

Multivitamin/Mineral Formula for Wellness Support*

Discussion

Adequate nourishment is the foundation for overall health and wellness, and good nutrition typically translates into a stronger immune system and better health. The human body uses dietary proteins, fats, and carbohydrates, known as macronutrients, to provide the energy (calories) needed to fuel physiological functions. Vitamins and minerals, known as micronutrients, are needed in much smaller quantities. Unlike their macro counterparts, micronutrients don't give you energy, but they do participate in converting food to energy; building and repairing tissues and DNA; manufacturing neurotransmitters, hormones, and other modulators in the body; breaking down and detoxifying xenobiotics and medications; and maintaining growth, reproduction, and health.*^[1-3]

According to the Dietary Guidelines for Americans 2020-2025 (DGA) and additional data from the USDA and other agencies and organizations, the American diet lacks micronutrients.^[4-6] Mass food production, storage techniques, poor food choices, and nutrient-depleting preparation methods may be contributing to this deficit. Furthermore, the percent daily values (%DV) for micronutrients are based on the minimum amount needed to meet the basic need of a healthy person of a specific age and gender group. The %DV is not always indicative of the amount needed for optimal functioning of all individuals, especially those who are chronically ill.*^[3,5,7]

When considering where American diets fall short in nutrients, the DGA shows that low intakes of potassium, dietary fiber, calcium, and vitamin D are a public health concern.^[4] Other nutrients that have notably low intakes or require increased intake subsequent to life stage include vitamins A, B6, B12, C, E, and folate; the mineral magnesium; and choline.^[4,8,9] Data from the National Health and Nutrition Examination Surveys (NHANES) suggest a pervasive deficiency in A, C, D, E, and zinc—nutrients linked to immune health.^[6] Inadequate intake of most of these nutrients is attributable to an overall unhealthy eating pattern due to low intakes of nutrient-rich foods such as vegetables, fruits, whole grains, and dairy that contain these nutrients.^[4] In cases when food is not enough for an individual to get adequate micronutrients, multivitamin/mineral supplements are recognized as being of value to help fill dietary nutritional shortfalls.*^[2,6,7,10-12]

ActivNutrients without Iron is designed to meet the foundational nutrition needs for a variety of protocols and life stages. This formula provides:

A Balanced Profile Vitamins and minerals work cooperatively when present in sufficient amounts. However, imbalances between micronutrients can disrupt this synergistic relationship, possibly leading to instances of competitive intestinal absorption or displacement at the metabolic/cellular level, which can produce relative excesses and insufficiencies. For this reason, ActivNutrients without Iron features a balanced nutrient profile that includes calcium and magnesium, zinc and copper, vitamins C and E, bioactive folate, vitamin B12, B vitamin complex, beta-carotene, and trace elements.*

Bioavailable Nutrient Forms The micronutrients are provided in bioactive forms so that they can be adequately absorbed and utilized.

Clinical Applications

- Foundational Nutrition*
- Basic Formula for Wellness*
- Supports Antioxidant Activity*
- Supports Detoxification*
- Supports Health in Individuals with Inadequate Nutrient Intake*
- Supports Energy Production and Stress Response*

*ActivNutrients[®] without Iron features a premium, multivitamin/mineral blend of high-quality vitamin and mineral forms selected for optimum utilization. The comprehensive nutrient profile is delivered in a vegetarian capsule and supports foundational wellness; provides antioxidant activity with vitamins C and E, selenium, and beta-carotene; and supports detoxification.**

ActivNutrients without Iron contains an iron-free complement of Albion[®] patented mineral chelates and complexes. Albion is a recognized world leader in mineral amino acid chelate nutrition and manufactures highly bioavailable nutritional mineral forms that are validated by third-party research and clinical studies. ActivNutrients without Iron also contains natural vitamin E, clinically shown to be more bioavailable than synthetic dl-alpha-tocopherol, as well as mixed tocopherols to approximate how much vitamin E an individual might gain when consuming healthful foods.^[13,14] The folate source in this formulation is methyltetrahydrofolate (5-MTHF)—the most bioactive form of folate^[15]—in the form of Quatrefolic[®], which has greater stability, solubility, and bioavailability over calcium salt forms of 5-MTHF. Supplementing with bioactive 5-MTHF facilitates the bypassing of steps in folate metabolism. This may be especially beneficial to individuals with genetic variations in folate metabolism.^[16,17] Vitamins B2, B6, and B12 are provided in metabolically active forms.*

