

Ultra Glucose Support Pack

DESCRIPTION

Ultra Glucose Support Pack is a comprehensive combination of vitamins, minerals, co-q10, antioxidants, fish oil and other important nutrients designed to support healthy blood glucose levels, peripheral circulation, cardiovascular health, and AGE (advanced glycation end-product) inhibition for healthy aging.†

FUNCTIONS

Glucose metabolism that is associated with high blood glucose can lead to high levels of glycation. Advanced glycation end products (AGEs) are proteins or lipids that become glycated after exposure to sugars. The presence and accumulation of AGEs in many different cell types affect extracellular and intracellular structure and function. In high blood sugar environments and in natural aging, AGEs alter cell structure and normal vascular function. Crucial to maintaining healthy AGE formation is optimal antioxidant protection.

Proanthocyanidins are a class of potent antioxidants found in pine bark extract, grape seed extract, resveratrol and many other plants. OPC (oligomeric proanthocyanidins) has been shown to neutralize free radicals, support the strength and structure of blood vessels, and support the normal inflammatory response.† MegaNatural® BP Grape seed extract is different from other grape seed extracts and made by a patented water extraction process that yields over 90% proanthocyanidins. Alpha lipoic acid (ALA) is another antioxidant among the well-researched nutrients for support of peripheral nerve function. ALA may normalize nitric oxide levels to support increased circulation to the neurons. One study confirmed ALA resulted in significant reductions in lipid peroxidation. In vitro studies of N-acetyl-L-cysteine have documented inhibition of glycation induced damage to pancreatic cells. N-acetyl-L-cysteine is a potent antioxidant, serving as an intracellular precursor of glutathione. Since nearly all cellular activities are dependent upon energy, coenzyme Q-10 is essential for the health of all human tissues and organs. Coenzyme Q-10 is a naturally-occurring antioxidant nutrient which impedes free radical formation in biological systems.

BenfoPure® is a unique proprietary form of Benfotiamine, a fat-soluble form of Vitamin B-1 Thiamine. Studies show that BenfoPure® Benfotiamine is significantly more bioavailable than traditional forms of Vitamin B-1 or thiamine. Benfotiamine supports the body through blocking biochemical pathways by which high blood sugar damages cells. Benfotiamine maintains normal endothelial function by reducing the risk of AGEs, which is associated with optimal cardiovascular health.†

Chromium is an integral component of the glucose tolerance factor (GTF), a naturally occurring compound of chromium, nicotinic acid, and amino acids that is essential for proper glucose metabolism. Adequate chromium nutrition is essential for the formation of GTF and the healthy metabolism of blood glucose.

Gynema sylvestre is an ayurvedic botanical that may assist in the normal regeneration and repair of healthy pancreatic beta cells. Gymnema is also thought to be supportive in maintaining normal intestinal glucose absorption. Human and animal studies have indicated it may be useful in supporting healthy glucose metabolism. Research suggests that the trace element vanadium may have unique activity within a number of physiological systems including insulin sensitivity and lipid and carbohydrate metabolism. Biotin serves as a cofactor of glucose metabolism and induces glucokinase, an enzyme that encourages cells to retain glucose for energy production rather than release it into the blood stream.

Ultra Glucose Support Pack also includes important phytonutrients in a proprietary blend of wild blueberry, strawberry and spinach extracts to supply active polyphenols for protection against free radical damage. Lutein, lycopene, zeaxanthin, and astaxanthin are carotenoid antioxidants for ocular health and beyond. Astaxanthin, the most powerful carotenoid sourced from algae, is increasingly popular due to its' numerous health benefits studied such as cardiovascular, immune, and inflammatory support. † Pterostilbene, a methylated form of resveratrol is another potent antioxidant and has been clinically studied for cardiovascular, blood sugar, cognitive and longevity support. †

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EPA and DHA acids also participate in the regulation of already normal blood lipid and lipoprotein levels. The benefits of omega-3 fatty acids continue to emerge and numerous health organizations around the world recommend adequate daily intake of EPA and DHA. Data continues to accumulate that supports EPA and DHA in cardiovascular health as well as many other areas, including neurological health, vision health, and joint health.†

INDICATIONS

Ultra Glucose Support Pack may be a useful dietary supplement for individuals wishing to support healthy blood sugar metabolism.

