

**CANADA RNA BIOCHEMICAL INC.**

*“Defining Medicine Of The Future”*

Tel: (604) 273-2233

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## **CordImmune (Cordyceps Sinensis)**

0.3% Adenosine, 0.2% cordycepin, 18% polysaccharides (super cs-4 strain)

*“The Ultimate Anti-Aging Medicine!!”*

Cordyceps is not an herb, but rather a fungal mushroom. Cordyceps has the reputation of been the best anti-aging herb in Traditional Chinese Medicine, and modern research has shown its anti-aging effects on virtually all systems of the human body.

### **Main Ingredients**

- Polysaccharides, adenosine, adenine, uracil, guanine, thymine deoxyriboside, uracil deoxyriboside, 18 different amino acids (including 8 essential ones), polypeptides, mannitol, protein, organic acids, different micronutrients (P, Se, K, Ca, Mg, Mn, Fe, Na, Cu, Zn, Al, Si, Cr, V, Ni, Sr, Ti and Mo), vitamins (B1, B2, B12, E & K), ergosterol, superoxide dismutase (SOD), etc.

### **Toxicity**

- A 3-month, placebo-controlled, sub-acute toxicity study in both sexes of rats found the Cs-4 strain caused no toxicity or death at a dosage of 3 g/kg p.o. A 30-day, placebo-controlled toxicity study in mice found no signs of toxicity and no deaths from Cs-4. In both studies, organ weights and peripheral blood cells were not significantly different from those of the controls.

### **Anti-Aging Studies On**

1. **↑ Cellular ATP (18)** : improves sexual function (17) and traditionally used for fatigue.
2. **Hepatic system**: activates Kupffer cell function, increases SOD and glutathione peroxidase in liver, raises plasma albumin, inhibits inflammation and liver fibrosis (1-3).
3. **Cardiovascular system**: inhibits thrombus formation, hypotensive, mildly inhibits platelet aggregation, vasodilation, reduces heart rate, reduces arrhythmia induced by aconitine, hypolipidemic (13-16).
4. **Immune system**: modulates cellular immune function, inhibits humoral immune hyperfunction, prevent inhibition of NK cells by cyclophosphamide, protects T helper cells from immunosuppression effects of prednisolone acetate and cyclophosphamide, prolongs allograft survival time, increase spleen weight (4-6).
5. **Endocrine system**: increases corticosteroid production (differently than ACTH), stimulates bone marrow hematogenesis function (7-8).
6. **Malignant cells**: inhibits Ehrlich ascites carcinoma, Meth A fibrosarcoma, K562, Jurkat, Wm-1342, HL-60 and RPMI-8226 cell lines; promotes differentiation (9-12).

### **Potential Applications**

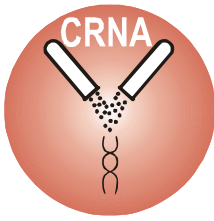
- As an anti-aging supplement which improve almost all organ functions and the quality of life.
- Protection liver and kidney from hepato- and nephro-toxic drugs.
- Sports performance and endurance enhancement

**Dosage:** 1 to 3 grams per day for maintenance; 3 to 6 grams per day for optimal effects.

The above statements have not been evaluated by the FDA. This product is not intended to diagnose, treat, cure, or prevent any disease.

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## **Cord-Immune (now with cordycepin)**

**0.3% Adenosine, 0.2% cordycepin, 18% polysaccharides**

***“The Extra Immune Punch You’ve Been Looking For!! ”***

Cord-Immune is a revolutionary product, and it’s the only Cordyceps sinensis (Super CS-4 Strain) in the world that contains both adenosine and cordycepin! Traditionally, cordycepin is only found in extracts from Cordyceps militaris and not found in Cordyceps sinensis. Cord-Immune is the only product on the market that contains pure extracts from Super CS-4 strain of Cordyceps sinensis, a new hybrid strain that is capable of producing high yields of adenosine and cordycepin. Cord-Immune has all the benefits of the traditional Cordyceps; in addition, the presence of cordycepin gives it the extra immune support most practitioners are looking for.

### **What is cordycepin?**

Cordycepin, or 3'-deoxyadenosine, is a nucleoside analog and a transcription chain terminator. When cordycepin is introduced to cells undergoing DNA replication, it produces a defective DNA that triggers cells to undergo apoptosis (programmed cell death). Currently, the National Cancer Institute in collaboration with a pharmaceutical company has initiated a Phase I clinical study of cordycepin as a potential treatment agent. However, we believe that the whole Cordyceps would be more potent than a single agent. We believe that the synergistic effects of Cordyceps polysaccharides, adenosine, cordycepic acid, and cordycepin would be much greater than those achieved by the use of cordycepin alone.

### **Fundamental studies on cordycepin**

7. **Anti-viral:** inhibits the replication of western equine encephalitis virus (1), herpes simplex virus (2, 11), and influenza virus (8).
8. **Anti-bacterial:** inhibits growth of Colstridium spp. without adverse effects on the growth of Bifidobacterium spp.(3).
9. **Anti-fungal:** inhibits Candida albicans and Candida krusei (6).
10. **Immune regulatory:** up-regulates interleukin-10 production and inhibits interleukin-2 production (4).
11. **Apoptotic:** induces apoptosis in ADA-inhibited TdT-positive leukemia cells (5, 7).
12. **Radiation damage enhancement:** inhibits repair of X-ray induced DNA damage (9, 10, 12, 13).

### **Contra-indications:**

Because cordycepin is a nucleoside analog and a transcription chain terminator, it is advised that Cord-Immune should not be used in women who are trying to conceive or are pregnant, infants, and children unless under the supervision of a physician.

The above statements have not been evaluated by the FDA. This product is not intended to diagnose, treat, cure, or prevent any disease.

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