Support for Energy Production and Stress Response ActivNutrients without Iron provides generous levels of B vitamins which serve as prime coenzymes in glycolysis and oxidative phosphorylation and as cofactors in amino acid and lipid metabolism.^[18-20] Sufficient levels of the B vitamins are critical for energy production and cell growth and division, and they have many other essential roles in the body, including support for nervous system function.^[21] The balanced presence of B vitamins is essential to their cooperative functioning and excellent for individuals with stressful lifestyles.*

Antioxidant Protection Vitamins E and C, selenium, zinc, beta-carotene, and trace elements provide broad-spectrum antioxidant activity.^[22,23] Their combined presence supports their ability to regenerate each other and maintain consistent levels of antioxidant activity both intra- and extracellularly.*

Detoxification Support Xenobiotics, including environmental pollutants and medications, must undergo biotransformation into molecules that can be easily excreted from the body. Detoxification of xenobiotics is a complex process that requires micronutrients, phytonutrients, energy, and adequate antioxidant support for safe and effective completion.^[23-25] There are significant levels of bioavailable riboflavin, niacin, folate, and B12 present in ActivNutrients without Iron to support phase I detoxification.

ActivNutrients[®] without iron

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Discussion Continued

Beta-carotene, vitamin C, tocopherols, selenium, copper, zinc, and manganese are present to support tissues when reactive intermediates are formed between phase I and phase II detoxification.*

ActivNutrients without Iron offers foundational multivitamin and mineral support designed to compensate for dietary nutritional shortfalls and nourish optimal wellness. This formulation is iron-free for individuals who typically do not need to supplement their diet with iron, including most men and post-menopausal women.*

ActivNutrients[®] without iron Supplement Facts

Serving Size: 2 Capsules

	Amount Per Serving	%DV
Vitamin A (75% as natural beta-carotene and 25% as retinyl palmitate)	1,120 mcg	124%
Vitamin C (as sodium ascorbate, potassium ascorbate, zinc ascorbate, and calcium ascorbate)	125 mcg	139%
Vitamin D3 (cholecalciferol)	2.5 mcg (100 IU)	13%
Vitamin E (as d-alpha tocopheryl succinate)	67 mg	447%
Thiamin (as thiamine mononitrate)	10 mg	833%
Riboflavin (as riboflavin 5'-phosphate sodium)	10 mg	769%
Niacin (as niacinamide and niacin)	32 mg	200%
Vitamin B6 (as pyridoxal 5'-phosphate)	10 mg	588%
Folate (as (6S)-5-methyltetrahydrofolic acid, glucosamine salt) ^{S1}	340 mcg DFE	85%
Vitamin B12 (as methylcobalamin)	250 mcg	10,417%
Biotin	500 mcg	1,667%
Pantothenic Acid (as d-calcium pantothenate)	100 mg	2,000%
Choline (as choline dihydrogen citrate)	18 mg	3%
Calcium (as di-calcium malates ^{S2} , d-calcium pantothenate, and calcium ascorbate)	50 mg	4%
Iodine (as potassium iodide)	50 mcg	33%
Magnesium (as di-magnesium malate) ^{S2}	50 mcg	12%
Zinc (as zinc bisglycinate chelate) ^{S2}	6.5 mg	59%
Selenium (as selenium glycinate complex) ^{S2}	50 mcg	91%
Copper (as copper bisglycinate chelate) ^{S2}	0.5 mg	56%
Manganese (as manganese bisglycinate chelate) ^{S2}	0.25 mg	11%
Chromium (as chromium nicotinate glycinate chelate) ^{S2}	250 mcg	714%
Molybdenum (as molybdenum glycinate chelate) ^{S2}	25 mcg	56%
Potassium (as potassium glycinate complex ^{S2} and potassium ascorbate)	49.5 mg	1%
Inositol	18 mg	**
PABA (para-aminobenzoic acid)	6 mg	**
Vanadium (as vanadium nicotinate glycinate chelate) ^{S2}	375 mcg	**

** Daily value (DV) not established.

Other Ingredients: Capsule (hypromellose and water), microcrystalline cellulose, ascorbyl palmitate, silica, medium-chain triglyceride oil, and mixed tocopherols.

