

GlucoQuench™ Hormone Specific™ Formulation

DESCRIPTION

GlucoQuench™ is a Hormone Specific™ Formulation containing botanical ingredients, adaptogens, and phytotherapeutic extracts to help maintain the Glucose-Insulin-System (GIS), promote healthy glucose metabolism, and support hormone function.†

Each Hormone Specific™ Formulation provided by Douglas Laboratories® and formulated by Dr. Joseph J Collins is created to support the optimal function of specific hormones through the use of hormone specific adaptogens, hormone specific agonists and hormone specific functional mimetics. †

FUNCTIONS

The beta cells of the pancreas produce the hormone insulin to transport glucose into the cells of the body and create energy. These cells can quickly adjust to spikes in blood glucose by secreting some of their stored insulin while simultaneously creating more. If cells become resistant to insulin, a cascade of undesirable effects on organs and systems may occur.† C-peptide is a hormone secreted into the bloodstream in equimolar quantities to insulin and is a clinical indication of beta cell mass.

Lagerstroemia speciosa (banaba) extracts have been used for many years in traditional medicine. The effects of banaba have been attributed to both corosolic acid as well as ellagitannins. Studies have been conducted in various animal models, animal studies and in vitro systems corosolic acid-standardized extracts, and ellagitannins. The beneficial effects of banaba and corosolic acid with respect to various aspects of glucose and lipid metabolism appear to involve multiple mechanisms, including enhanced cellular uptake of glucose, decreased gluconeogenesis, and the regulation of lipid metabolism.† These effects may be mediated by PPAR, MAP K, NF- κB and other signal transduction factors.†

Gymnema sylvestre, standardized to gymnemic acids, has been shown to nutritionally support the insulin producing cells of the pancreas.† Studies done with oral administration of an extract induced significant increases in both circulating insulin and C-peptide.† Certain bioactive compounds of gymnema have been shown to have insulin receptor-binding capabilities and may support the normal uptake of glucose into cells.†

Rehmannia glutinosa is a widely used traditional Chinese herb that contains more than 70 compounds including iridoinds, saccharides, amino acid, and inorganic ions. The actions of these may support healthy glucose and insulin levels.† In research, studies point to the ability of *rehmannia glutinosa* to modulate levels of the hormone ghrelin, and promote the induction of peptide YY (PYY) secretion.†

Berberine is a naturally occurring alkaloid and a primary constituent of several plants including barberry, goldenseal, and phellodendron. It has been shown to support glycolysis and promote normal glucose metabolism as well as healthy lipid metabolism in vitro.† The main mechanism triggered by alkaloid compounds in berberine is the adenosine monophosphate-activated protein kinase (AMPK). In one study, those who took berberine for eight weeks had cardiovascular benefits and increased ability to exercise compared to those taking a placebo.†

The water-soluble polyphenol polymers found in cinnamon extract promote healthy glucose function, lipid metabolism and blood flow.† **Cinnamon extracts** have shown support of insulin action via increasing glucose uptake and enhancing the insulin-signaling pathway in skeletal muscle.†

Eleutherococcus senticosus is a widely used adaptogen that has shown to support the healthy management of blood glucose after carbohydrate intake by inhibiting glucosidase activity in the small intestine mucosa.†

Panax ginseng, Withania somnifera and Rhodiola rosea are other popular adaptogens that also support the function and structure of the Glucose-Insulin-System.†

INDICATIONS

GlucoQuench™ is a useful dietary supplement for those individuals who wish to support healthy blood glucose metabolism and insulin function.†

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FORMULA (#202298)

Dose per 2 capsules or 4 capsules

Gymnema Sylvestre

(leaf extract, standardized to 25% gymenic acids) 200 mg.....400 mg

Rehmannia glutinosa extract [root] 200 mg.....400 mg

Berberine HCL (from *Berberis aristata* extract, root) 125 mg 250 mg

Eleutherococcus senticosus

[root, standardized to 0.8% eleutherosides]..... 100 mg.....200 mg

Cinnamon bark extract (*Cinnamom cassia*)62.5 mg.....125 mg

Lagerstroemia speciosa [banaba leaf extract]

(standardized to 18% corosolic acid).....28 mg.....56 mg

A Phytocrine™ Proprietary Blend 160 mg.....320 mg

Panax ginseng extract [root, standardized to 3% ginsenosides] *Withania somnifera* [Ashwagandha root and

leaf extract, standardized to a minimum of 10% withanolide glycoside conjugates and 32% oligosaccharides],

Rhodiola rosea root extract [standardized to 5% rosavins and 2% salidroside]

SUGGESTED USE

As a dietary supplement, adults take 2 capsules each day with food or for 1 to 2 weeks or as directed by your healthcare professional. If desired, the dose may then be increase to 4 capsules each day with food for 2 to 4 months or as directed by your healthcare professional. After 2 to 4 months, dosage may be lowered back down to 2 capsules each day with food and continue on that dosage as needed or as directed by your healthcare professional.

SIDE EFFECTS

No adverse side effects have been reported. If you are pregnant, nursing, have any health condition or taking any medication, consult your healthcare practitioner before using this product.

STORAGE

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

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For more information on GlucoQuench 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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