Cordyceps Sinensis

Much of what is known about Cordyceps sinensis we owe to the research of Dr. Georges Halpern, a physician and professor emeritus with the University of Hong Kong, and author of several books about Cordyceps. Research suggests that Cordyceps may improve the BIO ENERGY status of animals and probably in humans. This would happen because Cordyceps improves the internal balance mechanism, thus making the utilization of OXYGEN more efficient. These properties may account for the overall physical enhancement, the added endurance, and the anti-fatigue effects which are seen in humans using the Cordyceps supplement.

**Cordyceps Improves the respiratory function.** Several scientific studies have demonstrated the benefits of Cordyceps sinensis in alleviating the symptoms of several respiratory illnesses including chronic bronchitis and asthma (Reference 2, Chapter “Effects on the Respiratory System”, pages 429-432). In a double blind, placebo controlled study with 30 elderly volunteers Cordyceps significantly improved the maximum amount of oxygen these people were able to assimilate (Reference 4).


**Improves the Functioning of the Heart.** Numerous studies have demonstrated the benefits of Cordyceps sinensis on heart rhythm disturbances, such as cardiac arrhythmias and chronic heart failure (Reference 2, Chapter “Effects on the Cardiovascular System”, pages 436 – 441). An even more vigorous study was conducted using “in vivo” mouse model induced acute Pulmonary Edema (Pneumonia) which causes systemic lack of oxygen, acidic body, and death.

Research results show that animals taking Cordyceps had a significantly greater survival rate of 20% mortality vs. 80% mortality in 30 minutes. This is a startling

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400% improvement. (From Wan F, Zhang S. Clinical observations of fermented Cordyceps sinensis (Cs-4) in antitussive, expectorant, and antathematic effects. Collection on the Basic Medicinal and Clinical Studies of Submerged Culture Cordyceps sinensis. Beijing, Nanchang, China:Jiangxi TCM/IMM, 1985:35-39)

**Helps Maintain Cholesterol.** Four excellent studies have demonstrated that Cordyceps sinensis helps to lower total cholesterol by 10 to 21% and triglycerides by 9 to 26%. At the same time it helps to increase HDL- cholesterol (“good cholesterol”) by 27 to 30% (Reference 1, Chapter “Effects on blood lipid metabolism and arteriosclerosis”, pages 299 – 301).


**Genetic.** Promotes DNA Repair.

**Liver Protection.** Improves Liver Functions, helps with Hepatitis and Cirrhosis Sub chronic and chronic hepatitis on related liver diseases are more prevalent than most people think. Liver is the living filter of the human body, cleaning the blood and all other fluids of impurities. There is no way for you to survive, much less feel healthy, without a functioning liver.

**Research:** Clinical trials on 33 patients with Hepatitis “B” and on another 8 patients with cirrhosis taking Cordyceps supplement showed 71.9% improvement on “Thymol Turbidity Test” and 78.6% improvement in” SGPT Test” both of these are enzyme test showing improving functions of the liver. (Zhou LT, Yang YZ, Xu YM, Zhu QY, Zhu YR, Ge XY, Gao JD.) Short term curative effect of cultured Cordyceps sinensis (Berk.) Sacc. Mycelia in chronic hepatitis B. China J Chinese Materia Medica 1990;15(1):53-55).

**Chronic Kidney Diseases Improvement.** (3) Chronic kidney diseases improvement of 51% after only one month with Cordyceps supplement. (Jiang JC, Gao YF. J Administration) Traditional Chinese Med 1995;5(suppl):23-24)

**Reduces Tumor Size in Cancer Patients.** Several clinical studies have been conducted in China and Japan with cancer patients (References 1 and 2). The studies were done
with CSE (Cordyceps sinensis mycelium) using a therapeutic dose of 6 grams per day (= 4 capsules twice daily). In one study with 50 lung cancer patients administered CSE in conjunction with chemotherapy, tumors reduced in size in 46% of patients. A study in cancer patients with various types of tumors found CSE (6 g/day for over 2 months) improved subjective symptoms in the majority of patients. White blood cell counts were maintained and tumor size was significantly reduced in about half of the patients.

Researchers in Japan reported that CSE enhances the general reactivity of the immune system in individuals with cancer. To discover this, they subcutaneously injected mice with cancerous (lymphoma) cells and then orally administered CSE. This lead to a reduction of tumor size and prolongation of the host survival time. CSE also improved the antibody responses.

**Immune System.** Increases NK cell activity, makes more MUSCLE – Increases Power, builds better/younger cells.

**Recharge the Protective Army of NK cells.** Your body's ability to fight infections and tumors depends on the availability of Natural Killer (NK) Cells. These are essential first lines of defense for our body's protection mechanisms commonly known as the Immune System.

