

Ingredient Spotlight

Cordyceps

What are? *Cordyceps sinensis* or *Ophiocordyceps sinensis* is an annual *Ascomycetes* fungus closely related to the mushroom. **(1)** It is also called “caterpillar fungus” based on its original source and identification, but modern *Cordyceps* are lab grown on grains or broth and thus sustainably obtained. *Cordyceps* have a number of biologically active components. These include polysaccharides, adenosine, cordycepin, cordycepic acid, and ergosterol.**(2)** Studies show that *Cordyceps* has numerous effects including oxygen-free radical scavenging, anti-senescence, immunomodulation, antioxidant and decreasing inflammation. **(3,4)**

What does it/ they do?

- **Renal-protective effects:** In animal research, *Cordyceps* decreased nephrotoxicity commonly seen with aminoglycoside administration. **(5)** This result was attributed to the regeneration of renal tubular cells and decreased lysosomal activity which can cause renal tubular damage.
- **Enhances excretion of Creatinine and BUN**
 - CPS-2 is one of the water-soluble polysaccharides that can be isolated from *Cordyceps sinensis*. This polysaccharide showed a protective effect renal health. It was helpful in reducing blood urea nitrogen and serum creatinine. **(6)**
 - This study concluded that the use of *Cordyceps* preparation, as an addition to conventional therapy has the potential to decrease serum creatinine, increase creatinine clearance, reduce proteinuria and alleviate kidney complications, such as increased hemoglobin and serum albumin. **(7)**
 - A meta-analysis of clinical research in patients with kidney issues associated with high blood sugar shows that taking *Cordyceps* 0.6-2 grams orally three times daily, along with standard treatment, seems to decrease serum creatinine levels and increase creatinine clearance when compared with standard treatment alone **(8)**
 - Another meta-analysis of clinical studies in human patients with diabetic kidney issues shows when given *Cordyceps* along with compounds to decrease blood pressure there were decreases blood urea nitrogen serum creatinine levels when compared with other treatment methods. **(9)**
- **Decreases Fibrosis in kidney**
 - 10 *Cordyceps* may decrease fibrosis of the kidney by reducing the expression of intercellular adhesion molecule-1 (ICAM-1) and vascular cell adhesion molecule-1 (VCAM-1) in rats with hypertension. **(10)**

Adverse effects: *Cordyceps* is generally well tolerated. It might cause mild adverse effects including diarrhea, constipation, and abdominal discomfort. Symptoms can be minimized by taking *Cordyceps* after eating.

Potential drug interactions: Antiplatelet and anticoagulant medications, Immunosuppressant therapies, Testosterone.

Products that utilize this ingredient include: Renal Essentials Feline Chews, Renal Essentials Feline Tablets, and Renal Essentials Pro.

References:

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