

MultiNutriMax combines vitamins and minerals with a variety of standardized nutraceuticals. More than a multivitamin, it provides an ample spectrum of vitamins, minerals and nutrients for greater antioxidant protection.

Ingredients: Magnesium citrate, calcium citrate malate, calcium-L-ascorbate (vit. C), green tea extract (*Camellia sinensis*), citrus bioflavonoids, D-alpha-tocopheryl acid succinate (vit. E), bee pollen, anticaking agents (magnesium salts of fatty acids and silicon dioxide), D-ribose, alpha-lipoic acid, kelp (*Ascophyllum nodosum*), potassium citrate, L-proline, *N,N*-dimethylglycine, spirulina (*Spirulina platensis*), chlorella (*Chlorella vulgaris*), zinc citrate, betaine hydrochloride, D-pantothenate calcium (vit. B5), thiamin hydrochloride (vit. B1), sunflower lecithin (*Helianthus annuus*), nicotinamide (vit. B3), L-cysteine, para-aminobenzoic acid (PABA), coenzyme Q10 (ubiquinone), riboflavin (vit. B2), inositol hexanicotinate (vit. B3), pyridoxine hydrochloride (vit. B6), rutin, choline citrate, inositol, manganese citrate, HVP from rice** (from selenium chelate), boric acid, hesperidin, quercetin, cupric gluconate, D-biotin, tomato extract (*Solanum lycopersicum*), riboflavin 5'-phosphate sodium (vit. B2), pyridoxal 5'-phosphate (vit. B6), HVP from rice** (chromium chelate), calcium-L-methylfolate, methylcobalamin (vit. B12), cholecalciferol (vit. D3), flavour: piperine (black pepper extract, *Piper nigrum*), vegetable capsule (glazing agent: hydroxypropylmethylcellulose; humectant: purified water).

Nutritional information:	2 capsules (1 908 mg)
Vitamins:	
Vitamin D ₃ (from cholecalciferol)	1,425 µg (57 IU) (29%*)
Vitamin E (from D-alpha-tocopheryl acid succinate)	33,44 mg α-TE (50 IU) (279%*)
Vitamin C (calcium-L-ascorbate)	43,75 mg (55%*)
Thiamin (vit. B ₁) (from 8,25 mg thiamin hydrochloride)	7,36 mg (669%*)
Riboflavin (vit. B ₂) (from 5 mg riboflavin + 1,25 mg riboflavin 5'-phosphate, sodium)	5,94 mg (424%*)
Niacin (vit. B ₃) (from 7,5 mg nicotinamide + 5 mg inositol hexanicotinate)	12,1 mg NE (76%*)
Vitamin B ₆ (from 5 mg pyridoxine hydrochloride + 1,25 mg pyridoxal-5'-phosphate)	4,97 mg (355%*)
Folate (from calcium-L-methylfolate)	95 µg (48%*)
Vitamin B ₁₂ (methylcobalamin)	75 µg (3.000%*)
Biotin (D-biotin)	16,5 µg (33%)
Pantothenic acid (vit. B ₅) (from 11,5 mg D-pantothenate, calcium)	10,5 mg (175%*)
Minerals:	
Magnesium (from magnesium citrate)	112,5 mg (30%*)
Zinc (from zinc citrate)	3,75 mg (38%*)
Manganese (from manganese citrate)	1 mg (50%*)
Copper (from cupric gluconate)	250 µg (25%*)
Boron (from boric acid)	0,125 mg
Iodine (from kelp)	25 µg (17%*)
Chromium (HVP** chelate)	12,5 µg (31%*)
Selenium (HVP** chelate)	12,5 µg (23%*)
Calcium (citrate and ascorbate)	81 mg (10%*)
Potassium (citrate)	8,25 mg (0,4%*)

Aminoacids:

L-Proline	22,5 mg
L-Cysteine	7,5 mg

Nutraceuticals:

<i>N,N</i> -Dimethylglycine (DMG)	20 mg
Green tea (<i>Camellia sinensis</i>) (50% polyphenols) (3 mg EGCG/capsule)	60 mg
Citrus bioflavonoids (50% hesperidins)	50 mg
Bee pollen	35 mg
D-Ribose	30 mg
Alpha-Lipoic acid	25 mg
Chlorella (broken-cell) (<i>Chlorella vulgaris</i>)	18 mg
Spirulina (<i>Spirulina platensis</i>)	18 mg
Betaine (hydrochloride)	12,5 mg
Lecithin (from sunflower)	8,25 mg
para-Aminobenzoic acid (PABA)	6,25 mg
Coenzyme Q10 (ubiquinone-10)	6 mg
Rutin	5 mg
Choline (citrate)	4,15 mg
Inositol (<i>myo</i> -inositol)	4,075 mg
Hesperidin	2,5 mg
Quercetin	2,5 mg
Tomato (<i>Solanum lycopersicum</i>) (20% lycopene)	750 µg
Piperine (black pepper extract)	190 µg

*NRV: Nutrient Reference Value in %.

