

Athletic Enhancement Herbal Program

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Though most people exercise for health, competitive athletes repeatedly push themselves to the limits of their bodies' capacities, potentially putting themselves in danger in the process. My experience working with athletes, body builders, tri-athletes, iron men and women has shown me that when the training program is severe, the immune system can be compromised because of the the constant strain on the body's resources for repair and rejuvenation.

When you "push the envelope" and really challenge your body-mind, athletically, you may experience one or all of the following: stress/strain, lack of pre-event energy, pain or stiffness, inflammation, fatigue, lowered endurance, deficient immune response from over-training, slow recovery time, nagging injuries, lack of stamina post-event "let-down," adrenal exhaustion, decreased libido, slow sexual recovery, lack of vitality, lack of concentration, lack of motivation, and loss of memory.

Therefore, providing the body with "nutritional assistance" for repair and rejuvenation is critical to shake off nagging injuries, strains, and constant soreness. And, this alone is not enough. Vitamins and minerals offer the body inert biochemical building blocks for repair, but more is needed. I have found that we need to provide our bodies with increased "life force", increased energy, to motivate, and inspire the body-mind. And that is where herbal medicine excels.

We are not the first generation of human beings to athletically push ourselves to the limit, we are not the first generation to look to increase stamina and endurance with herbs, and we are certainly not the first to look to the wisdom of the plant kingdom for increased "life force" for rejuvenation and performance. There have been 500 generations of warriors, dancers, monks and martial artists of the East spanning a 2,000 year old tradition of using plants for 'an edge', for increased endurance and stamina. It's their wisdom that I look to, to build formulas and programs. I combine this wisdom with modern scientific wisdom, and formulate with the most effective plants from all over the globe. Modern science is now demonstrating that their botanical wisdom has validity. (See references below.) Then use the program and notice the results!

Who can benefit from this Herbal Athletic Improvement Program? Any person who is pushing themselves for greater athletic performance.

Remember the suggested dosages are a starting point; feel free to increase or decrease according to your own intuition and experience. I have found that most athletes are in tune with their body's needs, and during training is the best time to listen and fine tune those messages.

SUPPLEMENTATION PROGRAM

Herbs:

1. [MEN'S STAMINA FORMULA](#): 2 capsules, three times daily.
2. [WOMEN'S STAMINA FORMULA](#): 2 capsules, three times daily.
3. [ALERT FORMULA](#): 2 capsules, three times daily.



Add **INFLAM-EASE FORMULA**: 2 capsules, three times daily, as needed for inflammation chronic sprains and swelling.

Vitamins:

1. **MULTI VITAMIN: ULTRA PREVENTIVE X**: Use as directed on bottle.
2. **Co Q10**: 1 capsule, twice daily.

MEN'S STAMINA FORMULA

This formula helps the body-mind endure. It helps to increase stamina and performance and shortens recovery time. Siberian ginseng helps to fight inflammation and improve circulation. In the 1960s, Russian factory workers, cosmonauts, deep-sea divers, and athletes found that it helped increase stamina and helped the body-mind perform better under stress. It is a nutritive tonic for the adrenals that feeds the cardiovascular, immune, digestive, nervous, and reproductive systems with regulatory secretions of cortisol. Siberian ginseng improves the flow of blood to the brain and heart, and was used by a majority of Russian athletes. It increases the amount of time muscle cells can remain in aerobic respiration during exercise, allowing one to work out longer with less muscle soreness, lactic acid build-up, or exhaustion.

Panax (Asian) ginseng contains 13 ginsenosides believed responsible for many of its remarkable anti-fatigue, anti-stress, sexually-rejuvenating, and immune-stimulating qualities. It helps to increase stamina and performance and shortens recovery time. It is a nutritive tonic for the adrenals that feeds the cardiovascular, immune, digestive, nervous, and reproductive systems with regulatory secretions of cortisol. Ginseng has been shown to quiet the mind while, at the same time, increasing energy for workout performance and general mental functioning. It is used as part of the classic Four Gentleman Chinese formula, along with poria, atractylodes, and licorice.

Panax Ginseng Over a period of several decades, German and Soviet researchers have studied the effects of Panax ginseng, standardized to 4% ginsenosides, on the performance of athletes. One study compared 200mg/day of Panax ginseng in 14 highly trained male athletes versus a placebo. The ginseng group showed an increase in their maximum oxygen uptake when compared to the placebo group as well as a statistically significant improvement in recovery time and lower serum lactate values. Other studies in various groups of young athletes have shown Panax ginseng extract to provide statistically significant improvements in performance measures such as forced vital capacity and maximum breathing capacity as compared to the placebo groups.