DIRECTIONS: Take two capsules twice daily, or as directed by your healthcare professional.

Consult your healthcare professional prior to use. Individuals taking medication should discuss potential interactions with their healthcare professional. Do not use if tamper seal is damaged.

STORAGE: Keep closed in a cool, dry place out of reach of children.

FORMULATED TO EXCLUDE: Wheat, gluten, yeast, soy, dairy products, fish, shellfish, peanuts, tree nuts, egg, ingredients derived from genetically modified organisms (GMOs), artificial colors, artificial sweeteners, and artificial preservatives.



S1. Quatrefolic is a registered trademark of Gnosis S.p.A. Produced under US Patent 7,947,662.



S2. Albion, DimaCal, Ferrochel, TRAACS and the Albion Medallion design are registered trademarks of Albion Laboratories, Inc. Malates covered by U.S. Patent 6,706,904 and patents pending



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Additional references available upon request

CoQmax™ Ubiquinol

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Bioactive Antioxidant Support*

Discussion

CoQ10 and the CoQ10 cycle play fundamental roles in the antioxidant and energy systems of the body. The ubiquinone form of CoQ10 is produced in the mitochondria, where it directly participates in energy production by accepting electrons in the electron transport chain. Through the action of an oxidoreductase enzyme, ubiquinone is rapidly converted to ubiquinol, the lipidsoluble form that supports antioxidant activity throughout the body. Conversion of ubiquinone to ubiquinol declines with age, particularly after age 40. Supplementation may help maintain normal levels of ubiquinol in the body as well as address drug-induced nutrient depletion of CoQ10. Until recently, the ubiquinol form had not been effective as a supplement because it was chemically unstable and easily oxidized. CoQmax Ubiquinol™ contains a patented, absorbable form of ubiquinol that maintains its structure and stability in the gastrointestinal environment.*

Antioxidant Status Oxidative stress is detrimental to the integrity and function of cell membranes and tissues, and ultimately to DNA itself. Antioxidant status must be maintained throughout the body in order to protect vulnerable cells. Research indicates that ubiquinol supports antioxidant activity, including the regeneration of vitamins C and E, helping to maintain normal levels of free radical activity in the body. Researchers also suggest a possible role for CoQ10 in redox control of cell signaling and gene expression.*[1]

Cholesterol Antioxidant protection is vital to maintaining the integrity of cholesterol and its role as a precursor to vitamin D, hormones, cell membranes, and brain tissue. Reactive oxygen species, including superoxide released by immune cells, cause the oxidation of cholesterol and can turn a vital biochemical precursor into a toxin.*[2]

CoQ10 Depletion Serum CoQ10 levels decline with age but are also reduced with inhibition of the HMG-CoA reductase enzyme, an enzyme essential to CoQ10 production. In the event of reduced production, or drug-induced nutrient depletion, physicians recommend supplementation with CoQ10 to help maintain normal levels in the body.[3] Related depletion of vitamin E in lymphocytes may raise further concerns about patients' vulnerability to oxidative stress.*[4]

Heart Health Research suggests that patients experienced significant support of cardiac function after receiving supplemental ubiquinol (an average 450-580 mg per day). These patients achieved more desirable levels of serum CoQ10 when switched from ubiquinone to ubiquinol.[5] Researchers suggest that ubiquinol had dramatically improved absorption. Research on the elderly also appears to indicate that supplemental CoQ10 can increase tolerance to aerobic stress in cardiac tissue.*[6]

Aging The role of CoQ10 in aging has become a topic of great interest. Supplementation with both forms of CoQ10—ubiquinone and ubiquinol—was studied in a SAMP1 mouse model. Results suggest that the ubiquinol form more effectively raised CoQ10 levels in the liver (the main target tissue), followed by kidney, heart, and brain. Ubiquinol also appeared to have a more positive effect on maintenance of healthy function than did ubiquinone.*[7,8]

Clinical Applications

- Supports Antioxidant Activity in Lymph, Blood, and Cell Membranes*
- Provides Fully Reduced Form of CoQ10*
- Neutralizes Superoxide and Other Free Radicals*
- Patented, Stabilized Form of Ubiquinol*

