



**Code:** 9214 **NPN:** 80121912  
**Size:** 60 Liquid Softgels

# Berberine LipoMicel®

Glucose Support · Higher Bioavailability · 500 mg

- Provides 500 mg of berberine HCl per softgel, the dosing strength used in clinical trials for glucose and lipid control
- Uses LipoMicel technology, which creates a liquid micelle matrix that disperses the berberine into tiny microdroplets, resulting in a highly stable delivery system
- Supports healthy glucose metabolism via multiple mechanisms, including enhancement of insulin sensitivity
- Has favourable effects on blood lipids, including a reduction in triglycerides and both total and LDL cholesterol
- Activates Nrf-2, a key regulator of antioxidant gene transcription and prevention of glucose-induced neurotoxicity
- Helps maintain cardiovascular health
- Extracted from *Berberis vulgaris* (European barberry)

## PRODUCT SUMMARY

While berberine is traditionally used for gastrointestinal symptoms, current research shows that it also has benefits for blood glucose support, cardiovascular health, and antioxidant activity. It helps lower blood glucose by slowing the absorption of carbohydrates and supporting insulin sensitivity, in addition to lowering HbA1c levels. It helps reduce waist circumference and body weight, blood pressure, and triglycerides in metabolic syndrome. It also helps lower blood pressure, total and LDL cholesterol, and triglyceride levels.

Berberine improves insulin sensitivity through inhibition of alpha-glucosidase activity, upregulation of insulin receptors in peripheral tissues, AMPK activation, and UHRF1 inhibition. In controlled trials, it reduced HbA1c levels with comparable efficacy to standard treatment. Berberine also activates Nrf2, a key regulator of cellular antioxidant defence, and attenuates glucose-induced neurotoxicity.

Berberine supplements can vary widely in bioavailability. Improved delivery forms, such as LipoMicel berberine, enhance bioavailability, provide resistance against intestinal degradation, and may also improve intracellular delivery. A pilot crossover study showed that LipoMicel berberine was effective in lowering blood glucose levels by 12% after two 500 mg doses.



**BERBERINE LIPOMICEL**  
GLUCOSE SUPPORT · HIGHER BIOAVAILABILITY · 500 MG

**Serving Size:** 1 Softgel

**Servings Per Container:** 60

**Each Softgel Contains:**

Berberine LipoMiel® (hydrochloride) (*Berberis vulgaris*) (root bark)..... 500 mg

**Non-medical Ingredients:** Softgel (gelatin, glycerin, purified water, carob powder), medium chain triglycerides, bergamot flavour, xylitol, MSM, stevia leaf extract, sunflower lecithin.

**Recommended Adult Dose (18 Years & Older):** 1 softgel 2 times per day or as directed by a health care practitioner. Consult a health care practitioner for use beyond 3 months.

**Recommended Use:** Provides support for healthy glucose metabolism. Helps maintain cardiovascular health in adults. Helps support healthy blood lipid levels. Helps support healthy cholesterol levels (serum triglycerides, total and LDL).

**Caution:** Consult a health care practitioner if you have leucopenia, a kidney disorder, or blood pressure problems. Consult a health care practitioner prior to use if you have liver disease, hypotension, hypoglycemia, or diabetes. Do not use if you are 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 reach of children.

**Contraindications:** Do not use if you are pregnant or breastfeeding.

**Drug Interactions:** Berberine has been shown to lower blood glucose levels and may have an additive effect when combined with other hypoglycemic medications, such as metformin. Berberine has been shown to increase levels of cyclosporin A, and combined use should be avoided. Berberine has demonstrated inhibitory activity on cytochrome enzymes CYP2D6, 3A4, and CYP2C9, and the use of medications metabolized by these enzymes should be monitored.

**Contains no artificial colours, preservatives, or sweeteners; no dairy, starch, sugar, wheat, gluten, yeast, soy, corn, egg, fish, shellfish, salt, tree nuts, or GMOs.** Sealed for your protection. Do not use if seal is broken. For freshness, store in a cool, dry place.

References available at [bioclinicnaturals.com](http://bioclinicnaturals.com)



· GUARANTEED ·

Bioclinic Naturals® products are manufactured to meet or exceed current Good Manufacturing Practices (cGMP) of the U.S. Food and Drug Administration (FDA), Health Canada, and the Therapeutic Goods Administration (TGA) of Australia.