WOMEN'S STAMINA FORMULA

Women's Stamina helps the body-mind endure by increasing stamina and performance, shortening recovery time, and reducing energy fluctuations. It differs from the Men's Stamina formula because the quality of women's blood is often compromised when enduring stress or a heavy training schedule; it is very common for female athletes' menstrual cycles to be irregular or even stop. Rehmannia, peony, dong quai, and cnidium make up a classic Traditional Chinese Medicine (TCM) blood-building formula, Four Substance Soup. Suma, from the Brazilian rain forest, is used to strengthen the immune and hormonal systems (and is especially helpful to regulate estrogen production), adding great benefit to women under endurance stress. The Four Gentlemen is a classic TCM Qi (energy)-building formula. Ginseng, atractylodes, poria, and licorice boost energy and endurance.



ALERT FORMULA

This formula helps the body-mind endure whilst keeping the mind alert and the mood energized, all these factors are crucial for consistent work outs. Asian (Panax) ginseng adds more ginseng to the Women's and Men's Stamina Formulas. To stay "up" for workouts Ginkgo is included in the formula. The brain uses up to 20% of the body's total oxygen supply. Anything that restricts blood or oxygen to the brain compromises it's functioning. Ginkgo has powerful antioxidant and neuro-protective properties and as such increase the recovery time in-between workouts. German physicians, in one year, wrote more prescriptions for ginkgo than for any other drug. Younger subjects (tested over a 6-month period) have benefited from ginkgo with improved concentration, quickened information recall, and increased alertness. It is believed that these results are due to increased blood supply to the brain. Gotu Kola, an Ayurvedic mind-enhancing and relaxing tonic, is supported by a four-thousand-year-old reputation used in India for nourishing and calming the mind while increasing intelligence. Gotu Kola is traditionally used as a revitalizing herb and mind relaxer that promotes concentration. It strengthens nervous function and memory and is also used as a tonic. In Ayurvedic medicine, Gotu Kola has been used for thousands of years. Perhaps the best data for Gotu Kola is shown by its ability to improve symptoms of varicose veins, particularly overall discomfort, tiredness, and swelling. In human studies, Gotu Kola extract (30-180mg/day/4 weeks) leads to improvements in various measurements of vein function (foot swelling, ankle edema, and fluid leakage from the veins) compared to placebo. Gotu Kola appears to have a generally beneficial effect on connective tissues, where it may improve the structure and function of the connective tissue in the body, keeping veins stronger and also possibly reducing the symptoms of other connective-tissue disease.

References:

Ginseng

- Avakian EV, Sugimoto RB, Taguchi S, Horvath SM. Effect of Panax ginseng extract on energy metabolism during exercise in rats. *Planta Med.* 1984 Apr;50(2):151-4.
- Bruce A, Ekblom B, Nilsson I. The effect of vitamin and mineral supplements and health foods on physical endurance and performance. *Proc Nutr Soc.* 1985 Jul;44(2):283-95.
- Dowling EA, Redondo DR, Branch JD, Jones S, McNabb G, Williams MH. Effect of Eleutherococcus senticosus on submaximal and maximal exercise performance. *Med Sci Sports Exerc.* 1996 Apr;28(4):482-9.
- Grandhi A, Mujumdar AM, Patwardhan B. A comparative pharmacological investigation of Ashwagandha and Ginseng. *J Ethnopharmacol.* 1994 Dec;44(3):131- 1-5.
- Lewis WH, Zenger VE, Lynch RG. No adaptogen response of mice to ginseng and Eleutherococcus infusions. *J Ethnopharmacol.* 1983 Aug;8(2):209-14.
- Martinez B, Staba EJ. The physiological effects of Aralia, Panax and Eleutherococcus on exercised rats. *Jpn J Pharmacol.* 1984 Jun;35(2):79-85.
- Pieralisi G, Ripari P, Vecchiet L. Effects of a standardized ginseng extract combined with dimethylaminoethanol bitartrate, vitamins, minerals, and trace elements on physical performance during exercise. *Clin Ther.* 1991 May-Jun;13(3):373-82.
- Ramachandran U, Divekar HM, Grover SK, Srivastava KK. New experimental model for the evaluation of adaptogenic products. *J Ethnopharmacol.* 1990 Jul;29(3):275-81.
- Tadano T, Nakagawasai O, Niijima F, Tan-No K, Kisara K. The effects of traditional tonics on fatigue in mice differ from those of the antidepressant imipramine: a pharmacological and behavioral study. *Am J Chin Med.* 2000;28(1):97-104.
- Wang BX, Cui JC, Liu AJ, Wu SK. Studies on the anti-fatigue effect of the saponins of stems and leaves of panax ginseng (SSLG). *J Tradit Chin Med.* 1983 Jun;3(2):89-94.
- Wang LC, Lee TF. Effect of ginseng saponins on exercise performance in non-trained rats. *Planta Med.* 1998 Mar;64(2):130-3.