*Ubiquinol, the bioactive form of CoQ10, supports antioxidant activity by neutralizing free radicals and toxic superoxides. It supports cytoprotection by minimizing membrane lipid peroxidation as well. The patented, lipid-stabilized form of ubiquinol in CoQmax™ Ubiquinol is present for enhanced bioavailability. Ubiquinol, representing over 90% of total body CoQ10, is efficiently converted to the energy-generating ubiquinone form as the body needs it.**

Kaneka QH™ Stabilized ubiquinol was developed by Kaneka Corporation[9] (the world's largest manufacturer of CoQ10) and was found to be safe and bioavailable following single and multiple doses.*[10]

CoQMax™ Ubiquinol Supplement Facts

Serving Size: 2 Softgels

	Amount Per Serving	%Daily Value
Calories	15	67%
Total Fat	1.5 g	2%†
Kaneka Ubiquinol* Coenzyme Q10 (as ubiquinol)	200 mg	**

† Percent Daily Values are based on a 2,000 calorie diet.

** Daily value not established.

Other Ingredients: Medium-chain triglycerides, softgel (bovine gelatin, glycerin, purified water, and annatto in sunflower oil), ascorbyl palmitate, white beeswax, and sunflower lecithin.

DIRECTIONS: Take one to two softgels daily, or as directed by your healthcare practitioner.

Consult your healthcare practitioner prior to use. Individuals taking medications should discuss potential interactions with their healthcare practitioner. Do not use if tamper seal is damaged.

STORAGE: Keep closed in a cool, dry place out of reach of children.

DOES NOT CONTAIN: Wheat, gluten, corn, yeast, soy, dairy products, fish, shellfish, peanuts, tree nuts, egg, ingredients derived from genetically modified organisms (GMOs), artificial colors, artificial sweeteners, or artificial preservatives.



Q+, Kaneka Ubiquinol*, and the quality seal* are registered or pending trademarks of Kaneka Corp.

The use of Ascorbyl Palmitate in the formulation is covered by US patent 6,740,338.

CoQMax™ Ubiquinol 200 mg Supplement Facts

Serving Size: 1 Softgels

	Amount Per Serving	%Daily Value
Calories		10
Total Fat	1 g	1%†
Kaneka Ubiquinol® Coenzyme Q10 (as ubiquinol)	200 mg	**

† Percent Daily Values are based on a 2,000 calorie diet.

** Daily value not established.

Other Ingredients: Medium-chain triglycerides, softgel (bovine gelatin, glycerin, purified water, and annatto in sunflower oil), ascorbyl palmitate, sunflower lecithin, and white beeswax.

DIRECTIONS: Take one softgel daily, or as directed by your healthcare practitioner.

Consult your healthcare practitioner prior to use. Individuals taking medications should discuss potential interactions with their healthcare practitioner. Do not use if tamper seal is damaged.

STORAGE: Keep closed in a cool, dry place out of reach of children.

DOES NOT CONTAIN: Wheat, gluten, corn, yeast, soy, dairy products, fish, shellfish, peanuts, tree nuts, egg, ingredients derived from genetically modified organisms (GMOs), artificial colors, artificial sweeteners, or artificial preservatives.



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Additional references available upon request

Extended-Release Arginine Alpha-Ketoglutarate

Discussion

N.O.max™ ER elevates the plasma level of L-arginine, a “semiessential” amino acid and important nutrient whose remarkable properties are validated by a Nobel Prize in medicine (1998). More than 60,000 clinical studies have brought L-arginine to the forefront of modern medicine as a nutrient that offers a wide range of health benefits. N.O.max ER provides L-arginine in extended-release form to prolong its bioavailability.*

L-arginine is considered a direct nitric oxide (NO) precursor as it is the substrate of nitric oxide-generating enzymes called nitric oxide synthetases (NOS). Nitric oxide is an endogenously produced cellular signaling molecule involved in a variety of endothelium-mediated actions in the vasculature.[1] The plasma concentration of L-arginine might be a rate-limiting factor for NO production. Research in humans suggests that oral supplementation with L-arginine may increase smooth muscle relaxation, inhibit platelet aggregation, and inhibit expression of adhesion molecules and endothelin-1.[2] L-arginine drives the biosynthesis of NO in tissues, including the vascular endothelium and skeletal muscle.[3] Acting via the cyclic guanosine monophosphate (cGMP) intracellular signaling system, NO increases blood flow without increasing blood pressure.[4] In short, NO causes vasodilation by inhibiting smooth muscle contraction. Increased blood flow results in increased nutrient uptake and glucose utilization in muscle, especially during exercise.*[4]

