as a longevity tonic in traditional Tibetan and Chinese medicine, cordyceps exhibits adaptogenic, antioxidant, anti-inflammatory and antimicrobial activity. Practitioners may recommend it to help support a range of concerns, beginning with healthy immune system function, improved glucose metabolism, and gut microbial balance. More studies are needed to help determine the potential efficacy of cordyceps in addressing issues of pulmonary hypertension and associated vascular, heart and lung health, but initial research looks promising.

Cordyceps Select[™] contains Cs-4 whole cordyceps extract, a clinically researched form of this remarkable remedy produced via modern fermentation processes not involving caterpillars.

REFERENCE

1. Luitel H, et al. Yarsagumba is a Promising Therapeutic Option for Treatment of Pulmonary Hypertension due to the Potent Anti-Proliferative and Vasorelaxant Properties. *Medicina (Kaunas)*. 2020 Mar 16;56(3):131. doi: 10.3390/medicina56030131. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7142425/>