Intelligent Remedies, Inc.
P.O. Box 448, Puunene, HI 96784
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HEMEflow O2™

Blood Support Extract

Product Information Sheet

HEMEflow O2™ combines phytotherapeutic extracts of **Angelica sinensis**, **Cordyceps sinensis**, **Curcuma longa (turmeric), Cnidium monnieri, Zingiber officinale (ginger)**, and **Cinnamomum verum (Ceylon cinnamon)**. This formula is designed to help support healthy circulation, oxygen utilization, and normal energy metabolism.

***Angelica sinensis*,** (Dong quai), traditionally used in Chinese medicine to support menstrual and circulatory health, has been used historically for blood-tonifying and uterine support; identified constituents include polysaccharides, organic acids, ferulic acid, and Z-ligustilide.

***Cordyceps sinensis*,** Cordyceps sinensis, a fungus used in traditional practice for respiratory and kidney-related support, contains cordycepin, polysaccharides, and other nucleosides; experimental and limited clinical studies suggest antioxidant, immunomodulatory, and metabolic effects, though findings are context-specific.

Curcuma longa. Curcuma longa (turmeric) contains curcuminoids with antioxidant and anti-inflammatory activity observed in laboratory and some human studies. Cnidium monnieri has been used traditionally and shows antioxidant and anti-inflammatory activity in preclinical research, including modulation of NF-κB and MAPK pathways.

***Cnidum monnieri*,** antioxidant, anticancer, anti-inflammatory, and immunomodulatory properties and has an anti-Inflammatory effect via blocking the activation of the NF-κB and MAPK/p38 pathways.

Zingiber officinale (ginger) is a traditional remedy for digestive and inflammatory complaints and contains gingerols and related compounds with demonstrated antioxidant and anti-inflammatory effects in preclinical and some clinical trials.

Cinnamomum verum (cinnamon) is rich in polyphenols and antioxidants and has been examined in studies for effects on oxidative stress and metabolic markers.

- **Highly bio-available due to heat and alcohol reflux extraction**
- Extracted in **Maui, Hawaii**.
- **Organic**, Non-GMO, Gluten free
- Extracted with **Maui-grown organic sugarcane alcohol** and deep ocean mineral water.

These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

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Singh M., Tulsawani R., Koganti P., et al., 2013 — ***"Cordyceps sinensis increases hypoxia tolerance by inducing heme oxygenase-1 and metallothionein via Nrf2 activation in human lung epithelial cells."*** *Biomed Research International. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3770031/*

Study type: *Preclinical — in vitro (A549 human lung epithelial cell line).*

Key methods/results: *Aqueous Cordyceps extract reduced hypoxia-induced ROS, lipid/protein oxidation, and cell death; increased Nrf2, HO-1, MT expression and modulated HIF-1 and downstream genes under hypoxia.*

Takeaway (qualified)*: In cell models, Cordyceps extracts modulated antioxidant and hypoxia-responsive pathways and reduced markers of oxidative stress; these preclinical results suggest biological activity but do not establish clinical benefit in humans.*

Xue Bai, Y. Tang, Y. Lin, et al., 2018 — ***"Protective effect of Cordyceps sinensis extract on rat brain microvascular endothelial cells injured by oxygen–glucose deprivation."*** *Journal of Traditional Chinese Medical Sciences. https://www.sciencedirect.com/science/article/pii/S2095754817301217*

Study type: *Preclinical — in vitro (primary rat brain microvascular endothelial cells; OGD model).*

Key methods/results: *Pretreatment with Cordyceps extract improved cell viability, reduced LDH leakage, increased SOD activity, and lowered NO, MDA, TNF-α, and IL-1β versus OGD controls.*

Takeaway (qualified): *In an in vitro ischemia model, Cordyceps extract reduced oxidative and inflammatory markers and improved cell survival; this supports possible mechanisms but is not evidence of human clinical efficacy.*

Chen S., Li Z., Krochmal R., et al., 2010 — ***"Effect of Cs-4 (Cordyceps sinensis) on exercise performance in healthy older subjects: a double-blind, placebo-controlled trial."*** *Journal of Alternative and Complementary Medicine. https://pubmed.ncbi.nlm.nih.gov/20804368/*

Study type: *Human clinical trial — randomized, double-blind, placebo-controlled pilot study (n = 20; ages 50–75).*
Key methods/results: Cs-4 (333 mg TID for 12 weeks) increased metabolic and ventilatory thresholds (submaximal exercise markers) vs baseline; no change in VO2max; small sample size limits conclusions.

Takeaway (qualified)*: A small randomized pilot trial reported modest improvements in submaximal exercise thresholds with a standardized Cordyceps preparation, suggesting potential benefit for exercise tolerance that requires larger trials for confirmation.*

Educational note on hypoxia and cellular energy
Hypoxia (low tissue oxygen) can reduce cellular ATP production and, in experimental models, lead to changes such as membrane depolarization and altered ion-pump function that contribute to cellular stress. These mechanistic descriptions are educational background and do not indicate that this product diagnoses, treats, or prevents hypoxia or related medical conditions.