NutriDyn®

Berberine Pro

Support for Healthy Glucose Metabolism and Heart Health♦

Berberine Pro Supplementation

Berberine HCl and cinnamon bark extract have been studied for their potential benefits in heart health, glucose metabolism, and weight management.♦ Their mechanisms of action in these areas are due to their unique molecular interactions with various biochemical pathways.♦

The ingredients in Berberine Pro have shown the potential to support heart health and healthy glucose metabolism, which play a part in healthy weight management.♦ They seem to act through multiple, often interrelated, mechanisms that influence cellular metabolism, energy homeostasis, and healthy oxidative stress response.♦

Supplementation with Berberine Pro may also include these additional benefits:

- Supports heart health♦
- Promotes healthy blood glucose metabolism♦
- Supports healthy weight management♦
- Supports cellular health♦
- Promotes healthy antioxidant activity♦
- Promotes healthy inflammatory markers♦
- Promotes healthy gut microbiota♦

GLUTEN-FREE DAIRY-FREE VEGETARIAN

NON-GMO cGMP FACILITY

How Berberine Pro Works

Heart Health♦

Berberine has been shown to support various cardiovascular health markers.♦ The mechanism is believed to be via the activation of the AMP-activated protein kinase (AMPK) pathway, a key regulator of cellular energy homeostasis.♦[1] Additionally, berberine has demonstrated antioxidant effects that may further support heart health.♦[2] Cinnamon bark extract may also have antioxidant properties due to the presence of polyphenols.♦ These properties promote healthy oxidative stress response and inflammatory markers, which play a crucial role in heart health.♦[3]

Healthy Glucose Metabolism♦

Berberine has also been researched for its hypoglycemic effects related to cellular energy homeostasis, which promotes healthy glucose uptake into cells, glucose metabolism, and hepatic glucose production.♦[4] Berberine also supports healthy gut microbiota composition associated with healthy glucose metabolism.♦[5]

How Berberine Pro Works Continued

The active components in cinnamon, such as cinnamaldehyde and cinnamic acid, have been suggested to promote glucose uptake in peripheral tissues.♦[6]

Healthy Weight Management♦

The activation of AMPK by berberine can influence mechanisms involved in fat storage and promote fat burning in mitochondria.♦[7] Berberine may also reduce appetite and energy intake by promoting healthy levels of gut hormones such as leptin and ghrelin.♦[8] Additionally, berberine promotes healthy gut microbiota. An altered gut microbiota profile has been associated with obesity.♦

The potential effects of cinnamon on healthy weight management can be attributed to its promotion of healthy glucose metabolism, which supports healthy fat storage.♦[9] Additionally, cinnamon may have thermogenic properties, helping to support healthy energy expenditure and promoting fat burning.♦

Supplement Facts

Serving Size: 1 Capsule
Servings Per Container: 90

	Amount Per Serving	%DV
Berberine HCl	500 mg	**
Organic Cinnamon Extract (bark; *Cinnamomum ceylon*)	84 mg	**

Other Ingredients: Hypromellose, microcrystalline cellulose, vegetable magnesium stearate, silica.

Directions: Take one capsule three times daily before meals or as directed by your healthcare practitioner.

Caution: If you are pregnant, nursing, or taking medication, consult your healthcare practitioner before use. Keep out of reach of children.

References:

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3. Roussel AM, Hininger I, Benaraba R, et al. *J Am Coll Nutr.* 2009;28(1):16–21.
4. Yin J, Gao Z, Liu D, et al. *Am J Physiol Endocrinol Metab.* 2008;294(1):E148-E156.
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6. Kirkham S, Akilen R, Sharma S, *Tsiami A. Diabetes Obes Metab.* 2009;11(12): 1100-1113.
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8. Xie X, Li W, Lan T, et al. *Endocr J.* 2011;58(9):761-768.
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♦ 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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