In addition to the cardiovascular/circulatory benefits, L-arginine is involved in ammonia detoxification, hormone secretion, and immune health. It supports the synthesis of protein as well.[5] The generation of nitric oxide may act as a molecular switch that activates PGC-1 α , the master regulator of mitochondrial biogenesis and energy metabolism.[6] Many athletes have safely and effectively used L-arginine to increase “muscle pump” during a workout and for several hours afterward. Additional desired benefits include an increase in overall workout capacity (muscular endurance) and an increase in post-exercise recovery.*[7]

ACTINOS2® is a mixture of both high- and low-molecular weight fractions of proteins and peptides derived from whey through patent-pending technology. Research suggests that these fractions are NOS activators that boost NO production by factors unrelated to arginine, calcium, or bradykinin. ACTINOS2 may enhance transcription of the NOS gene and supports its role in reducing the negative feedback mechanism for NO production. The synergistic activity of the size-based fractions of ACTINOS2 has been shown to increase NO production in human endothelial cells in vitro from 9.5 to 12.7 times compared to a control.*[8]

N.O.max ER is manufactured in the United States using the highest purity (>98.0%) of L-arginine alpha-ketoglutarate that is commercially available. This patented formulation is specially designed to deliver L-arginine alpha-ketoglutarate in a controlled manner over a period of approximately 4-6 hours.*

Clinical Applications

- Supports Circulatory Health*
- Supports Cardiovascular Health*
- Optimizes Muscle Synthesis, Muscle Function, and Adaptation to Exercise*

*N.O.max™ ER represents a patented, extended-release nitric oxide precursor. Scientists now refer to nitric oxide (NO) as the “foundation” of cardiovascular health. This tiny molecule is a vasodilator responsible for controlling blood flow to the entire body, which may help support healthy blood flow pressure and promote the health of the endothelium—the inside of blood vessels. With age comes diminished NO levels; that’s why since 1998, when three scientists won the Nobel Prize for their discovery of NO, researchers have been working to harness its heart-healthy activity. Today, with the application of XYMOGEN’s extended-release technology, that activity has been realized with N.O.max ER.**

Extended-Release Arginine Alpha-Ketoglutarate

N.O.max™ ER Supplement Facts

Serving Size: 3 Capsules

	Amount Per Serving	%Daily Value
Arginine alpha-ketoglutarate	1.98 g	**
Whey Peptide Fraction‡,§1	150 mg	**

** Daily value not established.

Other Ingredients: Cellulose and cellulose derivatives, stearic acid, magnesium stearate, silica, and glycerin

Contains: Milk

DIRECTIONS: Take three caplets twice per day: 3 caplets 30 minutes before breakfast and 3 caplets again 30 minutes before lunch with 8 ounces of water.

Consult your healthcare professional prior to use, especially if you have or suspect you have a medical condition, including diabetes or cold sores; if you take prescription drugs or are allergic to any ingredient; or if you are pregnant or lactating. Keep out of reach of children. This product is not intended for use by individuals under 18 years of age.

STORAGE: Keep closed in a cool, dry place out of reach of children.

DOES NOT CONTAIN: Wheat, gluten, corn, yeast, soy, fish, shellfish, peanuts, tree nuts, egg, ingredients derived from genetically modified organisms (GMOs), artificial colors, artificial sweeteners, and artificial preservatives.

‡Controlled Delivery Formulation

PROTECTED BY U.S. PATENTS: 6,905,707 and 7,579,020.

UP-REGULATED WITH:
ACTINOS²
NOS-Enhancing Peptide Fraction
§1. ACTINOS² is a registered trademark of Glanbia plc.

