

PhytoMulti®

“The Smart Multi” to Activate Health Potential & Defy Aging*

There's a new revolution in helping patients eat better and supplement smarter. Epidemiologic studies have found that high consumption of plant-based foods—rich in beneficial phytonutrients, as well as essential vitamins and minerals—is associated with better health and longevity.¹⁻³ But 76% of Americans don't meet recommended daily fruit intake and 87% don't meet recommended daily vegetable intake.⁴ Plus, over 40% of US adults have inadequate intakes of magnesium and vitamins A, C, D, and E.⁵ A traditional multivitamin/mineral supplement may not provide preferred daily support that complements smart eating habits and promotes wellness and healthy aging. Now there's a growing recognition of the value of dietary phytonutrients—which help support antioxidant protection, DNA stability, and cellular communication that in turn influence metabolic pathways and body systems.⁶⁻¹⁰ And consuming an array of phytonutrients from a variety of fruits and vegetables may increase dietary value due to collective influences on health.¹¹ Phytonutrients can also be provided in supplements when fruit/vegetable intake is less than optimal.*

Form: 60 Tablets, 120 Tablets

Serving size: 2 Tablets

Vitamin A [50% as mixed carotenoids and 50% as retinyl acetate]	10,000 IU
Vitamin C (as ascorbic acid and ascorbyl palmitate)	120 mg
Vitamin D ₃ (as cholecalciferol)	1000 IU
Vitamin E (as d-alpha tocopheryl succinate)	100 IU
Vitamin K (as phytonadione)	120 mcg
Thiamin (as thiamin mononitrate)	25 mg
Riboflavin	15 mg
Niacin (as niacinamide and niacin)	50 mg
Vitamin B ₆ (as pyridoxine HCl)	25 mg
Folate (as calcium L-5-methyltetrahydrofolate)	800 mcg
Vitamin B ₁₂ (as methylcobalamin)	200 mcg
Biotin	500 mcg
Pantothenic Acid (as D-calcium pantothenate)	75 mg
Iodine (as potassium iodide)	150 mcg
Magnesium (as magnesium citrate)	40 mg
Zinc (as zinc citrate)	15 mg
Selenium (as selenium aspartate)	100 mcg
Copper (as copper citrate)	1 mg
Manganese (as manganese citrate)	0.5 mg
Chromium (as chromium polynicotinate)	200 mcg
Molybdenum (as molybdenum aspartate complex)	50 mcg

* These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.



Why PhytoMulti?

- Intelligent blend of a highly concentrated, full spectrum of phytonutrients with science-based efficacy*
- Demonstrated phytonutrient potential for antioxidant protection to defend cellular health and DNA stability—verified by sophisticated in vitro ORAC_{FN} and Comet assays*
- Optimized with 20+ essential vitamins & minerals for multidimensional health support*
- Available in tablets (with or without iron), capsules, and chewables

Choline (as choline bitartrate)	25 mg
Inositol	25 mg
Lycopene	6 mg
Zeaxanthin	2 mg
Lutein	6 mg
Resveratrol (from <i>Polygonum cuspidatum</i> root extract)	10 mg
Proprietary Phytonutrient Blend of:	400 mg
Citrus bioflavonoid complex [standardized to 45% hesperidin], green coffee bean extract [standardized to 45% chlorogenic acid], pomegranate whole fruit extract [standardized to 40% ellagic acid], grape seed extract [standardized to 90% polyphenols], blueberry (<i>Vaccinium</i> spp.) fruit extract [standardized to 20% total polyphenols, and 5% anthocyanins], green tea leaf extract [standardized to 60% catechins and 40% EGCG], bitter melon fruit extract [standardized to 5% bitter principles], prune skin extract [standardized to 50% polyphenols], watercress aerial parts 4:1 extract, Chinese cinnamon (<i>Cinnamomum cassia</i>) bark powder, Indian gum Arabic tree bark and heartwood extract [standardized to 6% catechins], rosemary extract [standardized to 11% min phenolic diterpenes and 7.6% min sum of carnosol+carnosic acid], artichoke leaf extract [containing cynarin and chlorogenic acid]	

Other Ingredients: Microcrystalline cellulose, cellulose, croscarmellose sodium, silica, stearic acid (vegetable), and coating (hypromellose, medium chain triglycerides, hydroxypropylcellulose, and sodium copper chlorophyllin).

Directions: Take one to two tablets once daily with food or as directed by your healthcare practitioner.

This product is non-GMO and gluten free.

Warning: Do not use if pregnant or nursing. Excess vitamin A may be toxic and may increase the risk of birth defects. Pregnant women and women who may become pregnant should not exceed 10,000 IU of preformed vitamin A (retinyl acetate) per day.

Caution: If you are taking medication or other nutritional supplements, consult your healthcare practitioner before use. Keep out of the reach of children.

