

Ultra Preventive® 50+

2 Daily EZ Swallow multivitamin/mineral tablets

DESCRIPTION

Ultra Preventive® 50+ is specially formulated with important vitamins, minerals, antioxidants and a proprietary fruit blend to support healthy aging in adults age 50+. This product features CoQ₁₀ for metabolic energy and heart health, lutein and zeaxanthin for healthy vision, lycopene for cellular support, bioavailable B vitamins, and Neurophenol®, a proprietary blueberry and grape seed extract blend clinically studied for memory in healthy aging adults.‡

These EZ Swallow tablets include a natural, plant-based vanilla-flavored tablet coating for ease of swallowing.

INDICATIONS

A unique multivitamin/mineral specially formulated for cognition, vision, and healthy aging. ‡

FUNCTIONS

Ultra Preventive® 50+ has been carefully developed to contain the right proportions and bioavailable forms of vitamins, minerals, antioxidants and other nutrients to support foundational health, cellular energy, vision, and cognition.‡

The body's ability to maintain high **ubiquinone (coenzyme Q₁₀)** levels naturally declines with age. CoQ₁₀ is an important rate-limiting cofactor in the mitochondrial electron transport chain, in which adenosine triphosphate (ATP) is generated to produce metabolic energy. Since nearly all cellular activities are dependent upon metabolic energy, CoQ₁₀ is essential for the health of tissues and organs with a high metabolic demand, especially the heart.‡

Lutein and zeaxanthin are important antioxidants in the macula of the eye. Recent studies performed by the NIH National Eye Institute have underscored the importance of these carotenoids in macular function, indicating that a dose of 10 mg lutein and 2 mg zeaxanthin offers macular health benefits. **Lycopene** is another carotenoid that provides antioxidant and cellular support for prostate, lung, cervical, breast and cardiovascular health.‡

Berries are rich in beneficial phytochemicals known as polyphenols. It is well-documented that blueberries and fruit polyphenols play a significant role in cognitive function as we age. Ultra Preventive® 50+ features **Neurophenol®**, a proprietary blend of standardized wild blueberry and grape seed extracts. The active polyphenols in Neurophenol® include flavonoids such as anthocyanins and phenolic acids, resveratrol, and proanthocyanidin dimers and oligomers (also known as oligomeric proanthocyanidins, or OPCs).‡

Human, animal and cellular studies suggest that Neurophenol® supports neuronal function, at least in part by supporting antioxidant defenses, cytokine balance and healthy gene expression. Animal research suggests that Neurophenol® may also support spatial memory, which is essential for recording information about orientation in the environment.‡

In a recent multi-national study of 200 older adults, Neurophenol® provided significant support for cognitive performance and memory at a dose of 600 mg per day over a six-month period. This provided significant support for episodic memory and verbal recognition memory, which reflect the ability to recognize previous events. Neurophenol® also helped to maintain a healthy cognitive age. These findings were significant in the lowest quartiles of initial cognitive performance. Neurophenol® provided significant support for episodic memory and verbal recognition memory (Figure 1). Neurophenol® also promoted the ability to encode and retrieve verbal information (Figure 2). For both outcomes, significant support was evident in the lowest quartiles of initial performance (Figures 1-3). These actions may be explained, in part, by modulation of the expression of genes involved in neuronal plasticity (Figure 4).‡

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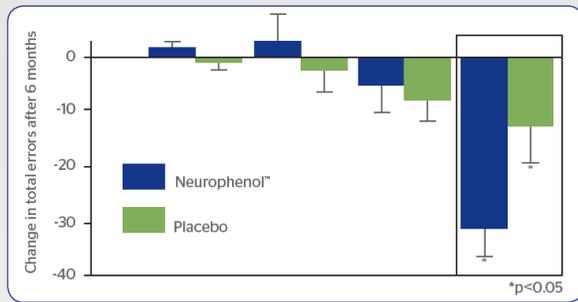


Figure 1: Neurophenol™ supplementation supported episodic memory in older adults, as determined by paired associate learning test. Significant support was evident in the lowest quartile of initial performance ($p < 0.05$). (box, far right)*

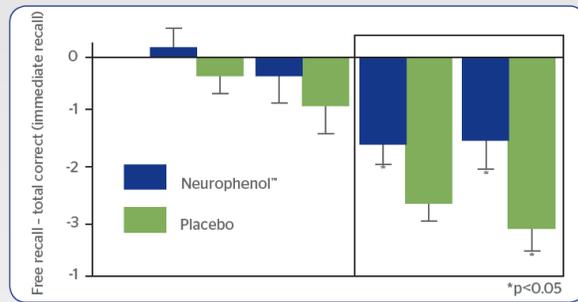


Figure 2: Neurophenol™ supplementation supported recognition memory in older adults, as determined by verbal recognition memory test. Significant support was evident in the lowest quartiles of initial performance ($p < 0.05$). (box, far right)*

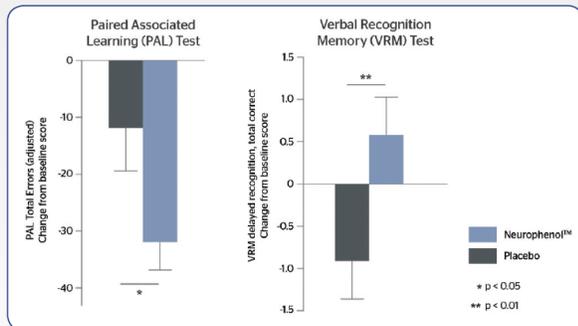


Figure 3: Neurophenol™ provided significant cognitive benefit to individuals whose scores were lowest at baseline. Results from this group only are shown above. Neurophenol™ supported episodic memory (left), indicated by the reduction of total errors in the Paired Associates Learning (PAL) test. Neurophenol™ also provided significant support for verbal recognition memory (right).*

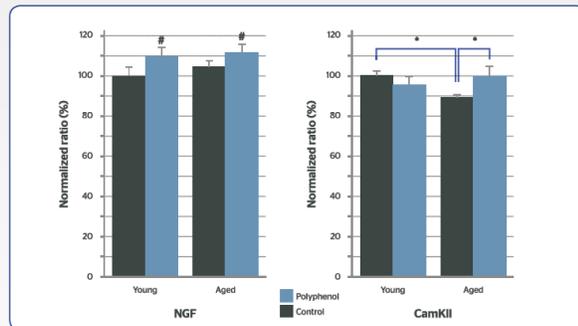


Figure 4: Neurophenol™ supplementation promoted nerve growth factor (NGF) gene expression in both young and aged mice, and Ca^{2+} / calmodulin-dependent protein kinase (CamKII) in aged mice. NGF promotes cholinergic nerve function to support spatial memory, while CamKII is involved in signaling cascades related to learning and memory.*

This formula contains **methylated B vitamins** to support cellular energy and the methylation pathways that influence mood, energy and homocysteine levels. This product contains three important forms of vitamin B₁₂. Hydroxycobalamin is a precursor of vitamin B₁₂ that is converted in the body to both methylcobalamin and adenosylcobalamin. While methylcobalamin is found in the cytosol of cells and predominates in blood and other fluids, adenosylcobalamin is the major form of vitamin B₁₂ stored in the mitochondria of cellular tissues.‡

L-methylfolate (5-MTHF) is the naturally occurring, predominant form of folate commonly found in cells and is essential for overall health, as it participates as a cofactor in a reaction that involves the remethylation of homocysteine to methionine. Unlike synthetic folic acid, L-methylfolate can be used directly by the body, without the need for an additional conversion via the enzyme 5, 10-methylenetetrahydrofolate reductase (MTHFR).‡

This formula also provides 20 mg of **zinc**, a mineral that is important in aging adults. **Vitamin A** is provided as a combination of provitamin A (beta carotene) and preformed vitamin A (retinyl palmitate), to help maintain vitamin A status to accommodate lower conversion efficiency in some individuals.‡

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FORMULA (#202547)

Serving Size 2 tablets

Vitamin A	2,100 mcg
(as 70% beta carotene and 30% Vitamin A palmitate)	
Vitamin C (as ascorbic acid)	120 mg
Vitamin D ₃ (as cholecalciferol).....	25 mcg (1000 IU)
Vitamin E (as d-alpha-tocopheryl succinate).....	65 mg
Thiamine (as Thiamine HCl).....	25 mg
Riboflavin (as Riboflavin-5-phosphate).....	10 mg
Niacin/Niacinamide.....	30 mg
Vitamin B-6 (as pyridoxal-5-phosphate).....	10 mg
Folate (as Metafolin®, L-5-MTHF).....	667 mcg DFE
	(400 mcg L-5-MTHF)
Vitamin B-12	350 mcg
(as methylcobalamin/adenosylcobalamin/hydroxycobalamin)	
Biotin	300 mcg
Pantothenic Acid (as d-calcium pantothenate).....	25 mg
Choline (from choline bitartrate)	60 mg
Calcium (as Calcium Citrate/Malate Complex).....	50 mg
Iodine (as potassium iodide).	150 mcg
Magnesium (as magnesium citrate).....	50 mg
Zinc (as Opti-Zinc, monomethionine)	20 mg
Selenium (as amino acid chelate)	100 mcg
Chromium (as amino acid chelate)	120 mcg
Molybdenum (as amino acid chelate)	100 mcg
Potassium (as Potassium citrate)....	30 mg
Proprietary Neurophenol® blend.....	300 mg
Providing 85 mg of flavonoids (flavan-3-ols, phenolic acids, flavonols, anthocyanins, resveratrol) from:	
Grape extract (<i>Vitis vinifera</i> , fruit) and Wild Blueberry Extract (<i>Vaccinium angustifolium</i> , fruit)	
Co-Enzyme Q10 (as ubiquinone).....	50 mg
Lutein (from marigold (<i>Tagetes erecta</i>) flower extract)...	10 mg
Lycopene (extracted from tomatoes).....	3 mg
Zeaxanthin isomers (from marigold flower).....	2 mg

Other ingredients: Microcrystalline cellulose, coating (hydroxypropyl methylcellulose, starch (rice), gum acacia, glycerine, natural vanilla flavor, fruit and vegetable juice (natural colorant), spirulina extract (natural colorant)), croscarmellose sodium, hydroxypropyl cellulose, ascorbyl palmitate, stearic acid and silica

OptiZinc® is a trademark of InterHealth N.I.

Metafolin® is a registered trademark of Merck KGaA, Darmstadt, Germany.

Neurophenol® is a registered trademark used with permission.

Gluten-free, Non-GMO

SUGGESTED USE

Adults take 2 tablets daily with food or as directed by a healthcare professional.

Ultra Preventive® 50+ can be combined with **Optimized Curcumin with Neurophenol®** by Douglas Laboratories to provide the clinical dose of 600 mg of Neurophenol® for memory support. †

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SIDE EFFECTS

No adverse effects have been reported.

STORAGE

Store in a cool, dry place, away from direct light. Keep out of reach of children.

REFERENCES

- O. Hasselwander, W. Hönlein, L. Schweillert, K. Krömer (2000): 5-Methyltetrahydrofolate: The active form of folic acid. *Functional foods* 2000.
- Lea R, Colson N, Quinlan S, Macmillan J, Griffiths L. *Pharmacogenet Genomics*. 2009 Jun;19(6):422-8. [L-methylfolate].
- Verhaar M, Wever R, Kastelein J, Dam T, Koomas H, Rabelink T. *Circulation*. 1998;97:237-241 [5-Methyltetrahydrofolate]
- Huskisson E, Maggini S, Ruf M. *J Int Med Res*. 2007 May-Jun;35(3):277-89. [methylcobalamin]
- Akaike A, Tamura Y, Sato Y, Yokota T. *Eur J Pharmacol*. 1993 Sep 7;241(1):1-6. [methylcobalamin]
- Ciccone MM, et al. *Mediators Inflamm*. 2013;2013:782137. [Carotenoids].
- Chew EY, Clemons TE, Agrón E, Sperduto RD, Sangiovanni JP, Kurinij N, Davis MD; AREDS report no.35. *Ophthalmology*. 2013 Aug;120(8):1604-11.e4. [Vitamins C and E, β-carotene, and zinc].
- Age-Related Eye Disease Study 2 (AREDS2) Research Group. AREDS2 report No. 3. *JAMA Ophthalmol*. 2014 Feb;132(2):142-9. [Lutein and Zeaxanthin].
- Richer S, et al. *Optometry*. 2004 Apr;75(4):216-30. [Lutein and Zeaxanthin].
- Olmedilla B, Granado F, Blanco I, Vaquero M. *Nutr*. Vol 19, 1, January 2003 pg. 21-24. [Lutein]
- Tran UC, Clarke CF. *Mitochondrion*. 2007 Jun; & Suppl: S62-71. Epub 2007 Mar 30. [Coenzyme Q10]
- Belardinelli, R., Muçaj, A., Lacalaprince, F., Solenghi, M., Principi, F., Tiano, L. and Littarru, G. P. (2005), *BioFactors*, 25: 137–145. [Coenzyme Q10]
- Neshatdoust S, Saunders C, Castle SM, Vauzour D, Williams C, Butler L, Lovegrove JA, Spencer JP. *Nutr Healthy Aging*. 2016 Oct 27;4(1):81-93. doi: 10.3233/NHA-1615. [flavonoids]
- Rendón-Ramírez AL, et al. *Environ Toxicol Pharmacol*. 2014 Jan;37(1):45-54. [Vitamin E and C].
- Tiano L, Belardinelli R, Carnevali P, Principi F, Seddaiu G, Littarru GP. *Eur Heart J*. 2007 Sep; 28 (18): 2249-55. Epub 2007 Jul 19. [Co-Q10]
- Wang, Z.M, Zhou, B., Wang, Y.S., Gong, Q.Y., Yan, J.J., Gao, W., and Wang, L.S.. *Am J Clin Nutr*. 2011;93(3):506-515. [Green tea]
- Shukitt-Hale B, Lau FC, Joseph JA. *J Agric Food Chem*. 2008 Feb 13;56(3):636-41. Epub 2008 Jan 23. Review. [Anthocyanins]
- Lau FC, Bielinski DF & Joseph JA (2007) *J Neurosci Res*. 85:1010–1017. [Blueberry]
- Dal-Pan A, Dudonné S, et al. *J Alzheimers Dis*. 2017;55(1):115-135. [Neurophenol]
- Dudonné S, et al. *Food Funct*. 2016 Aug 10;7(8):3421-30. [Neurophenol]
- Bensalem, Julien, et al. *Nutrition and Aging*, vol. 3, no. 2-4, pp. 89-106, 2015 [Neurophenol]

For more information on Ultra Preventive® 50+ visit douglaslabs.com

‡ 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.

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