FORMULA (#66811-60X)

1 AM Pack contains (2 capsules, 2 tablets, 1 softgel):

| | |
|--|-----------|
| Calories from Fat..... | 10 |
| Total Fat | 1.25 g |
| Vitamin A (as natural beta-carotene)..... | 2,500 IU |
| Vitamin C (as Ascorbic Acid)..... | 60 mg |
| Vitamin D-3..... | 1,500 IU |
| Vitamin E (as d-alpha tocopheryl succinate)..... | 50 IU |
| Thiamine (as Thiamine HCl/thiamine pyrophosphate) .. | 37.5 mg |
| Riboflavin (as Riboflavin-5-phosphate) | 5 mg |
| Niacin/Niacinamide..... | 15 mg |
| Vitamin B-6 (as Pyridoxal-5-phosphate)..... | 5 mg |
| Folate (as L-methylfolate, Metafolin®)..... | 200 mcg |
| Vitamin B-12 (as methylcobalamin)..... | 125 mcg |
| Biotin | 1,400 mcg |
| Pantothenic Acid | 12.5 mg |
| (d-calcium pantothenate) | |
| Calcium (as Calcium Citrate/Malate Complex)..... | 25 mg |
| Magnesium (as Magnesium Citrate) | 12.5 mg |
| Iodine (from kelp) | 75 mcg |
| Zinc (as Opti-Zinc®, monomethionine)..... | 7.5 mg |
| Selenium (as amino acid chelate) | 50 mcg |
| Copper (as amino acid chelate) | 0.5 mg |
| Chromium (as amino acid chelate/polynicotinate).. | 460 mcg |
| Molybdenum (as amino acid chelate)..... | 50 mcg |
| Potassium (as Potassium Aspartate) | 15 mg |
| Omega-3 Supercritical CO ₂ | |
| Triglyceride Concentrate | 1,250 mg |
| Providing: | |
| EPA (Eicosapentaenoic Acid)..... | 600 mg |
| DHA (Docosahexaenoic Acid) | 400 mg |
| Coenzyme Q-10 | 60 mg |
| Red Wine Proanthocyanidins (fruit)..... | 5 mg |
| Alpha-Lipoic Acid..... | 150 mg |
| N-Acetyl-L-Cysteine | 250 mg |
| <i>Gymnema sylvestre</i> leaf, | 200 mg |
| dried extract, min. 25% gymnemic acids | |
| Vanadium (from Vanadium Krebs†)..... | 250 mcg |
| Choline (as Choline Bitartrate) | 30 mg |
| Inositol | 12.5 mg |
| Lutein..... | 1.5 mg |
| Lycopene (natural) | 1.5 mg |
| Zeaxanthin..... | 0.5 mg |
| Astaxanthin..... | 0.5 mg |
| Pterostilbene (methylated resveratrol, pTeroPure™)..... | 5 mg |
| Proprietary Blend..... | 150 mg |
| Wild Blueberry Extract (fruit, <i>Vaccinium angustifolium</i> , standardized to 4% polyphenols), Strawberry Extract (fruit, <i>Fragaria vesca</i> , standardized to 2% polyphenols), Spinach Extract (leaf, <i>Spinacia oleracea</i> , standardized to 1.5% polyphenols) | |

1 PM Pack Contains (2 capsules, 2 tablets):

| | |
|---|-----------|
| Vitamin A (as natural beta carotene)..... | 2,500 IU |
| Vitamin C (as Ascorbic Acid)..... | 60 mg |
| Vitamin D-3..... | 500 IU |
| Vitamin E | 50 IU |
| (as d-alpha tocopheryl succinate) | |
| Thiamine (as Thiamine HCl/thiamine pyrophosphate) | |
| | 37.5 mg |
| Riboflavin (as Riboflavin-5-phosphate) | 5 mg |
| Niacin/Niacinamide..... | 15 mg |
| Vitamin B-6 (as Pyridoxal-5-phosphate)..... | 30 mg |
| Folate (as L-methylfolate, Metafolin®)..... | 200 mcg |
| Vitamin B-12 (as methylcobalamin)..... | 125 mcg |
| Biotin | 1,400 mcg |
| Pantothenic Acid | 12.5 mg |
| (d-calcium pantothenate) | |
| Calcium | 25 mg |
| (as Calcium Citrate/Malate Complex) | |
| Magnesium (as Magnesium Citrate) | 12.5 mg |
| Iodine (from kelp) | 75 mcg |
| Zinc (as Opti-Zinc®, monomethionine)..... | 7.5 mg |
| Selenium (as amino acid chelate) | 50 mcg |
| Copper (as amino acid chelate) | 0.5 mg |
| Chromium..... | 460 mcg |
| (as amino acid chelate/polynicotinate) | |
| Molybdenum (as amino acid chelate)..... | 50 mcg |
| Potassium (as Potassium Aspartate) | 15 mg |
| Benfotiamine (as BenfoPure®)..... | 150 mg |
| MegaNatural®-BP | |
| Grape Seed Extract..... | 25 mg |
| (<i>Vitis vinifera</i>) (standardized to 90% polyphenols) | |
| Enzogenol® Pine Bark Extract | 10 mg |
| Alpha-Lipoic Acid..... | 200 mg |
| N-Acetyl-L-Cysteine | 250 mg |
| <i>Gymnema sylvestre</i> leaf, | 200 mg |
| dried extract, min. 25% gymnemic acids | |
| Vanadium (from Vanadium Krebs†)..... | 250 mcg |
| Choline (as Choline Bitartrate) | 30 mg |
| Inositol | 12.5 mg |
| Lutein..... | 1.5 mg |
| Lycopene (natural) | 1.5 mg |
| Zeaxanthin..... | 0.5 mg |
| Astaxanthin..... | 0.5 mg |
| Pterostilbene (methylated resveratrol)..... | 5 mg |
| Proprietary Blend..... | 150 mg |
| Wild Blueberry Extract (fruit, <i>Vaccinium angustifolium</i> , standardized to 4% polyphenols), Strawberry Extract (fruit, <i>Fragaria vesca</i> , standardized to 2% polyphenols), Spinach Extract (leaf, <i>Spinacia oleracea</i> , standardized to 1.5% polyphenols) | |