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Additional references available upon request

Supports Vitality, Virility, and Vigor†

Discussion

Five percent of males aged 40-50 years and as many as 70% of males over 70 years are confronted with “hypogonadism.” Low testosterone levels have been associated with a decline in libido, erectile dysfunction, lack of energy, less physical strength and endurance, loss of height, decreased enjoyment in life, low mood, feeling grumpy, falling asleep after dinner, and decreased work performance.[1,2] Some studies suggest that low testosterone may also contribute to cognitive decline.†[3,4]

Although sometimes thought of as a male hormone, a review study of the clinical significance of testosterone has shown its positive association with sexual function and a healthy libido in women.†[5]

Most circulating testosterone is bound to sex hormone-binding globulin (SHBG). Only the lesser amount of testosterone not bound to SHBG is considered bioavailable.[6] TestoPlex Plus features a blend of ingredients designed to support healthy androgen biosynthesis, which includes modulating the influence of SHBG.†

Shilajit is a naturally occurring, mineral-rich phytocomplex with many bioactive components, including fulvic acids. It comprises rock humus, rock minerals, and organic substances that have been compressed by layers of rock mixed with marine organisms and microbial metabolites.[7] Shilajit has a rich history of use in Indian ayurvedic and siddha medicine as a health and wellness optimizer. It is known as a rasayana because of its rejuvenating qualities, which include heightening physical performance and relieving fatigue.†[8]

According to an article in the American Journal of Clinical Nutrition, weightlifters use shilajit to promote better strength, recovery, and muscular hypertrophy and also to combat physical stress, but human data on these uses are lacking.†[9]

Animal and human studies have documented the safety of shilajit. The oral median lethal dose (LD50) is > 200 grams, and chronic use at doses of 0.2-1.0 g/kg body weight appear to be safe.†[7]

Upwards of 50 studies on shilajit suggest that it has a positive effect on testosterone levels and adaptogenic, antioxidant, cytokine-balancing, immunomodulatory, and antidiabetic activities.[10] Fulvic acid, the main bioactive component in shilajit, blocks tau proteins self-aggregation suggesting it may have a role in supporting cognition.†[11]

PrimaVie® shilajit at a dose of 250 mg/capsule consumed twice daily after major meals for 90 days was evaluated in 75 healthy male volunteers aged 45-55 for its testosterone secretion efficacy and its stimulation effects. This double-blind placebo-controlled study revealed that PrimaVie shilajit, when compared to placebo, significantly ($P < 0.05$) increased total testosterone, free testosterone, and dehydroepiandrosterone (DHEA). The levels of testosterone synthesis-supportive gonadotropic hormones were wellmaintained.†[7]

Another study further demonstrated the safety and also the spermatogenic nature of shilajit. Infertile males ($n = 35$) took 100 mg of PrimaVie shilajit twice daily after major meals for 90 days. At completion, 28 of the subjects had significant ($P < 0.001$) improvement compared to baseline values of factors related to fertility. Furthermore, at the study's completion, the semen's content of malondialdehyde (MDA), a marker for oxidative stress, was reduced. High-performance liquid chromatography (HPLC) revealed that the semen had constituents of PrimaVie shilajit. Compared to baseline, serum levels of testosterone rose 23.5% ($P < 0.001$) and follicle-stimulating hormone (FSH) rose 9.4% ($P < 0.05$). Liver and kidney profiles were unchanged.†[12]

In addition, the safe use of PrimaVie shilajit in either gender was demonstrated in an experimental study on skeletal muscle adaptation in human subjects ($n = 16$), ages 21-70 years. Participants were given 250 mg of PrimaVie with no adverse effects during the 12-week study period.†[13]

Clinical Applications

- Supports Healthy Testosterone Levels†
- Supports Healthy Libido and Performance†
- Supports Overall Vitality†
- Optimizes Physical Strength and Endurance†
- Supports Cognition†

TestoPlex™ Plus features two safe, clinically-tested, standardized, and patented ingredients designed to support vitality and general physical and mental well-being in men and women. Numerous studies have demonstrated that PrimaVie® shilajit and LJ100® Eurycoma longifolia support healthy androgen biosynthesis, which includes modulating the influence of sex hormone-binding globulin.†

Eurycoma longifolia root (Malaysian ginseng) is considered a tonic and an adaptogen for supporting healthy libido, energy, sports performance, and weight management by promoting healthy testosterone levels and freeing testosterone from SHBG. Eurypeptides activate the CYP-17 enzyme, which plays a key role in production of DHEA, progesterone, testosterone, and pheromone via the metabolism of pregnenolone. A systemic review and meta-analysis of randomized controlled studies ($n = 139$) concluded that the herbal extract “may have clinical effect on erectile function. However, more efficacy trials are warranted to further support current evidence.”†[14]

