



WELLBETX[®] BERBERINE

500 mg

NPN 80059713

RESEARCH INFORMATION

Feature summary

Blood glucose (sugar) management is a key part of maintaining a healthy body, yet millions of Canadians struggle with ailments related to poorly controlled blood sugar and insulin levels. The unique ways in which WellBetX Berberine acts on the body makes it a useful natural option for improving blood sugar, triglycerides, and cholesterol levels.

Berberine is a naturally occurring compound extracted from the roots of various plants, including barberry, goldenseal, and Oregon grape, and is likely responsible for the beneficial effects of traditional tonics made from these plants. Modern evidence shows berberine works to restore the insulin sensitivity needed to maintain healthy blood sugar levels, and promotes cardiovascular health by helping to lower LDL (bad) cholesterol in people with poorly controlled blood sugar.

Every vegetarian capsule provides 500 mg of pure berberine, the same concentration used successfully in clinical trials to enhance insulin sensitivity and prompt a hypoglycemic effect that supports weight management. By lowering blood sugar berberine minimizes the body's production of insulin, the fat-storing hormone.

All WellBetX products are made with the highest quality ingredients. They provide essential nutritional support designed to balance blood sugar and promote cardiovascular health when paired with a nutritious diet and physical activity.

How it works

Berberine lowers blood glucose and improves insulin sensitivity through various physiological mechanisms. Most of its actions involve AMP-activated protein kinase (AMPK) – an enzyme involved in regulating the body's energy levels. By targeting this pathway, berberine induces the uptake of glucose into cells, where it is converted into energy. Activating AMPK is also key to berberine's function in regulating blood lipids, such as LDL cholesterol, total cholesterol, and triglycerides. This enzyme acts as a master switch, regulating energy production and storage as well as lipid metabolism. It helps burn fatty acids within cells, stabilize the receptors for LDL cholesterol, and inhibit the formation of lipids by the liver.

Berberine also helps block the digestion of carbohydrates, including starch, by inhibiting disaccharidases – the enzymes needed to break them down. As a result, only a limited amount of glucose can be absorbed through the intestines and pass into the blood. For the glucose that is absorbed into the bloodstream, berberine helps get it into cells more efficiently by enhancing the transport proteins responsible for moving it across cell membranes. It also promotes insulin sensitivity by increasing the number and activity of available insulin receptors. This allows the same concentration of insulin to be more effective at moving glucose out of the bloodstream. Using insulin more efficiently is a foundation for successfully managing diabetes.

Research

Berberine is a naturally occurring compound found in the roots, rhizomes, and stem bark of various plants. Its application for metabolic problems related to insulin resistance, glucose metabolism, and blood lipids is well supported by clinical studies using 500 mg doses.

A combined clinical study and cell assay investigating the effects of berberine on fat cells found that when patients with metabolic syndrome were supplemented with three 300 mg doses of berberine per day for three months, their insulin sensitivity improved. Researchers concluded that this outcome was due to berberine's effect on inhibiting fat stores. They found that patient body mass index (BMI) and waist circumference decreased by 4.1 kg/m² and 6.2 cm respectively. After three months fasting insulin and blood glucose levels had also decreased by 26% and 17% respectively (Yang et al., 2012).

Berberine's efficacy in normalizing the insulin response and blood glucose control is comparable to that of the insulin sensitizer metformin (Yin et al., 2008). A placebo-controlled clinical trial comparing the effects of metformin to berberine found that when women with insulin resistance took three 500 mg doses of berberine per day for three months, their fasting insulin levels decreased by 34%. This is comparable to the 37% decrease in fasting insulin observed in participants who took metformin (Wei et al., 2012).

People with type 2 diabetes can also reap benefits from berberine similar to those of metformin. A clinical study found that diabetic participants who took three 500 mg doses of berberine per day for three months had a 35% decrease in fasting blood glucose and a 44% decrease in postprandial blood glucose (Yin et al., 2008). A meta-analysis of 27 randomized, controlled clinical trials found that diabetic participants who took berberine in addition to making lifestyle changes lowered their blood glucose levels significantly more than when taking a placebo or making lifestyle changes only (Lan et al., 2015).

Elevated blood lipids, such as cholesterol and triglycerides, can lead to serious health problems. However, some studies have identified that a 0.78 mmol/L decrease in LDL cholesterol translates into a 30% lower risk of coronary heart disease (Dong et al., 2013). Berberine targets multiple cardiometabolic risk factors, as it has been shown to lower blood lipids among diabetic participants in several controlled trials (Yin et al., 2008). A meta-analysis of controlled clinical studies found that up to three 500 mg doses of berberine per day reduced LDL cholesterol by 0.65 mmol/L (Dong et al., 2013). Other placebo controlled studies have resulted in a 0.93 mmol/L decrease in total cholesterol, a 1.0 mmol/L decrease in triglycerides, and a 36% remission in metabolic syndrome (Wei et al., 2012; Perez-Rubio et al., 2013).

Ingredients

Each capsule contains:

Berberine (hydrochloride)
(*Berberis vulgaris*) (root bark)500 mg

Dosage

Recommended adult dose: 1 capsule 2 times daily with meals or as directed by a health care practitioner. Consult a health care practitioner for use beyond 3 months.

Cautions

Consult a health care practitioner if you have leucopenia, a kidney disorder, hypotension, or blood pressure problems. Consult a health care practitioner prior to use if you have hypoglycemia or diabetes. Do not use if pregnant or breastfeeding. May cause gastrointestinal discomfort such as constipation, vomiting, abdominal pain, or diarrhea, in which case discontinue use and consult a health care practitioner. Keep out of the reach of children.

References

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