Hypoallergenic Multivitamin/Mineral Formula for Wellness Support*



ActivNutrients is available in 120 and 240 capsules
ActivNutrients without Iron is available in 60, 120, and 240 capsules
ActivNutrients without Copper & Iron is available in 120 capsules

Discussion

Good nutrition is a basis for wellness, and good nutrition usually translates into a stronger immune system and better health. An important aspect of good nutrition is micronutrition (vitamins and minerals).[1-4] Micronutrients 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. According to research by the USDA and other organizations, the American diet is lacking micronutrients. [5-8] In fact, nine out of 10 Americans are missing key micronutrients.[7] Mass food production, storage techniques, poor food choices, and nutrient-depleting preparation methods may contribute to inadequacies. The bottom line is that children and adults are not consuming enough nutrient-rich foods to meet all their most basic vitamin and mineral needs.[6] What's more, some scientists feel that the recommended intakes (e.g., %DV, DRIs, EARs, RDAs) may not meet the requirements of all individuals, especially the chronically ill.*

There are numerous reasons to select ActivNutrients formulas:

Balanced Profile Vitamins and minerals work synergistically and cooperatively when present in proper 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 formulas feature 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.*

Bioavailability The micronutrients are provided in bioavailable forms so that they can be better absorbed and utilized. ActivNutrients formulas contain a full complement of Albion® patented mineral chelates and complexes. Albion is a recognized world leader in mineral amino acid chelate nutrition and manufactures highly

Clinical Applications

- » Foundation Nutrition for a Variety of Protocols*
- » Basic "Insurance" Formulas for Wellness*
- » Supports Antioxidant Protection*
- » Supports Detoxification*
- » Supports Health in Individuals with Poor Nutrient Intake*
- » Supports Individuals with Stressful Lifestyles*

This high-quality, hypoallergenic, multivitamin/mineral blend includes activated vitamins; folate as Quatrefolic® (5-MTHF) for optimal utilization; and patented Albion® TRAACS® chelated mineral complexes in vegetarian capsules. The comprehensive nutrient profile in **ActivNutrients®** supports foundational wellness; antioxidant activity with vitamins C and E, selenium, and beta-carotene; and phase I detoxification.*

bioavailable nutritional mineral forms that are validated by third-party research and clinical studies. Not only do these formulas contain natural vitamin E, which has been proven to be up to 100% more bioavailable than synthetic dl-alpha-tocopherol, but it is also provides mixed tocopherols to more closely approximate how one might consume vitamin E in healthful foods. [9,10] Folate is provided as 5-methyltetrahydrofolate (5-MTHF)—the most bioactive form of folate. [11] ActivNutrients formulas feature 5-MTHF as Quatrefolic®, which is proven to have greater stability, solubility, and bioavailability over calcium salt forms of 5-MTHF. Vitamin B12 is provided as MecobalActive™. This patented form of methylcobalamin has very high purity; no harmful solvents are used in its production. [12] Vitamins B2 and B6 are also provided in activated forms.*

Energy Production ActivNutrients formulas provide generous levels of B vitamins, which serve as prime coenzymes in glycolysis and oxidative phosphorylation and as cofactors in amino acid and lipid metabolism. The balanced presence of B vitamins is essential to their cooperative functioning and excellent for those with stressful lifestyles.*

Antioxidant Protection Vitamins E and C, selenium, zinc, beta carotene, and trace elements provide broad-spectrum antioxidant activity. 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. There are significant levels of bioavailable riboflavin, niacin, folate, and B12 present in these formulas to support phase I detoxification. Beta carotene, vitamin C, tocopherols, selenium, copper, zinc, and manganese are present to protect tissues from reactive intermediates formed between phase I and phase II detoxification.*

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|---|--------------------|---------|
| | 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 mg | 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 malate $^{\rm S2},$ d-calcium pantothenate, and calcium ascorbate) | 50 mg | 4% |
| Iron (as ferrous bisglycinate chelate) ^{S2} | 2.5 mg | 14% |
| lodine (as potassium iodide) | 50 mcg | 33% |
| Magnesium (as di-magnesium malate) ^{s2} | 50 mg | 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 (<i>para</i> -aminobenzoic acid) | 6 mg | ** |
| Vanadium (as vanadium nicotinate glycinate chelate) ^{\$2} | 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.

