

ENERGY is a formula especially created to strengthen the immune system, invigorate, provide energy and combat states of convalescence and stress.

Bee pollen and astragalus increase energy, favouring better physical resistance and balancing the body's systems. Red ginseng and Siberian ginseng are among the best energy tonics; they stimulate the entire body, helping it overcome stress, fatigue and weakness. D-Ribose helps with energy production at the cellular level and improves muscle recovery time and resistance. Licorice root has the ability to help with stress and energy since it contains substances similar to adrenocortical hormones in the body, making it ideal for those who suffer from adrenal insufficiency and exhaustion.

Ingredients: D-Ribose, bee pollen (multiflower), Siberian ginseng root extract (*Eleutherococcus senticosus*), *N*,*N*-dimethylglycine hydrochloride, licorice root extract (*Glycyrrhiza uralensis/ Glycyrrhiza glabra*), astragalus root extract (*Astragalus membranaceus*), red ginseng root and leaves extract (*Panax ginseng*), anticaking agents: magnesium salts of fatty acids and silicium dioxide, carrier: fatty acids, vegetable capsule (glacing agent: hydroxypropylmethylcellulose; purified water).

Nutritional information:	1 capsule (866 mg)
D-Ribose	300 mg
Bee pollen	250 mg
Siberian ginseng (0,8% eleutherosides)	100 mg
N,N-Dimethylglycine hydrochloride	35 mg
Licorice (10% glycyrrhizinic acid)	25 mg
Astragalus (16% polysaccharides)	20 mg
Red ginseng (20% ginsenosides)	10 mg

Contains no: Preservatives, artificial flavour or colour, milk or milk products, wheat, soy, or yeast.

Size and format: 45 vegetable capsules

Recommended daily dose:

1 capsule once or twice daily. Consult a health-care practitioner for use beyond 1 month.

Do not exceed the stated recommended daily dose.

Indications and uses:

Different studies have shown that the ingredients in ENERGY can be of help for: Stimulating the body's natural defences, increasing energy and combating fatigue. It is excellent for periods of

convalescence, feeling run-down and stress.

Cautions:

Consult a health-care practitioner prior to use if you are pregnant or breast-feeding; if you are treated with medication (antidepressants, blood thinners, or digoxin), or if you have special medical conditions (diabetes, any type of acute infection, or an autoimmune disorder). Do not use if you have high blood pressure, liver disease, or asthma; if you are treated with Warfarin; if you have allergies to bees or bees' products.

<u>D-RIBOSE</u>: It's a simple carbohydrate molecule found in all cells of the human body. Physical stress can increase the loss of nucleotides (such as ATP, ADP and AMP) in the heart and skeletal muscles. D-ribose is fundamental for the continuous production of ATP, the molecule which gives the heart and muscles the energy they need to function. Ribose helps with energy production at the cellular level and improves muscle recovery time and resistance⁽¹⁻³⁾.

<u>BEE POLLEN</u>: The active substance of bee pollen is rich in amino acids, protein, vitamins (mainly B_{12}), minerals and oligoelements. Both protein and amino acids are of great importance when it comes to strengthening and conserving the immune system and combating stress. Bee pollen increases haemoglobin, facilitating the transmission of oxygen to cells and combating the onset of tiredness^(4,5).

<u>SIBERIAN GINSENG</u>: Siberian ginseng positively affects the brain, improving concentration and motor function, specifically movement coordination. It also possesses antioxidant and immune strengthening properties. It is especially recommended in cases of excessive stress (its anti-stress effect is due to the strengthening of the adrenal gland) as well as states of convalescence ⁽⁶⁾.



<u>N,N-Dimethylglycine (DMG)</u>: Dimethylglycine (DMG) is an amino acid derived from glycine which is found in the body in very small amounts. Studies show that it benefits the body in multiple ways since it improves oxygen use and cellular respiration, reduces the formation of lactic acid, stimulates carbohydrates and lipids metabolism and improves both humoral and cell immunity. Because of these properties, DMG offers good cardiovascular support, supplying oxygen to the heart, decreasing arrhythmia and angina pectoris as well as helping reduce cholesterol and triglycerides. It is of special interest in sports because of its capacity to increase performance, resistance and muscle recovery after exercise, making it a cult substance among athletes since its use in the Olympic Games of 1964 and 1968⁽⁷⁻¹⁰⁾.

