Glucose Control Support

Nutritional Support for Healthy Glucose Metabolism

EASTERN STATES COMPOUNDING PHARMACY

DESCRIPTION

Glucose Control Support contains a complementary blend of thiamin, biotin, chromium, alpha-lipoic acid, N-acetyl-L-cysteine, and standardized extract of Gymnema sylvestre leaf for targeted nutritional support of glucose metabolism.

FUNCTIONS

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 glycotoxin intermediates. AGEs can cause abnormal and destructive functioning of body proteins, lipids, and nucleic acids. AGE-associated damage is suspected in the pathogenesis of many diseases and age-related deteriorations.

AGEs can be created endogenously, often as a consequence of excessive blood glucose levels. AGEs are also present in browned foods and cured tobacco. As uncontrolled blood glucose levels give rise to the formation of dangerous AGEs, it is crucial to maintain blood glucose levels within normal, healthy limits to avoid excessive AGE induced damage.

Maintenance of normal blood glucose levels is fundamental to preventing AGE formation. 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 subsequent healthy metabolism of normal blood glucose levels.

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. Alpha-lipoic acid appears to enhance glucose use by muscles by augmenting muscle protein content. *Gymnema sylvestre* is an Ayurvedic botanical that may assist in the normal regeneration and repair of healthy pancreatic beta cells. Gymnema may also support healthy intestinal glucose absorption.

Select nutrients help to directly arrest glycation reactions. A derivative of thiamin (vitamin B1), called thiamin pyrophosphate, and alpha-lipoic acid have both been shown to prevent in vitro AGE production.

Also crucial to controlling AGE formation and subsequent damage is 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. 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.

INDICATIONS

Glucose Control Support may be a useful dietary supplement for those who wish to support nutritional control of healthy blood sugar metabolism.

FORMULA (WW #10075)

2 Capsules Contain:

Thiamine (pyrophosphate) ..... 50 mg
Biotin .....2,500 mcg
Chromium (ChromeMate® polynicotinate*).....800 mcg
Alpha-Lipoic Acid** ..... 200 mg
N-Acetyl-L-Cysteine ..... 500 mg
Gymnema sylvestre leaf, ... 400 mg
dried extract, 25% gymnemic acids

* ChromeMate® brand. U.S. Patent Number 4,923,855 InterHealth Co.

** Lipoic Acid used in this product is of the highest quality available and of Italian origin.

SUGGESTED USE

Two capsules daily, or as directed by a 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.

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