Scientific Rationale

PhytoMulti represents an entirely new class of “smart” daily nutritional supplementation that goes beyond basic wellness support to recharge, nourish, and defend cells like no other foundation nutrition formula—activating health potential like no other supplement.*

It’s specifically formulated to target cellular health with a novel combination of essential vitamins and minerals, plus a proprietary blend of concentrated phytonutrients with scientifically tested biological activity designed to protect cells and maintain DNA stability.*

In an experimental research study conducted at the Functional Medicine Research Center® (FMRC, the clinical research arm of Metagenics, Inc.), PhytoMulti’s proprietary phytonutrient blend exhibits high antioxidant capacity that supports DNA stability. As demonstrated in the Comet assay, the phytonutrient blend reduces DNA damage at the individual cell level following the exposure to oxidative damage (Figure 1).*

In a 4-week open-label study conducted at the FMRC, the effects of 2 daily PhytoMulti tablets on multiple biomarkers were evaluated in 15 healthy adults:***

- PhytoMulti was well absorbed, as indicated by the significant increase in plasma levels of carotenoids, folate, and vitamin B₁₂* (Figure 2)
- Serum levels of oxidized LDL (oxLDL), plasminogen activator inhibitor-1 (PAI-1), and myeloperoxidase (MPO)—markers of oxidative stress, cardiovascular health, and overall health—were significantly reduced* (Figure 3)

Figure 1. Demonstrated Antioxidant Capacity to Support DNA Stability*

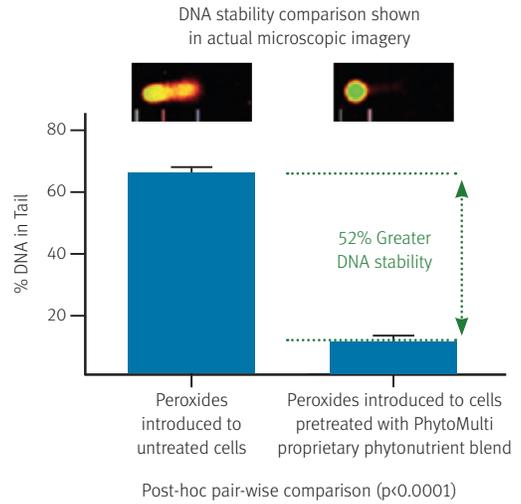
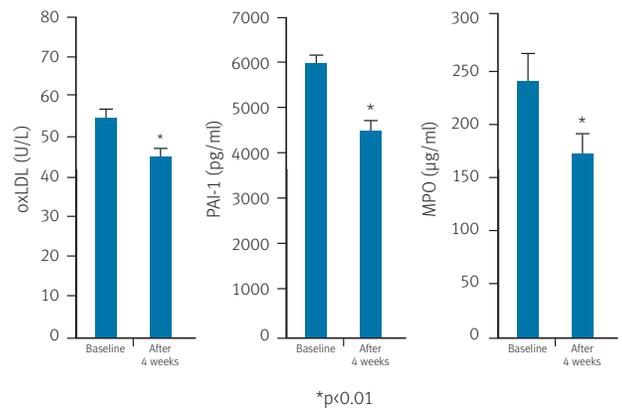


Figure 2. Significant Increase in Carotenoids, Folate & B₁₂

Variable	Baseline	After 4 weeks	P value
Carotenoids (µg/dl)			
cis-lycopene	6.83 ± 1.04	10.81 ± 1.31	<0.001
trans-lycopene	8.71 ± 1.07	11.73 ± 1.24	<0.01
lutein	13.78 ± 1.97	16.32 ± 2.33	<0.05
zeaxanthin	4.56 ± 0.66	16.93 ± 1.66	<0.001
α-carotene	5.48 ± 1.17	7.7 ± 1.51	<0.01
β-carotene	16.77 ± 3.1	40.12 ± 6.04	<0.001
β-cryptoxanthin	8.85 ± 1.22	18.44 ± 1.81	<0.001
Folate (ng/ml)	12.5	20.5	<0.001
Vitamin B ₁₂ (pg/ml)	640.1	738.4	<0.01
Homocysteine (µM/l)	7.8 ± 0.62	8.0 ± 0.74	0.375

Figure 3. Significant Reductions in oxLDL, PAI-1 & MPO



References:

1. Willett WC. Diet and health: what should we eat? *Science*. 1994;264(5158):532-537.
2. Block G, Patterson B, Subar A. *Nutr Cancer*. 1992;18(1):1-29.
3. Steinmetz KA, Potter JD. *Cancer Causes Control*. 1991;2(5):325-357.
4. Centers for Disease Control and Prevention (CDC). *MMWR Morb Mortal Wkly Rep*. 2015;64(26):709-713.
5. Agarwal S, Reider C, Brooks JR, Fulgoni VL 3rd. *J Am Coll Nutr*. 2015;34(2):126-134.
6. Potapovich AI, Kostyuk VA. *Biochem*. 2003;68(5):514-519.
7. Stoner GD, Wanf LS, Casto BC. *Carcinogenesis*. 2008;29(9): 1665-1674.
8. Liu LK, Lee HJ, Shih YW, Chyau CC, Wang CJ. *J Food Sci*. 2008;73(6):H113-121.
9. Hooper PL, Tytell M, Vigh L. *Cell Stress & Chaperones*. 2010;15(6):761-770.
10. Howitz KT, Sinclair DA. *Cell*. 2008;133(3):387-391.
11. Thompson HJ, Heimendinger J, Diker A, et al. *J Nutr*. 2006;136(8):2207-2212.
12. Lerman RH, Desai A, Lamb JJ, Chang JL, Darland G, Konda VR. *Glob Adv Health Med*. 2014; 3(2):34-39.

*These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

→ Talk to your healthcare provider today about **PhytoMulti**.
www.metagenics.com