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Other ingredients: Cellulose, gelatin (capsule, from fish [Tilapia]), hydroxypropyl methylcellulose (capsule), dicalcium phosphate, vegetable stearate, silica, stearic acid, titanium dioxide, dextrose, magnesium silicate, glycerin, water, rosemary extract (leaf), caramel color and natural vanilla flavor.

This product contains fish oil (anchovies, sardines, mackerel).

†Krebs = Citrate, Fumarate, Malate, Glutarate and Succinate Complex.

SUGGESTED USE

Adults take 1 AM pack in the morning with a meal and 1 PM pack in the evening with a meal, or as directed by your healthcare professional.

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

Stirban A, et al. Benfotiamine prevents macro- and microvascular endothelial dysfunction and oxidative stress following a meal rich in advanced glycation end products in individuals with type 2 diabetes. *Diabetes Care*. 2006 Sep;29(9):2064-71.

Nagamatsu M, Nickander KK, Schmelzer JD, et al. Lipoic acid improves nerve blood flow, reduces oxidative stress, and improves distal nerve conduction in experimental diabetic neuropathy. *Diabetes Care* 1995;18:1160-1167.

Anderson, RA. Chromium, glucose intolerance, and diabetes. *J Am Coll Nutr* 1998;17:548-55.

Baskaran K, Ahamath BK, Shanmugasundaram KR, Shanmugasundaram ER. Antidiabetic effect of a leaf extract from *Gymnema sylvestre* in non-insulin-dependent diabetes mellitus patients. *J Ethnopharmacol* 1990;30:295-305.

Bierhaus A, Chevion S, Chevion M, Hofmann M, et al. Advanced glycation end product-induced activation of NF-kappaB is suppressed by alpha-lipoic acid in cultured endothelial cells. *Diabetes* 1997;46:1481-90.

Bordia A, Verma SK, Srivastava KC. Effect of ginger (*Zingiber officinale* Rosc.) and fenugreek (*Trigonella foenumgraecum* L.) on blood lipids, blood sugar and platelet aggregation in patients with coronary artery disease. *Prostaglandins Leukot Essent Fatty Acids*. 1997 May;56(5):379-84.

Robert G Fassett, Jeff S Coombes. Astaxanthin, oxidative stress, inflammation and cardiovascular disease. *Future Cardiology*. Jul 2009, Vol. 5, No. 4: 333-342

Joseph JA, Fisher DR, Cheng V, Rimando AM, and Shukitt-Hale B. Cellular and behavioral effects of stilbene resveratrol analogues: implications for reducing the deleterious effects of aging. *J. Agric. Food Chem*. 56, 10544 (2008)

Yzebe D, Lievre M. Fish oils in the care of coronary heart disease patients: a meta- analysis of randomized controlled trials. *Fundam Clin Pharmacol* 2004;18:581-92.

Cam MC, Brownsey RW, McNeill JH. Mechanisms of vanadium action: insulin-mimetic or insulin-enhancing agent? *Can J Physiol Pharmacol*. 2000 Oct;78(10):829-47. Review.

For more information on Ultra Glucose Support Pack™ 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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Your patients trust you.**