



Berberine Pro

Support for Healthy Glucose Metabolism and Heart Health[^]

PRACTITIONER EXCLUSIVE

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.[^]

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, both of 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 glucose uptake into cells, promotes healthy glucose metabolism, and supports healthy hepatic glucose production.^{^4} Berberine also supports healthy gut microbiota composition associated with healthy glucose metabolism.^{^5}

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, and an altered gut microbiota profile has been associated with obesity.[^]

The potential effects of cinnamon on healthy weight management can be attributed to healthy levels 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.[^]



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Form: 90 Capsules Serving Size: 1 Capsule

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

Other Ingredients:

Hypromellose, 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.

Berberine Pro Supplementation

The ingredients in Berberine Pro have shown potential in supporting heart health and healthy glucose metabolism, both of which play a part in healthy weight management.^ They seem to act through multiple mechanisms, often interrelated, 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 healthy cellular health^
- Promotes healthy antioxidant activity^
- Promotes healthy inflammatory markers^
- Promotes healthy gut microbiota^

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References:

1. Zhang Y, Li X, Zou D, et al. *J Clin Endocrinol Metab.* 2008;93(7):2559-2565. Caliceti C,
2. Franco P, Spinozzi S, et al. *Curr Med Chem.* 2016;23(14):1460-1476. Roussel AM, Hining
3. I, Benaraba R, et al. *J Am Coll Nutr.* 2009;28(1):16-21. Yin J, Gao Z, Liu D, et al. *Am J*
4. *Physiol Endocrinol Metab.* 2008;294(1):E148-E156. Zhang L, Wu X, Yang R, et al. *Front Cell*
5. *Infect Microbiol.* 2021;10:588517. Kirkham S, Akilen R, Sharma S, Tsiami A. *Diabetes Obes*
6. *Metab.* 2009;11(12):1100-1113. Kim WS, Lee YS, Cha SH. *Am J Clin Physiol Endocrinol*
7. *Metab.* 2009 Apr;296(4):E812-9. Xie X, Li W, Lan T, et al. *Endocr J.* 2011;58(9):761-768.
8. Khan A, Safdar M, Ali Khan MM, et al. *Diabetes Care.* 2003;26(12):3215-3218.
- 9.

^ 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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