- Yokozawa T, Oura H. Increased hepatic adenine nucleotide content by ginseng. *J Ethnopharmacol.* 1991 Aug;34(1):79-82.
- Ziemia AW, Chmura J, Kaciuba-Uscilko H, Nazar K, Wisnik P, Gawronski W. Ginseng treatment improves psychomotor performance at rest and during graded exercise in young athletes. *Int J Sport Nutr.* 1999 Dec;9(4):371-7

Ginkgo

- Agnoli A, Fiorani P, Pistolese GR. Preliminary results in the modifications of cerebral blood flow using xenon-133 during administration of ginkgo-biloba. *Minerva Med.* 1973 Nov 7;64(79 Suppl):4166-73.
- Allard M. Treatment of the disorders of aging with Ginkgo biloba extract. From pharmacology to clinical medicine. *Presse Med.* 1986 Sep 25;15(31):1540-5.
- al-Zuhair H, Abd el-Fattah A, el-Sayed MI. The effect of meclofenoxate with ginkgo biloba extract or zinc on lipid peroxide, some free radical scavengers and the cardiovascular system of aged rats. *Pharmacol Res.* 1998 Jul;38(1):65-72.
- Christen Y. Oxidative stress and Alzheimer disease. *Am J Clin Nutr.* 2000 Feb;71(2):621S-629S.
- Deberdt W. Interaction between psychological and pharmacological treatment in cognitive impairment. *Life Sci.* 1994;55(25-26):2057-6 -66.
- Diamond BJ, Shiflett SC, Feiwei N, Matheis RJ, Noskin O, Richards JA, Schoenberger NE. Ginkgo biloba extract: mechanisms and clinical indications. *Arch Phys Med Rehabil.* 2000 May;81(5):668-78.
- Fowler JS, Wang GJ, Volkow ND, Logan J, Franceschi D, Franceschi M, MacGregor R, Shea C, Garza V, Liu N, Ding YS. Evidence that ginkgo biloba extract does not inhibit MAO A and B in living human brain. *Life Sci.* 2000 Jan 21;66(9):PL141-6.
- Garg RK, Nag D, Agrawal A. A double blind placebo controlled trial of ginkgo biloba extract in acute cerebral ischaemia. *J Assoc Physicians India.* 1995 Nov;43(11):760-3.
- Gsell W, Reichert N, Youdim MB, Riederer P. Interaction of neuroprotective substances with human brain superoxide dismutase. An in vitro study. *J Neural Transm Suppl.* 1995;45:271-9.

Gotu Kola

- Belcaro GV, Grimaldi R, Guidi G. Improvement of capillary permeability in patients with venous hypertension after treatment with TTFCA. *Angiology.* 1990 Jul;41(7):533-40.
- Cesarone MR, Laurora G, De Sanctis MT, Incandela L, Grimaldi R, Marelli C, Belcaro G. The microcirculatory activity of Centella asiatica in venous insufficiency. A double-blind study. *Minerva Cardioangiol.* 1994 Jun;42(6):299-304.
- Chen YJ, Dai YS, Chen BF, Chang A, Chen HC, Lin YC, Chang KH, Lai YL, Chung CH, Lai YJ. The effect of tetrandrine and extracts of Centella asiatica on acute radiation dermatitis in rats. *Biol Pharm Bull.* 1999 Jul;22(7):703-6.
- Gonzalo Garijo MA; Revenga Arranz F; Bobadilla Gonzalez P Allergic contact dermatitis due to Centella asiatica: a new case. *Allergol Immunopathol (Madr)* 1996 May-Jun;24(3):132-4.
- Hausen BM. Centella asiatica (Indian pennywort), an effective therapeutic but a weak sensitizer. *Contact Dermatitis.* 1993 Oct;29(4):175-9.
- Maquart FX, Chastang F, Simeon A, Birembaut P, Gillery P, Wegrowski Y. Triterpenes from Centella asiatica stimulate extracellular matrix accumulation in rat experimental wounds. *Eur J Dermatol.* 1999 Jun;9(4):289-96. *Phytother Res* 1999 Feb;13(1):50-4.
- Shukla A; Rasik AM; Dhawan BN Asiaticoside-induced elevation of antioxidant levels in healing wounds.
- Shukla A; Rasik AM; Jain GK; Shankar R; Kulshrestha DK; Dhawan BN. In vitro and in vivo wound healing activity of asiaticoside isolated from Centella asiatica. *J Ethnopharmacol* 1999 Apr;65(1):1-11.

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