<u>ASTRAGALUS ROOT AND LICORICE ROOT</u>: Both possess an enormously positive effect on the immune system, above all on T-cells and interferon production. T-cells contribute to cell immunity and defend the body against viruses, bacteria, fungi and parasites. The presence of these cells is particularly important after cancer therapy. Thanks to their energetic and immunologic effects, these roots make up a defence against (infectious) diseases and restore the immune system when it's weakened by disease. Astragalus root also acts as a tonic for circulation⁽¹¹⁻¹³⁾.

<u>RED GINSENG</u>: With stimulant and energetic properties, red ginseng regulates blood pressure, decreasing cholesterol. It stimulates the central nervous system and suppresses the sensation of fatigue.

It activates the exchange between proteins and nucleic acid⁽¹⁴⁻¹⁵⁾.

References:

2) Teitelbaum, Jacob E., Clarence Johnson, and John St Cyr. "The use of D-ribose in chronic fatigue syndrome and fibromyalgia: a pilot study." Journal of Alternative & Complementary Medicine 12.9 (2006): 857-862.

3) Omran, Heyder, et al. "D-Ribose improves diastolic function and quality of life in congestive heart failure patients: a prospective feasibility study." European journal of heart failure 5.5 (2003): 615-619.

4) Linskens, H. F., and W. Jorde. "Pollen as food and medicine—a review." Economic Botany 51.1 (1997): 78.

5) Campos, Maria Graça R., et al. "What is the future of Bee-Pollen." Journal of ApiProduct and ApiMedical Science 2.4 (2010): 131-144

6) Eleutherococcus. Review of Natural Products. Facts and comparisons [online]. 2007. Available from Wolters Kluwer Health, Inc. Accessed April 6, 2007

7) Bishop, P. A., J. F. Smith, and B. Young. "Effects of N, N-dimethylglycine on physiological response and performance in trained runners." The Journal of sports medicine and physical fitness 27.1 (1987): 53–56.

8) Kendall, Rooer V. "Comment: N, N-Dimethylglycine and T-Carnitine as Performance Enhancer in Athletes." Annals of Pharmacotherapy 28.7-8 (1994): 973-973. 9) Kendall, Roger V., and John W. Lawson. "Recent findings on N, N-dimethylglycine (DMG): a nutrient for the new millennium." Townsend Letter for Doctors and Patients (2000): 75-85.

10) Walker, M. "Some Nutri-Clinical Applications of N, N-Dimethylglycine." Townsend Letter for Doctors (1988)

11) Shao, Bao-Mei, et al. "A study on the immune receptors for polysaccharides from the roots of Astragalus membranaceus, a Chinese medicinal herb." Biochemical and biophysical research communications 320.4 (2004): 1103-1111.

12) Park, Hyun-Jung, et al. "The effects of Astragalus membranaceus on repeated restraint stress-induced biochemical and behavioral responses." The Korean Journal of Physiology & Pharmacology 13.4 (2009): 315-319.

13) Mitscher, Lester A., et al. "Antimicrobial agents from higher plants: prenylated flavonoids and other phenols from Glycyrrhiza lepidota." Phytochemistry 22.2 (1983): 573-576

14) Dharmananda, Subhuti. The Nature of Ginseng from Traditional Use to Modern Research. ITM, 2002.

15) Borràs Vila, M^a Pilar. "Ginseng (Panax ginseng)." Natura Medicatrix: Revista médica para el estudio y difusión de las medicinas alternativas 21.2 (2003): 76-83

¹⁾ Seifert, John G., et al. "The role of ribose on oxidative stress during hypoxic exercise: a pilot study." Journal of medicinal food 12.3 (2009): 690-693.