

Diabet-Support Pack™

DESCRIPTION

Diabet-Support Pack™, from Douglas Laboratories®, is a synergistic combination of vitamins, minerals, herbs and other nutrients designed to support healthy blood sugar metabolism.

FUNCTIONS

Glucose metabolism that is associated with high blood glucose can lead to high levels of glycation. Glycation is the non-enzymatic attachment of sugars to major molecules in the body, including proteins, lipids, and nucleic acids. Glycation reactions generate advanced glycation end-products (AGEs) and glycotxin intermediates. AGEs can affect the normal functioning of body proteins, lipids, and nucleic acids. Crucial to maintaining healthy AGE formation is optimal antioxidant protection. Oxidative stress is closely related to AGE production and is a known contributing factor to many of the same health concerns thought to be associated with AGE damage. Coenzyme Q-10 (or ubiquinone) is an important rate-limiting nutrient that is a cofactor in the mitochondrial electron transport chain, the biochemical pathway in cellular respiration from which adenosine triphosphate (ATP) and metabolic energy is derived. 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 retards free radical formation in biological systems. 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. Fenugreek, a popular spice in Asia and Europe, contains a high percentage of mucilage, a soluble dietary fiber. Soluble dietary fiber plays important roles in the digestive system, helping to inhibit the absorption of sugars and fats and causing blood sugar levels to rise at a slower rate. Recently, cinnamon, a well-known spice and flavoring, has been gaining attention for its roles that it plays in supporting the body's metabolism of glucose. Research suggests that vanadyl sulfate may have unique activity within a number of physiological systems including glucose, lipid and bone metabolism. Essential fatty acids can help maintain normal cell membrane fluidity and structure which is important for adequate hormone receptor function and cellular communication. EPA and DHA acids also participate in the regulation of already normal blood lipid and lipoprotein levels.

INDICATIONS

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

FORMULA (#65397)

Each Pack Contains:

Vitamin A	20,500 I.U.
.....	(44% as vitamin A Palmitate/ 56% [11,500IU] as Beta
Carotene)	
Vitamin C (Ascorbic Acid)	600 mg
Vitamin D3	500 I.U.
Vitamin E	200 I.U.
(as d-alpha tocopheryl with mixed tocopherols)	
Thiamine (as Thiamine HCL)	50 mg
Riboflavin	25 mg
Niacin/Niacinamide	95 mg
Vitamin B6	50 mg
(as Pyridoxine HCl/Pyridoxal-5-Phosphate)	

Diabet-Support Pack™

Folate (as L-methylfolate, Metafolin®)	400 mcg
Vitamin B12 (on ion Exchange Resin)	50 mcg
Biotin	150 mcg
Pantothenic acid (d-calcium Pantothenate)	250 mg
Calcium (from Calcium Citrate/Ascorbate Complex)	250 mg
Iodine (from kelp)	100 mcg
Magnesium (from Magnesium Aspartate-Ascorbate Complex)	250 mg
Zinc (from Zinc Amino Acid Chelate)	27.5 mg
Selenium (Organic Selenium from Krebs* Cycle and Kelp)	175 mcg
Copper (from Copper Amino Acid Chelate and Sebecate)	2 mg
Manganese (from Manganese Aspartate Complex)	13 mg
Chromium (Organically bound with GTF activity-low allergenicity from Chromium Polynicotinate and Chromium Picolinate)	400 mcg
Molybdenum (from Molybdenum Krebs*)	50 mcg
Potassium (from Potassium Aspartate Complex)	49.5 mg
Choline (from Choline Citrate. Bitartrate)	30 mg
Inositol	50 mg
Citrus Bioflavanoid Complex	100 mg
PABA (Para- Aminobenzoic Acid)	25 mg
Vanadium (from 7.5 mg Vandyl Sulfate and Vanadium Krebs*)	1.4 mg
Boron (from Boron Aspartate/ Citrate Complex)	0.75 mg
Trace Elements approx. 50 mcg (from sea vegetation)	
L-Cysteine/N-Acetyl-L-Cysteine	200 mg
L-Methionine	6 mg
Glutamic Acid(from Glutamic Acid HCl)	10 mg
Betaine(from Betaine HCl)	57 mg
Bilberry Extract (fruit) (Vaccinum myrtillus ext. [4:1])	100 mg
Ginkgo biloba Extract(leaf) (providing a minimum of 24% total ginkgo flavone glycosides and 6% total terpenes)	60 mg
L-Glutathione	25 mg
Taurine (as L-Taurine)	375 mg
Rutin	15 mg
Hesperidin	10 mg
Proanthocyanidins (Red Wine Grapes)	65 mg
Eyebright Powder (entire plant)	5 mg
Hawthorn Berry Powder (fruit)	5 mg
Coenzyme Q10	60 mg
alpha-Lipoic-Acid	50 mg

Diabet-Support Pack™

Gymnema Sylvestre extract (leaf) (standardized to 40% gymnemic acids)	200 mg
Fenugreek extract (seed) (standardized to 20% 4- hydroxyisoleucine)	125 mg
Cinnulin PF® Cinnamon extract (Cinnamomum burmannii, bark)	125 mg
EPA (Eicosapentaenoic acid)	660 mg
DHA (Docosahexaenoic acid)	340 mg
Ginger (root)	20 mg

SUGGESTED USE

Adults take 1 pack daily with meals 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

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

Anderson RA, Broadhurst CL, Polansky MM, Schmidt WF, Khan A, Flanagan VP, Schoene NW, Graves DJ. Isolation and characterization of polyphenol type-A polymers from cinnamon with insulin-like biological activity. *J Agric Food Chem*. 2004 Jan 14;52(1):65-70.

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.

Frye EB, Degenhardt TP, Thorpe SR, Baynes JW. Role of the Maillard reaction in aging of tissue proteins. Advanced glycation end product-dependent increase in imidazolium cross-links in human lens proteins. *J Biol Chem* 1998;273:18714-9.

Kaneto H, Fujii J, Myint T, et al. Reducing sugars trigger oxidative modification and apoptosis in pancreatic beta-cells by provoking oxidative stress through the glycation reaction. *Biochem J* 1996;320:855-63.

Preuss HG. Effects of glucose/insulin perturbations on aging and chronic disorders of aging: the evidence. *J Am Coll Nutr* 1997;16:397-403.

For more information on Diabet-Support Pack™ visit douglaslabs.com

† These statements have not been evaluated by the Food and Drug Administration.

Diabet-Support Pack™

This product is not intended to diagnose, treat, cure, or prevent any disease.

Manufactured by
Douglas Laboratories
600 Boyce Road
Pittsburgh, PA 15205
800-245-4440
douglaslabs.com



**You trust Douglas Laboratories.
Your patients trust you.**

© 2012 Douglas Laboratories. All Rights Reserved