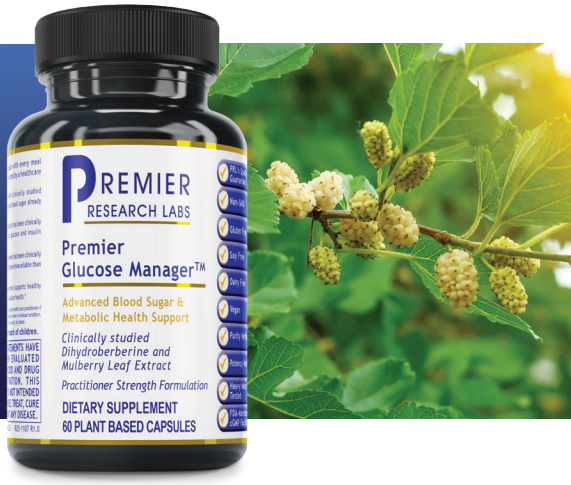
PREMIER RESEARCH LABS

Premier Glucose Manager™

Metabolic Support & Glycemic Balance

Dietary Supplement



Non GMO — Non-GMO
GLUTEN FREE
Vegan — VEGAN
POTENCY VERIFIED
PURITY VERIFIED
PLANT-SOURCE CAPSULES
VIOLITE® BOTTLE

The relationship between metabolic dysfunction and impaired glucose homeostasis continues to represent one of the most significant health challenges globally. Glucose dysregulation progresses along a continuum characterized by declining insulin sensitivity, compensatory hyperinsulinemia, progressive β-cell dysfunction, and postprandial hyperglycemia.[1,2] This metabolic progression is further compounded by oxidative stress, inflammatory signaling, and dyslipidemia, creating a cascade that impacts multiple physiological systems.[3,4]

Effective metabolic support requires addressing both basal insulin sensitivity and meal-related glucose fluctuations. Glucose Manager combines two clinically-validated ingredients—GlucoVantage® Dihydroberberine and Reducose® Mulberry Leaf Extract—to provide comprehensive glycemic support through complementary mechanisms of action.*

GLUCOVANTAGE® DIHYDROBERBERINE (DHB) – 100 MG

Dihydroberberine, derived from indian barberry (Berberis aristata) represents a hydrogenated derivative of berberine with significantly enhanced pharmacokinetic properties.* While standard berberine suffers from poor oral bioavailability (<1%), limiting its clinical utility despite demonstrated metabolic benefits, DHB addresses this limitation through structural modification.[1]

- **The Bioavailability Advantage:** DHB demonstrates approximately 5-fold greater bioavailability compared to standard berberine, enabling lower therapeutic doses with reduced gastrointestinal irritation.[1] The extended half-life (4–6 hours vs. 2–3 hours for berberine) allows for sustained metabolic support with convenient dosing[1] Following oral administration, DHB converts back to berberine in vivo, providing the well-established metabolic effects of berberine at a fraction of the dose.[1]
- **Mechanism: AMPK Activation:** DHB inhibits glucose oxidation at mitochondrial Complex I, triggering a cellular energy deficit that activates AMP-activated protein kinase (AMPK)—the body's master metabolic switch.[1,2,3] This cascade initiates multiple downstream effects supporting metabolic health.
- **Enhanced Insulin Sensitivity:** AMPK activation improves insulin receptor function and glucose uptake in skeletal muscle through translocation of GLUT4 transporters to the cell membrane.[4] Clinical studies demonstrate that berberine supplementation can support healthy insulin sensitivity comparably to other interventions in individuals with metabolic concerns.[7]
- **Optimized Energy Metabolism:** AMPK promotes ATP-generating pathways while inhibiting ATP consumption, enhancing overall metabolic efficiency and mitochondrial function.[4,6] This metabolic reorientation supports healthy cellular energy balance during periods of metabolic stress.
- **Lipid Balance Support:** AMPK activation enhances fatty acid oxidation while inhibiting hepatic lipogenesis through downregulation of acetyl-CoA carboxylase (ACC) and HMG-CoA reductase.[5,12,13,14] Clinical studies demonstrate berberine's ability to support healthy cholesterol and triglyceride levels already within normal range through increased LDL receptor expression and reduced VLDL secretion.[15]

REDUCOSE® MULBERRY LEAF EXTRACT – 250 MG

Reducose® is a standardized mulberry leaf extract (Morus alba) containing 5% 1-deoxynojirimycin (DNJ), providing 12.5 mg DNJ per serving. This represents the clinically-validated threshold for metabolic efficacy and delivers 50-fold higher DNJ content compared to common mulberry extracts (~0.1%).