**HVP = hydrolyzed vegetable protein.

Indications and uses:

Different studies have shown that **MultiNutriMax** can be helpful for: Increase energy, improve digestive problems, establish appropriate intestinal pH, stimulate detoxification, improve mental alertness, protect against free radicals and improve immune function.

Cautions:

Should not be used by pregnant or lactating women, children below 18 years old, if you are already using other products containing green tea, or on empty stomach. Consult a health-care practitioner prior to use if you have a special medical condition (like diabetes or liver disorder) or if you are treated with medication (like blood-pressure medication). If you are treated with hypoglycaemic medication, consult a medical practitioner prior to use this product.

Size and format:

60 vegetable capsules

Recommended daily dose:

2 capsules daily with food.

Do not exceed stated recommended daily dose (2 caps.). Do not consume a daily amount of 800 mg of EGCG or more.

MultiNutriMax contains synergic nutritional sources to help the body recognize the vitamins and absorb them better. The antioxidants are included to block free radicals and help prevent conditions associated with aging. It ensures the nutrients needed for maintaining a healthy body.

Even a good diet isn't always enough; pollution and stress have reached epidemic proportions. To reach and maintain optimal health, we need more antioxidants such as vitamins A, C and E, carotene and selenium to help combat pollution and disease, more B vitamins to help the body better deal with stress, synthetic materials and denaturalized food, and minerals to support the body, especially to strengthen bones ^(1,4).

Synergic ingredients in MultiNutriMax:

RIBOFLAVIN: The addition of riboflavin-5'-phosphate ensures that those with certain enzyme deficiencies obtain the complete benefits of vitamin B2. This form of vitamin B2 is also known as "activated riboflavin" because of its fast-acting effect in the body. Riboflavin-5'-phosphate is quickly hydrolysed to make riboflavin after ingestion ⁽¹⁻³⁾.

PYRIDOXAL-5'-PHOSPHATE (P5P): The active coenzyme form of vitamin B6. Most multivitamin formulas only contain the inactive pyridoxine hydrochloride form. New Roots Herbal uses P5P since it doesn't need processing by the liver; because of its enzymatic form, it is immediately assimilated in the blood stream. It carries out a vital role in the function of approximately 100 enzymes that increase the speed of essential chemical reactions in the human body ^(2,3).

MAGNESIUM CITRATE: A highly soluble and bioavailable form of magnesium. It also helps the body assimilate calcium. This magnesium salt is the type that is best absorbed into the blood stream. Magnesium citrate ensures strength and hardness of bones and teeth ⁽⁴⁾.

GREEN TEA EXTRACT (50% polyphenols): A complete food source, rich in important flavonoids. These powerful antioxidants are stronger than vitamins C or E and provide significant protection against disease ^(5,6).

D-RIBOSE: 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 ⁽⁷⁻⁹⁾.

ALPHA LIPOIC ACID: Has been described on several occasions as the "universal", "ideal" or "metabolic" antioxidant. It can inhibit the development of atherosclerosis, lung disease, chronic inflammation and neurological disorders ^(10,11).

N,N-DIMETHYLGLYCINE (DMG): An antioxidant and methyl donor that supports immune response to the flu virus and salmonella, and increases physical resistance, performance and muscle recovery after exercise. It also stimulates carbohydrate and fat metabolism ^(12,13).

COENZYME Q10: Supports cardiac function, manages high blood pressure, strengthens the heart muscle and tissue, stimulates the immune system, prevents LDL cholesterol oxidation and produces cell energy ^(14,15).

CHOLINE CITRATE: Helps the body metabolize fat and cholesterol. Nutritionists have found that choline can help improve memory, especially during the golden years ⁽¹⁶⁾.