LJ100® Eurycoma longifolia is a root extract whose safety and efficacy is backed by animal and at least 12 human clinical studies. Compound isolation, a patented waterextraction process, and technologically advanced manufacturing methods ensure the purity of this ingredient and allow for the capture of the potent, biologically active eurypeptides.†

A randomized, placebo-controlled, two-month study ($n = 20$) focused on the outcomes of LJ100 on various parameters in male volunteers aged 38-58 who had varied health conditions and consumed either a placebo or 200, 400, or 600 mg of LJ100. The herb-consuming volunteers showed improvement in sexual desire and performance. Also, testosterone and DHEA levels were high-normal when compared to baseline; HDL cholesterol improved; those who had type-2 diabetes showed improvement in blood glucose levels; and insulin-like growth factors (IGF-1) were high-normal (lower levels of IGF-1 are correlated with higher body fat). Compared to those on placebo, the majority of the volunteers on LJ100 had high-normal levels of thyroxine suggesting higher metabolism. Blood and lipid panels and liver and renal function profiles, electrolytes, and various tumor markers including prostate-specific antigen (PSA) were within normal range.†[15]

The benefits of LJ100 are not limited to males or particular age groups. Two studies, one in middle-aged and one in senior males and females, demonstrated the herb's promotion of healthy fitness, vitality, and vigor concomitant with an increase in free testosterone and a decline in SHBG.†[16,17]

In summary, it appears that the combination of these two herbs supports healthy testosterone levels in men and women which, in turn, supports vitality, virility, and vigor.†

Supports Vitality, Virility, and Vigor†

TestoPlex™ Plus Supplement Facts

Serving Size: 2 Capsules

	Amount Per Serving	%Daily Value
Shilajit (10.3% Dibenzo- <i>d</i> pyrones (DBPs) & Dibenzo- <i>d</i> pyrone Chromoproteins (DCPs)) (50% fulvic acids with DBP Core Nucleus)S1	500 mg	**
Eurycoma longifolia Extract (22% bioactive eurypeptides, 40% glyco saponins)(root)S2	200 mg	**

** Daily value not established.

Other Ingredients: Capsule (hypromellose and water), microcrystalline cellulose, dicalcium phosphate dihydrate, ascorbyl palmitate, and silica.

DIRECTIONS: Take two capsules in the morning, or as directed by your healthcare professional.

Consult your healthcare professional prior to use. Individuals taking medication should discuss potential interactions with their healthcare professional. Do not use if tamper seal is damaged.

STORAGE: Keep closed in a cool, dry place out of reach of children.

DOES NOT CONTAIN: Wheat, gluten, corn, yeast, soy, animal and dairy products, fish, shellfish, peanuts, tree nuts, egg, ingredients derived from genetically modified organisms (GMOs), artificial colors, artificial sweeteners, and artificial preservatives.

S1. PrimaVie® is a registered trademark of Natreon, Inc. and is protected under US patents 6,969,612 and 6,440,712.
S2. LJ100® is a registered trademark of HP Ingredients. Bioactive Fraction of Eurycoma Longifolia is protected by Worldwide patent WO/02/17946 A1 and US patent 7,132,117.



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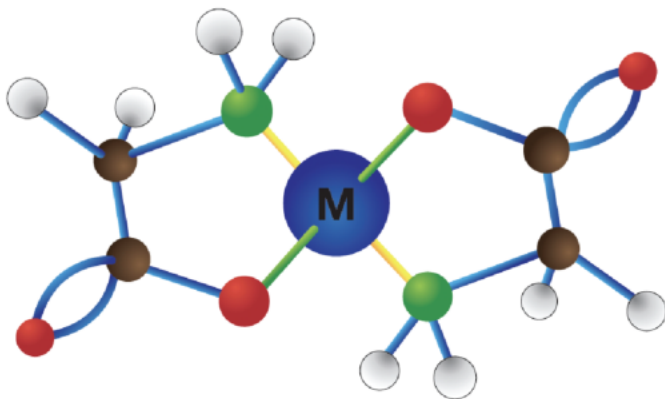
Zinc Glycinate

