

Gluco-Adapt™
Support for Glucose Metabolism†

DESCRIPTION

Gluco-Adapt is a blend of herbs, minerals, and alpha lipoic acid designed to provide healthy blood glucose support.† This product features *Garcinia cambogia*, which supplies HCA to support already healthy fat metabolism and glucose metabolism.† Additional ingredients in this formula support pancreatic beta cell function and glucose absorption.†

FUNCTIONS

Fluctuations in glucose metabolism can impact the degree of glycation present in the body. Advanced glycation end products (AGEs) are proteins or lipids that become glycated after exposure to sugars, and can be a result of the normal aging process. The presence of AGEs in various cell types can affect extracellular and intracellular structure and function. Essential nutrients can play an important role in helping to support already healthy blood glucose metabolism. † Alpha-lipoic acid is a fat- and water-soluble, sulfur-containing coenzyme. Alpha lipoic acid has been shown to inhibit AGE production. It functions in the body much like a B-vitamin, since it is involved in energy production. As part of several multi-enzyme complexes located in the mitochondria, alpha-lipoic acid is essential for metabolizing carbohydrates, proteins, and fats, and for the conversion of their energy into ATP. A related metabolic function of alpha-lipoic acid is its role in blood glucose disposal. This important coenzyme appears to be necessary for the normal transport of blood glucose into the cell. †

Gymnema sylvestre is an Ayurvedic botanical that may assist in the health of pancreatic beta cells. *Gymnema* may also support healthy intestinal glucose absorption. † Bitter melon (*Momordica charantia*) grows in tropical areas, including parts of East Africa, Asia, the Caribbean, and South America, where it is used traditionally as a food. The fruit of this plant lives up to its name—it tastes very bitter. At least three different groups of constituents in bitter melon have been reported to have blood sugar-regulating or other actions of potential benefit. These include a mixture of steroidal saponins known as charantin, insulin-like peptides, and alkaloids.†

Research shows that HCA (-) hydroxycitric acid helps maintain a healthy balance of hepatic lipogenesis and gluconeogenesis, thus preventing excessive conversion of glucose from carbohydrate into body fat. It is found in *Garcinia cambogia*, a tropical fruit grown in Asian rainforest climates. Research also indicates that (-) hydroxycitric acid plays an important role in the regulation of a normal appetite. † Chromium is an integral component of the glucose tolerance factor (GTF) and is essential for proper glucose metabolism. Adequate chromium nutrition is essential for the formation of GTF and already normal maintenance of blood glucose. †

INDICATIONS

Gluco-Adapt may be a useful dietary supplement for those who wish to support healthy blood sugar metabolism. †

FORMULA (#80442)

3 Vegetarian Capsules Contain:

| | |
|--|---------|
| <i>Gymnema sylvestre</i> leaf extract..... | 200 mg |
| Bitter Melon (fruit)..... | 200 mg |
| Fenugreek Seed | 150 mg |
| <i>Garcinia cambogia</i> extract..... | 995 mg |
| (supplying 500 mg of HCA) | |
| Alpha Lipoic Acid..... | 100 mg |
| Chromium (as chromium polynicotinate)..... | 200 mcg |
| Vanadium (Vanadyl Sulfate) | 2.5 mg |

Gluco-Adapt™**Support for Glucose Metabolism†****SUGGESTED USE**

Adults take 3 capsules daily or as directed by a healthcare professional.

SIDE EFFECTS

No known side effects.

STORAGE

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

REFERENCES

Anderson, RA. J Am Coll Nutr 1998;17:548-55.

Bierhaus A, Chevion S, Chevion M, Hofmann M, et al. Diabetes 1997;46:1481-90.

McCarty MF. Med Hypotheses 1998;51:399-403.

Raman A, Lau C. Phytomed Res 1996;2:349-62.

Shanmugasundaram ER, Gopinath KL, Radha Shanmugasundaram K, Rajendran VM. J Ethnopharmacol. 1990 Oct;30(3):265-79.

Westerterp-Plantenga M, Kovacs E. International Journal Of Obesity And Related Metabolic Disorders: Journal Of The International Association For The Study Of Obesity [serial online]. June 2002;26(6):870-872.

Preuss H, et al. Diabetes, Obesity & Metabolism [serial online].

Frauchiger MT, Wenk C, Colombani PC. J Am Coll Nutr. 2004 Aug;23(4):351-7.

Lee WJ, et al. Biochem Biophys Res Commun. 2005 Jul 8;332(3):885-91.

Gasic-Milenkovic J, Loske C, Münch G. Journal Of Alzheimer's Disease: JAD [serial online]. February 2003;5(1):25-30.

Fernandes N, Lagishetty C, Panda V, Naik S. BMC Complementary And Alternative Medicine [serial online]. September 24, 2007;7:29

For more information on Gluco-Adapt 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.

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

