

# Glucoset®

## Nutritional Support for Healthy Glucose Metabolism †

### DESCRIPTION

Glucoset® capsules, provided by Douglas Laboratories®, contain a complementary blend of thiamine, biotin, chromium, alpha-lipoic acid, N-acetyl-L-cysteine and standardized extract of *Gymnema sylvestre* leaf for targeted nutritional support of glucose metabolism. †

### 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. †

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 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 support the health of pancreatic beta cells. Gymnema may also support healthy intestinal glucose absorption. †

Select nutrients play important roles in modulating glycation reactions. Studies have shown the derivative of thiamin (vitamin B<sub>1</sub>), called thiamin pyrophosphate and alpha-lipoic acid maintains healthy AGE production. Also crucial to AGE homeostasis is antioxidant protection. Oxidative stress is closely related to AGE production. In vitro, N-acetyl-L-cysteine has shown the potential to moderate glycation in pancreatic cells. N-acetyl-L-cysteine also provides antioxidant support by serving as an intracellular precursor of glutathione. †

### INDICATIONS

Glucoset® may be a useful dietary supplement for those who wish to support healthy blood glucose metabolism.

### FORMULA (#GST)

Two Vegetarian Capsules contain:

Thiamine (hydrochloride).....	36 mg.
Biotin .....	2,500 mcg.
Chromium (ChromeMate® chromium polynicotinate*)...	800 mcg.
Alpha-Lipoic Acid** .....	200 mg.
N-Acetyl-L-Cysteine .....	500 mg.
Gymnema sylvestre leaf, .....	400 mg.
dried leaf, min 25% gymnemic acids	

\* ChromeMate® is a registered trademark of InterHealth Co.

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#### SUGGESTED USE

Two capsules daily or as directed by physician.

#### SIDE EFFECTS

No adverse side effects have been reported.

#### STORAGE

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

#### REFERENCES

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For more information on Glucoset® visit [douglaslabs.com](http://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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