LYCOPENE: An open-chain unsaturated carotenoid that neutralizes free radicals. It reduces the risk of macular degeneration, serum lipid oxidation and diseases of the lung, bladder, cervix, prostate and skin ^(17,18).

BEE POLLEN: Improves vital conditions in the body, acting as a reconstituent. Its revitalizing properties provide the body with vigour, strength and vital force. This revitalizing strength stems from its content in protein, carbohydrates, phytosterols, vitamins B, C and E, and other antioxidants like rutin, quercetin, selenium and beta-carotene ⁽¹⁹⁾.

SPIRULINA: Spirulina is a superfood that offers more digestible protein than beef and has a surprising variety of nutritional elements: vitamins, minerals, essential fatty acids, proteins, nucleic acids (DNA and RNA), chlorophyll and an ample range of phytochemicals. It's an important source of antioxidant carotenoids, which once absorbed are transformed into vitamin A. It reinforces the immune system, recovers energy, detoxifies the body and increases vital output ⁽²⁰⁾.

CHLORELLA: Chlorophyll activates the enzymes needed for adequate nutrient assimilation and combustion, a process that in turn produces energy. It detoxifies the body, strengthens the immune system and improves digestive tract function. Rich in vitamin B12, folic acid and iron ⁽²¹⁾.

References:

- 1) Powers HJ. Current knowledge concerning optimum nutritional status of riboflavin, niacin and pyridoxine. *Proc Nutr Soc.* 1999; 58(2):435–440.
- 2) McCormick DB. Two interconnected B vitamins: riboflavin and pyridoxine. *Physiol Rev.* 1989; 69(4):1170–1198.
- 3) Madigan SM, et al. Riboflavin and vitamin B-6 intakes and status and biochemical response to riboflavin supplementation in free-living elderly people. *Am J Clin Nutr.* 1998; 68(2):389–395.
- 4) Hathcock J. Vitamins and minerals: efficacy and safety. *The American Society for Clinical Nutrition.* 1997; 66(2):427-437.
- 5) Shen CL, et al. Green tea and bone metabolism. *Nutrition research.* 2009; 29(7):437-456.
- 6) Stagg GV & Millin DJ. The nutritional and therapeutic value of a tea-a review. *J Scie Food Agric.* 1975; 26(10):1439-1459.
- 7) 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.
- 8) 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.
- 9) 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.
- 10) Packer L, et al. Alpha-lipoic acid as a biological antioxidant. *Free Radical Biology and Medicine.* 1995; 19(2):227-250.
- 11) Biewenga GP, et al. The pharmacology of the antioxidant lipoic acid. *General Pharmacology: The Vascular System.* 1997; 29(3):315-331.
- 12) Kendall R & Lawson JW. Recent Findings on N,N-Dimethylglycine (DMG): A Nutrient for the New Millennium. *Townsend Letter for Doctors and Patients.* 2000: 75-85.
- 13) Walker M. Some Nutri-Clinical Applications of N,N-Dimethylglycine. *Townsend Letter for Doctors.* 1988: 226-228.
- 14) Littarru G & Tiano L. Bioenergetic and Antioxidant Properties of Coenzyme Q10: Recent Developments. *Molecular Biotechnology.* 2007; 37(1):31–37.
- 15) Overvad K, et al. Coenzyme Q10 in health and disease. *European Journal of Clinical Nutrition.* 1999; 53(10):764-770.
- 16) Food and Nutrition Board, Institute of Medicine. Riboflavin. Dietary Reference Intakes: Thiamin, Riboflavin, Niacin, Vitamin B6, Vitamin B12, Pantothenic Acid, Biotin, and Choline. Washington D.C.: National Academy Press. 1998:87-122.
- 17) Islam MN & Gracia F. Los antioxidantes para la salud óptima. *Revista médico científica.* 2013; 26(2): 3-9.
- 18) Selvan VK, et al. Lycopene's effects on health & diseases. *Natural Medicine Journal.* 2011; 3 (3).
- 19) Yang K, et al. Characterization of chemical composition of bee pollen in China. *J Agric Food Chem.* 2013; 61(3):708-718.
- 20) Alga spirulina: la nutrición natural e inteligente. Disponible en: www.contiagatedesalud.com.
- 21) Rai UN, et al. Chromate tolerance and accumulation in *Chlorella vulgaris* L.: role of antioxidant enzymes and biochemical changes in detoxification of metals. *Bioresource Technology.* 2013; 136:604-609.