Proprietary Zinc Formula

Discussion

Zinc is an essential trace mineral and serves important roles in the body. More than 300 enzymes depend on zinc for their normal activities in cellular metabolism. As a cofactor, zinc participates in carbohydrate and protein metabolism as well as copper-zinc superoxide dismutase (CuZnSOD) antioxidant activity. Zinc's role in supporting immune function includes regulating T lymphocytes, natural killer cells, CD4 cells, and interleukin II.[1] A review of the research suggests that "zinc supplementation can significantly reduce the morbidity and mortality of apparently well-nourished children and shorten the time to recovery from acute [health problems]."[2]

Zinc's pivotal role in protein metabolism translates into a pivotal role in wound healing, DNA synthesis, normal inflammatory response, and normal growth and development during childhood, adolescence, and pregnancy.[3] Zinc helps maintain the structural integrity of cell membranes; it assists them in their normal function and protects them from oxidative damage.[4] Research in human subjects of various ages suggests that zinc supplementation decreases oxidative stress markers, supports a normal response to inflammation, and appears to be a factor in balancing TH1 and TH2 immune cell activity.[5,6] Skin and mucous membranes also depend on zinc for their maintenance and integrity.*[3,7]



Zinc Bisglycinate Courtesy of Albion Laboratories, Inc.

Zinc and vitamin A have a fundamental relationship as zinc is required for synthesis of retinol-binding protein—the protein that transports vitamin A in the blood. Zinc is also essential to the production of an enzyme that converts vitamin A to one of its active forms, and this helps support vitamin A's vital role in night vision.[4] Zinc supports healthy vision in general, especially as we age. [8] Zinc's role in sensory perception extends not only to vision but also to normal taste and smell acuity.*[1,4,5,9]

Zinc is highly concentrated in the liver, pancreas, kidneys, bone, muscles, eyes, prostate gland, sperm, skin, hair, and nails.[1] The mineral is required for sperm maturation and fetal development. The endocrine system relies on adequate zinc status to assist in the regulation of insulin activity and the conversion of thyroxine (T4) to the active thyroid hormone triiodothyronine (T3).[1] Zinc's regulatory role extends to gene expression, cell signaling, and nerve impulse transmission, as well as normal apoptosis.*[4]

Clinical Applications

- Supports Enzymatic Reactions and Protein Metabolism*
- Promotes Immune and Reproductive Health*
- Supports Antioxidant Activity*
- Plays a Role in Sensory Perception*

*Zinc Glycinate is a fully reacted, proprietary TRAACS amino acid chelate formulated for enhanced absorption. As an essential mineral, zinc serves catalytic, structural, and regulatory functions in the body. Zinc ultimately supports immune and neurological function, growth, taste acuity, nutrient metabolism, and reproductive health.**

and absorption is essential.[3] Phytates—elements found in plantbased, high-fiber foods—can bind minerals (including zinc) and inhibit their absorption. Therefore, the bioavailability of dietary zinc may be compromised.[8] Other minerals, including iron, calcium, and copper, can interfere with zinc absorption, further affecting zinc nutriture.[4] Gastrointestinal and urinary zinc losses should be considered as well. Assessment of overall zinc status must take into account not only intake but also absorption and retention. Zinc Glycinate—an Albion® TRAACS amino acid chelate—is a high-potency source of zinc formulated for enhanced absorption. In this form, zinc is coupled with two glycine molecules to facilitate its absorption across the intestinal wall and reduce interference from phytates and competing minerals.*[10]

Zinc Glycinate

the girlfriend doctor
DR. ANNA CABECA

Proprietary Zinc Formula

Zinc Glycinate Supplement Facts

Serving Size: 1 Capsule

	Amount Per Serving	%Daily Value
Zinc (as TRAACS zinc bisglycinate chelate)	20 mg	**

Other Ingredients: Microcrystalline cellulose, HPMC (capsule), stearic acid, magnesium stearate, and silica.

DIRECTIONS: Take one capsule daily, or as directed by your healthcare practitioner.

Consult your healthcare professional prior to use. Individuals taking medication should discuss potential interactions with their healthcare professional. Do not use if tamper seal is damaged.

STORAGE: Keep closed in a cool, dry place out of reach of children.

DOES NOT CONTAIN: Wheat, gluten, corn, yeast, soy, animal or dairy products, fish, shellfish, peanuts, tree nuts, egg, ingredients derived from genetically modified organisms (GMOs), artificial colors, artificial sweeteners, or artificial preservatives.



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