WARNING: Accidental overdose of iron-containing products is a leading cause of fatal poisoning in children under 6. Keep this product out of reach of children. In case of accidental overdose, call a doctor or poison control center immediately.

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.

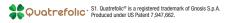
Also Available in:

ActivNutrients® without Copper & Iron
Activated Vitamin Cofactors in a Hypoallergenic
Proprietary Blend with Patented Mineral Chelates

The same great formula as ActivNutrients, but without copper or iron. Folate is provided as a blend of calcium folinate and Quatrefolic.

ActivNutrients® without Iron

Hypoallergenic Multivitamin/Mineral Formula for Wellness Support*
The same great formula as ActivNutrients, but without iron.



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



- Ames BN. A role for supplements in optimizing health: the metabolic tune-up. Arch Biochem Biophys. 2004 Mar 1;423(1):227-34. [PMID: 14989256]
- Toffanello ED, Inelmen EM, Minicuci N, et al. Ten-year trends in vitamin intake in free-living healthy elderly people: the risk of subclinical malnutrition. J Nutr Health Aging. 2011 Feb;15(2):99-103. [PMID: 21365161]
- Block G, Jensen CD, Norkus EP, et al. Usage patterns, health, and nutritional status of long-term multiple dietary supplement users: a cross-sectional study. Nutr J. 2007 Oct 24;6:30. [PMID: 17958896]
- **4.** Fletcher RH, Fairfield KM. Vitamins for chronic disease prevention in adults: clinical applications. *JAMA*. 2002 Jun 19;287(23):3127-29. [PMID: 12069676]
- 5. Moshfegh AJ, Goldman JD, Ahuja JK, et al. U.S. Department of Agriculture, Agricultural Research Service. What we eat in America, Nhanes 2005-2006. Usual nutrient intakes from food and water compared to 1997 dietary reference intakes for vitamin D, calcium, phosphorus, and magnesium. http://www.ars. usda.gov/SP2UserFiles/Place/12355000/pdf/0506/usual_nutrient_intake_vitD_ ca_phos_mg_2005-06.pdf Published July 2009. Accessed February 22, 2011.
- What we eat in America. WIN Notes. Weight Control Information Network. http://win.niddk.nih.gov/notes/winter99/artcl6.htm. Accessed July 22, 2011.
- Milk Processor Education Program. What America's Missing: A 2011 Report on the Nation's Nutrient Gap. Why Milk.com. http://www.whymilk.com/pdfs/ what_americas_missing.pdf. Accessed August 3, 2011.
- Alexy U, Libuda L, Mersmann S, Kersting M. Convenience foods in children's diet and association with dietary quality and body weight status. Eur J Clin Nutr. 2011 Feb:65(2):160-66. [PMID: 21139631]
- Kiyose C, Muramatsu R, Kameyama Y, et al. Biodiscrimination of alphatocopherol stereoisomers in humans after oral administration. Am J Clin Nutr. 1997 Mar;65(3):785-89. [PMID: 9062530]
- Burton GW, Traber MG, Acuff RV, et al. Human plasma and tissue alphatocopherol concentrations in response to supplementation with deuterated natural and synthetic vitamin E. Am J Clin Nutr. 1998 Apr;67(4):669-84. [PMID: 9537614]
- Venn BJ, Green TJ, Moser R, et al. Comparison of the effect of low-dose supplementation with L-5-methyltetrahydrofolate or folic acid on plasma homocysteine: a randomized placebo-controlled study. Am J Clin Nutr. 2003 Mar;77(3):658-62. [PMID: 12600857]
- Sallares J, Petschen I, Camps X, inventors; Ferrar Internacional, S.A., applicant. Process for the production of methylcobalamin. International publication number [English] WO 2006100059 A1. September 28, 2006.

Additional references available upon request