- **Mechanism: Alpha-Glucosidase Inhibition:** 1-Deoxynojirimycin (DNJ), an iminosugar structurally analogous to glucose, functions as a competitive inhibitor of intestinal alpha-glucosidase enzymes.[8,10,11] This mechanism produces several metabolic effects.
- **Clinical Evidence:** Reducose® is supported by over 10 years of human clinical studies demonstrating consistent metabolic benefits.[9]
- **Postprandial Glucose Control:** A 2024 randomized, double-blind, placebo-controlled crossover study examined different doses of Reducose® in healthy subjects consuming a complex mixed meal.[8] The study found approximately 40% reduction in post-meal glucose spikes (2-hour postprandial window), dose-dependent response with optimal effects at 250mg (12.5mg DNJ), and significant attenuation of glucose area-under-curve (AUC) measurements.[8]
- **Insulin Response Modulation:** Clinical trials consistently demonstrate that Reducose® supports healthy insulin responses: up to 41% reduction in total and peak insulin response, reduced insulin demand without hypoglycemic risk, and pancreatic β-cell preservation through reduced metabolic stress.[8,9,10,11]

GlucoVantage® (Dihydroberberine)	100mg
Reducose® (from Mulberry Leaf Extract) (Morus alba) (standardized to contain 5% 1-deoxynojirimycin)	250 mg

Suggested Use: Take 1 capsule with every meal with carbohydrates, maximum 3 capsules a day, or as directed by a healthcare professional.

Order Code: 2522 60 capsules per Bottle; Violite® Container

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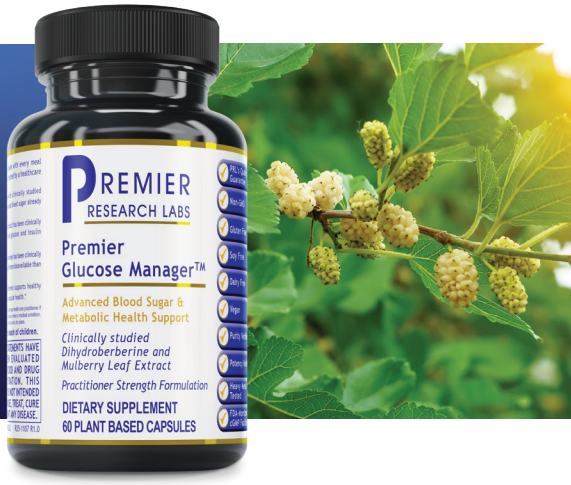

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DUAL-ACTION MECHANISM

The strategic pairing of dihydroberberine (DHB) and mulberry leaf extract (MLE) targets glucose dysregulation at two critical control points—absorption (intestinal level) and utilization (cellular level)—providing comprehensive coverage across the full glycemic cycle.*

Target	GlucoVantage® DHB	Reducose® MLE
Primary Focus	Fasting glucose & insulin sensitivity*	Postprandial glucose control*
Mechanism	AMPK activation, cellular energy sensing*	Alpha-glucosidase inhibition*
Insulin Impact	Enhances receptor function*	Reduces insulin demand by up to 41%*
Glucose Impact	Inhibits glucose oxidation at Complex I*	Reduces peak glucose by up to 40%*

INDICATIONS

Primary:

- Support for healthy blood sugar balance already within normal range*
- Metabolic wellness and insulin sensitivity support*
- Postprandial glucose response management*
- Cardiometabolic health optimization*

Secondary:

- Healthy lipid metabolism support*
- Vascular health and endothelial function*
- Mitochondrial function and cellular energy metabolism*

CAUTIONS AND CONTRAINDICATIONS

Not recommended during: Pregnancy and lactation (insufficient safety data); pediatric use (lack of safety and efficacy data)

Use with caution: Patients prone to hypoglycemia; those taking medications metabolized by CYP450 enzymes or P-glycoprotein; patients taking antidiabetic medications.

Pre-Surgical: Consider discontinuation 2 weeks prior to scheduled surgery.

REFERENCES

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7. Thondre PS, et al. Understanding the impact of different doses of Reducose® mulberry leaf extract on blood glucose and insulin responses after eating a complex meal. Nutrients. 2024;16(11):1670.
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Product Provides:

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