Several scientific studies of Cordyceps have especially focused on Natural Killer (NK) cells and Cordyceps effect on them and cancer formation. One such in-vitro study demonstrated Cordyceps adding significant enhancement of NK cell activity in normal individuals as well as leukemia stricken individuals. (Liu C, Lu S, Ji MR, Xie Y. effects of Cordyceps sinensis on in-vitro natural killer cells. Chinese J Integrated Traditional Western Med (Chung-Kuo Chung His I Chieh Ho Tsa Chih) 1992;12(5):267-269) showed that natural Cordyceps enhanced the NK cell activity of normal patients by 74% and increased the NK activity of leukemia patients by 400% and similar improvements of NK cell activities was found in big melanoma cancer (Xu RH, Peng XE, Chen GZ, Chen GL. Effects of Cordyceps sinensis on natural killer activity and colony formation of B16 melanoma. Chinese Med J 1992;105(2):97-101)
Improvements in the Immune System. The improvements in the Immune System were so impressive that Dr. Zhu at the Journal of Alternative and Complementary Medicine 1998 stated: “Because of the above profound influence on immune functions, natural Cordyceps products have been used in many clinical conditions in patients with altered immune functions.”

Anti-Aging. The First Anti-Aging Supplement Known to Mankind. It’s An Anti- Aging Fighter with clinical research proof in controlled studies which showed that elderly patients suffering from fatigue and some senility related symptoms reported. (1) Improvements in the reduction of fatigue 92%, of feeling cold 89%, in dizziness 83%, after taking Cordyceps for 30 days. Patients with respiratory/breathing problems felt physically stronger and some were able to jog for 600 ft. (Cao A, Wen Y. J Applied Traditional Chinese Med 1993;1:32-33)

Protects Against Free Radical Damage. Several studies have shown that Cordyceps sinensis protects against the damages caused by free radicals, and as such has powerful antioxidant properties (Reference 1, Chapter “Antisenescence and Oxygen-Free Radical Scavenging Activity”)

Reduces Fatigue. Several studies with animals have demonstrated that Cordyceps sinensis increases the cellular energy production and oxygen supply. A double blind, placebo controlled investigation showed a marked reduction in fatigue in elderly patients when they were given three grams of Cordyceps daily. In another study, Cordyceps sinensis improved shortness of breath and reduced fatigue in patients suffering from chronic heart failure (Reference 1, Chapter “Improvement of physical performance and quality of life”, pages 293 – 295).

Helps Discomforts from Tired Legs. Several studies have shown that Cordyceps sinensis improves the flow of blood in the body by relaxing the smooth muscles of the blood vessels allowing them to expand. Cordyceps also improves the functioning of the heart and lungs (see above). Cordyceps therefore prevents or reduces the contraction of blood vessels which interferes with the flow of blood vessels in the legs, the main cause of tired legs (Ref 2, Chapter “Effect on the Cardiovascular System”, pages 436-441).
Endurance & Stamina. Reduces muscle Soreness, Enhances Recovery, Promotes Better Oxygen efficiency,


Improves Stamina and Athletic Performance. Several studies with animals have shown that Cordyceps sinensis increases the cellular energy production and oxygen uptake (Reference 1, Chapter “Improvement of physical performance and quality of life”, pages 293 – 295). A study with mice demonstrated their improved swimming capabilities after six weeks of Cordyceps supplementation compared with a control group (Reference 3, page 260).


Combats Sexual Dysfunction. Three separate Chinese double blind and placebo-controlled studies with over 200 men with “reduced libido and other sexual problems” showed remarkably similar results. On average, 64% of the Cordyceps-users reported significant improvement at the conclusion of the experimental period compared with 24% of the placebo group. In another double blind, placebo controlled study conducted with 21 elderly women with similar complaints, 90% reported improvements of their condition following the use of Cordyceps, compared with none in the control group (Reference 1).

Hormones – Adrenal Thymus, Mitochondrial energy. Dramatic Natural Improvements are seen in endocrine hormone levels, in fertility, and in Sexual Libido for men and women.

Sexual Function. Improves Libido and Quality of Life in Men & Women, Fights infertility, Increases Sperm Count, Increases Sperm Survival.


(3) Human clinical studies involving both men and women of 189 patients with decreased libido and desire showed improvement of symptoms and desire of 66% (Wan F, Guo Y, Deng X. Chinese Traditional Patented Med 1988;9:29-31) and

(4) Another double blind study by the Institute of Materia Medica in Beijing, China showed a woman improvement of libido and desire at 86%. (JIA-SHI ZHU, M.D., Ph.D. The Journal of Alternative & Complementary Medicine, Vol.4, Number 3, 1998, pp.289-303)

(5) The most dramatic physical proof came from Fertility Study (Guo YZ. J Modern Diagnostics Therapeutics 1986;(1):60-65) involving a clinical research of 22 males showed that cordyceps supplement increased clear evidence of 33% increase in sperm count, decreased 29% incidence of sperm malformations, and a 79% increase in survival rate after 8 weeks of cordyceps supplement.

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These investigations with Cordyceps sinensis have been summarized in the following scientific articles:

