Ultra Preventive[®] **X** A comprehensive multivitamin/mineral with an organic fruit/vegetable/phytonutrient blend

DESCRIPTION

Ultra Preventive[®] X is Douglas Laboratories' signature formula and the most comprehensive multivitamin and mineral supplement, with an organic fruit, vegetable and phytonutrient blend. This unique formula provides antioxidant support and many beneficial nutrients, including carotenoids, flavonoids, polyphenols and bioavailable forms of vitamins and minerals that may contribute to optimal health.[†]

FUNCTIONS

Ultra Preventive[®] X has been carefully developed to contain adequate amounts of vitamins, minerals, and other beneficial nutrients and enzymes. Each ingredient is selected in consideration of its absorbability, competitive relationship with other nutrients, allergenic potential, and long-term safety. The specific nutrients are included in high-potency amounts because of the vital roles they play in antioxidant protection, cellular health, energy, methylation, the nervous system, and vascular, bone, heart and immune support, among other functions.†

Alpha-lipoic acid is a nutritional coenzyme that is involved in energy metabolism of proteins, carbohydrates and fats, has physiological functions for healthy blood glucose metabolism, and is able to scavenge a number of free radicals. Besides being a universal free radical scavenger, alpha-lipoic acid can also recharge other antioxidant systems such as glutathione and vitamins C and E.† Vitamin C is a potent water-soluble antioxidant nutrient, also protecting cells from oxygen free radical damage. It is essential for connective tissue and bone metabolism, capillary health, and immune function.† Vitamin C works together with vitamin E. **Beta-carotene** supports vitamin E, recognized as the body's most valuable fat soluble antioxidant. It prevents oxidation of unsaturated fatty acids by inactivating free radicals, thus stabilizing and protecting cell membranes, e.g., in the lungs, eyes, and arteries.†

The carotenoids **lutein and zeaxanthin** are important antioxidants in the macula of the eye, as evidenced by recent studies performed by the NIH National Eye Institute. Research has shown that these important carotenoids are the predominant pigments found in the macula to support healthy vision.† **Lycopene** provides optimal antioxidant and cellular support for prostate, lung, cervical, breast and cardiovascular health.†

The antioxidant activity of **quercetin** supports the gastrointestinal tract and immune system.[†] Quercetin increases mucus secretion from gastric cells. The mucus polysaccharide provides a protective buffer for the gastric cells from the low pH of the stomach contents. Quercetin also supports the normal immune response to antigens.[†] Quercetin inhibits the IgE-mediated release from mast cells as well as IgG-mediated histamine release. Many bioflavonoids, especially rutin and quercetin, support the health of the body's circulatory system by helping maintain capillary blood flow and proper vascular permeability, integrity, and resiliency.[†]

N-Acetyl-I-Cysteine is a precursor for the sulfur amino acid cysteine, which is used by the body to synthesize glutathione. Glutathione is a naturally occurring tripeptide that is a major component of two enzymes: glutathione peroxidase and glutathione reductase, which help scavenge toxic free radicals and inhibit peroxidation.[†]

Calcium and magnesium are included in a 1:1 ratio in bioavailable amino acid chelate and citrate forms to support bone and tissue health.† **Vitamin D** is responsible for the absorption of calcium into the blood, and **Vitamin K2** deposits the blood calcium into bones and teeth. Therefore, consuming sufficient amounts of dietary calcium is not enough for bone and cardiovascular health; the body needs to distribute and utilize the calcium properly with aid of Vitamin K2.†

A significant dose of elemental **choline** from choline bitartrate is supplied in this formula. Choline acts as a methyl donor for homocysteine and folate metabolism in the methylation cycle following conversion to betaine, and also as a structural component of cellular membranes and synthesis of the neurotransmitter acetylcholine.[†] Choline and inositol are lipotropic factors that support liver function and mobilize fats and bile.[†]

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This formula contains methylated B vitamins for increased bioavailability to the body. Hydroxycobalamin is a precursor form of vitamin B12 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 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)).

Ultra Preventive® X includes organic phytonutrients. Chlorella and spirulina are microalgae that supply chlorophyll, carotenes, B-vitamins, and trace elements. Organic fruits and vegetables in powder form provide naturally occurring nutrients and antioxidants to help fight free radical damage and support cellular health.† Green tea with EGCG and grape seed extract provide polyphenols for cellular and antioxidant support + Enzymes such as betaine HCL, papain and bromelain aid in the digestion of foods +

INDICATIONS

Ultra Preventive® X tablets may be a useful dietary supplement for those who wish to consume important nutrients for optimal health.⁺

CODMUL & (# 202224)

FORMULA (# 202231) Supplement Facts Serving Size 8 tablets:		
C C		% DV
Vitamin A	4500 mcg (15,000 IU)	500%
	e and 33% Vitamin A palmitate)	
Vitamin C (as ascorbic acid)	1000 mg	1111%
Vitamin D3 (as cholecalcifero		125%
Vitamin E	134 mg (200 IU)	893%
	I succinate plus mixed tocopherols)	
Thiamine	100 mg	8333%
Riboflavin	50 mg	3846%
(as Riboflavin/Riboflavin-5-ph		
Niacin/Niacinamide	190 mg	1188%
Vitamin B6	100 mg	5882%
(as Pyridoxal HCI/Pyridoxal-5		0000/
Folate	1333 mcg DFE	333%
(as L-methylfolate, Metafolin®		00.0000/
Vitamin B12	500 mcg	20,833%
	vlcobalamin/hydroxycobalamin)	40000/
Biotin	300 mcg	1000%
Pantothenic Acid	250 mg	5000%
(as d-calcium panthothenate)		E00/
Choline (from choline bitartra Calcium		50% 32%
• • • • • • • • • • • • • • • • • • • •	420 mg	32%
(as calcium citrate/calcium ch Iodine	200 mcg	133%
(from kelp)	200 mcg	13370
(nom keip) Magnesium	420 mg	100%
(as magnesium citrate/magne	0	10070
Zinc	25 mg	227%
200	20 mg	221/0

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(as zinc chelate)		
Selenium	200 mcg	133%
(as selenomethionine)	200 mcg	15570
Copper	2 mg	222%
(as copper amino acid chelate)	2 mg	222/0
Manganese	9 mg	391%
(as manganese sulfate)	3 mg	53170
Chromium	200 mcg	571%
(as chromium polynicotinate)	200 mcg	57170
Molybdenum	100 mcg	222%
(as molybdenum Krebs*)	Too meg	222/0
Potassium (as potassium chloride)	100 mg	2%
N-Acetyl L-Cysteine	150 mg	2 70
Betaine (as betaine HCL)	150 mg	
Inositol	100 mg	
Quercetin (as dihydrate)	100 mg	
Lemon bioflavonoids	100 mg	
Papain (from <i>Carica papaya</i> , fruit)	100 mg	
Bromelain (from <i>Anana comosus</i> , pineap	0	
Grape seed extract	pie stern) oo mg	
(standardized to 92% polyphenols)	50 mg	
Alpha Lipoic Acid	50 mg	
Vitamin K2 (as menaquinone-7)	45 mg	
Rutin (from <i>Sophora japonica</i> , flower)	25 mg	
Boron (as boron citrate)	3 mg	
Vanadium (as Vanadium Krebs*)	50 mcg	
Proprietary Organic Fruit and Vegetabl	0	
Organic beet powder (root), Organic carrot powder (root), Organic black cu		
blueberry powder (fruit), Organic broccoli powder (whole plant), Organic C		
Organic collard greens powder (leaf), Organic pomegranate powder (fruit),		
organie sonara greene powaer (lear), org	jame pornegranate po	maor (null),

k currant powder (fruit), Organic ic Concord grape powder (fruit), uit), Organic green cabbage powder (whole plant), Organic cranberry powder (fruit), Organic kale powder (whole plant), Organic parsley powder (whole plant), Organic raspberry powder (fruit), Organic spinach powder (whole plant)

Organic Phytonutrient Blend

jan	
Organic Spirulina (whole plant)	100 mg
Organic Chlorella (whole plant, broken cell wall)	100 mg
Organic Green Tea leaf extract	
(standardized to 50% polyphenols, 20% EGCG)	50 mg
Carotenoids	
Lutein (from marigold flower extract)	10 mg
Lycopene (from tomatoes)	6 mg
Zeaxanthin isomers (from marigold flower extract)	2 mg

Other Ingredients: methylcellulose, hydroxypropyl cellulose, carboxymethylcellulose, silica, ascorbyl palmitate, coating (purified water, hydroxypropyl methycellulose, glycerin). *Krebs = Citrate, Fumarate, Malate, Glutarate and Succinate Complex.

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

SUGGESTED USE

Adults take 8 tablets daily with food or as directed by a healthcare professional. This product is best taken with

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meals in divided doses, such as 4 tablets with 2 largest meals of the day.

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

Ward E. Nutr J. 2014 Jul 15;13:72. [Multivitamin and mineral supplement].

Prietl B, Treiber G, Pieber TR, Amrein K. Nutrients. 2013 Jul 5;5(7):2502-21. [Vitamin D].

Roxas M. Altern Med Rev. 2008 Dec;13(4):307-14. [Bromelain].

Klaus-Helge Ibs and Lothar Rink. J. Nutr. 133: 1452S-1456S, 2003. [Zinc].

Maggini S, Beveridge S, Suter M. J Int Med Res. 2012;40(1):28-42. [Vitamin C and zinc].

Colacci E, Pasquali A, Severi C. Clin Ter. 2011;162(1):e19-25. [Betaine].

Deminice R, et al. Amino Acids. 2015 Apr;47(4):839-46. doi:10.1007/s00726-014-1913-x. [Betaine].

Ciccone MM, et al. Mediators Inflamm. 2013;2013:782137. [Carotenoids].

Rendón-Ramírez AL, et al. Environ Toxicol Pharmacol. 2014 Jan;37(1):45-54. [Vitamin E and C].

Kräutler B. Subcell Biochem. 2012;56:323-46. [Vitamin B-12].

Wang YP, et al. Physiol Res. 2014;63(3):341-50. [Riboflavin].

Das UN. Nutrition. 2015 Feb;31(2):283-291. doi: 10.1016/j.nut.2014.08.011. Epub 2014 Sep 4. [Vitamin B-6].

Morris MS. Adv Nutr. 2012 Nov 1;3(6):801-12. [B-vitamins].

Jacobs AM, Cheng D. Rev Neurol Dis. 2011;8(1-2):39-47. [L-methylfolate, methylcobalamin, and pyridoxal 5'-phosphate].

Patrick L. Altern Med Rev 2008;13:116-27. [lodine].

Dhawan D, Singh Baweja M, Dani V. Hell J Nucl Med. 2007 Sep-Dec;10(3):167-71. [Zinc and iodine].

Gartner R, Gasnier BC, Dietrich JW, et al. J Clin Endocrinol Metab 2002;87:1687-91. [Selenium].

Lea R, et al. Pharmacogenet Genomics. 2009 Jun;19(6):422-8. [Folate].

Miller AL. Altern Med Rev. 2003 Feb;8(1):7-19. [L-methylfolate, methylcobalamin, and pyridoxal 5'-phosphate].

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Tsai CF, Lu FJ, Hsu YW. Mol Vis. 2012;18:1540-7. [Dunaliella salina].

Richer SP, et al. Visual Function Study (ZVF) FDA IND #78, 973. Optometry. 2011 Nov;82(11):667-680.e6. [Zeaxanthin].

El-Sayed M. Abdel-Aal. Et al. Nutrients 2013, 5(4), 1169-1185. [Lutein and zeaxanthin].

Mohanty I, et al. Br J Nutr. 2002 Oct;88(4):347-54. [Lycopene].

Jovanovic SV, Simic MG. Antioxidants in nutrition. Ann N Y Acad Sci 2000;899:326-34.

Arivazhagan P, Ramanathan K, Panneerselvam C. Chemico-Biological Interactions [serial online]. November 28, 2001;138(2):189-198. [alpha lipoic acid]

Malińska D, Winiarska K. Postepy Hig Med Dosw (Online). 2005;59:535-43. Review.[alpha lipoic acid]

For more information on Ultra Preventive® X 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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