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# Berberine LipoMicel<sup>®</sup> – Glucose Support and Higher Bioavailability

## About Berberine LipoMicel

- Berberine is a naturally occurring alkaloid found in many medicinal plant species worldwide. These plants include barberry (*Berberis vulgaris*), Chinese goldthread (*Coptis chinensis*), goldenseal (*Hydrastis canadensis*), Indian barberry (*Berberis aristata*), and Oregon grape (*Berberis aquifolium*).<sup>1</sup>
- Berberine helps decrease blood cholesterol and blood sugar.<sup>2,3</sup>
- It helps reduce body weight by an average of 2.67 kg (5 lb) in overweight populations.<sup>4</sup>
- With additional healthy lifestyle changes, berberine may help reduce blood pressure.<sup>5</sup>
- Improved delivery forms, such as LipoMicel<sup>®</sup> polymeric micelles (liquid micelle matrix), enhance berberine’s bioavailability.<sup>6</sup>
- LipoMicel berberine was effective in lowering blood glucose levels by 12% after two 500 mg doses.<sup>7</sup>

## How to Use Berberine LipoMicel

- Take 1 softgel 2 times per day or as directed by a health care practitioner. Consult a health care practitioner for use beyond 3 months.

## Cautions and Contraindications

- Consult a health care practitioner if you have leucopenia, a kidney disorder, or blood pressure problems. Consult a health care practitioner prior to use if you have liver disease, hypotension, hypoglycemia, or diabetes. Do not use if you are 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 reach of children.

## Drug Interactions

- If you are taking prescription medications, consult a health care practitioner prior to use as berberine may alter their effectiveness.<sup>8</sup> Consult a health care practitioner prior to use if you have low blood sugar (hypoglycemia), low blood pressure (hypotension), or reduced heart rate (bradycardia).<sup>9,10</sup> As berberine increases the levels of the drug cyclosporin A, individuals who have had organ transplants should consult a health care practitioner before using this product.<sup>11,12</sup> Berberine may inhibit cytochrome enzymes CYP2D6, 3A4, and CYP2C9, and the use of medications metabolized by these enzymes should be monitored.<sup>8</sup> If symptoms persist or worsen, consult a health care practitioner.

## Quick Tips for Optimal Health

- The DASH diet (i.e., potassium-rich fruits and vegetables, low-fat dairy products, and reduced salt intake) has been shown to be very helpful in lowering cholesterol and modifying other cardiovascular risk factors.<sup>13,14</sup>
- Just 250 mL (just over a cup) of beetroot juice helps support cardiovascular health.<sup>15</sup>
- Eating a handful of almonds (43 g/1.5 oz) daily not only helps reduce LDL cholesterol, but also reduces your waist size.<sup>16</sup>
- Eating 10 g of ground flaxseed per day for just 30 days helps lower your fasting blood sugar by almost 20%.<sup>17</sup>
- Long-term endurance exercise and/or strength training not only helps reduce the risk of heart disease, but also lowers fasting blood sugar in certain conditions.<sup>18</sup>
- Soluble dietary fibre supplements (e.g., PGX<sup>®</sup> or psyllium) help lower LDL cholesterol and also decrease blood sugar levels.<sup>19-21</sup>
- Substituting dietary legumes (i.e., beans, nuts, peas, lentils) for red meat helps improve blood sugar control and lower LDL cholesterol for individuals with blood sugar imbalance.<sup>22</sup>

PATIENT NAME: \_\_\_\_\_

**PRACTITIONER NOTES:**

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PRACTITIONER CONTACT INFORMATION:

## References

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14. Sacks, F.M., Svetkey, L.P., Vollmer, W.M., et al. (2001). Effects on blood pressure of reduced dietary sodium and the dietary approaches to stop hypertension (DASH) diet. DASH-sodium collaborative research group. *N Engl J Med*, 344(1), 3-10.
15. Kapil, V., Khambata, R.S., Robertson, A., et al. (2015). Dietary nitrate provides sustained blood pressure lowering in hypertensive patients: A randomized, phase 2, double-blind, placebo-controlled study. *Hypertension*, 65(2), 320-7.
16. Berryman, C.E., West, S.G., Fleming, J.A., et al. (2015). Effects of daily almond consumption on cardiometabolic risk and abdominal adiposity in healthy adults with elevated LDL-cholesterol: A randomized controlled trial. *J Am Heart Assoc*, 4(1), e000993.
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