

Healthy Glucose Management Can The Supplement Berberine Become Nature's Ozempic?

TikTok wellness trends can often sway our health decisions, often pushing the boundaries of the truth to gain extra "hits." The Ozempic craze is certainly up there on the list of misinformation that can lead the public down a potentially unhealthy path.

Along with the TikTok weight loss craze came Berberine, which has been positioned as "Nature's Ozempic." While Berberine shares some benefits with Ozempic, such as glucose management (blood sugar) management, it also offers unique advantages. It's important to note that Berberine does not promise rapid weight loss like Ozempic. No magic pill, supplement, or pharmaceutical will cure your every ill or vanish weight.

However, some natural health supplements, such as Berberine, make you stop and think about the value they can bring to your life.

Berberine is being compared to Ozempic because of the positive effects it can have on Type II diabetes, providing healthy glucose management and resetting symptoms of metabolic syndrome. However, the components of Ozempic (semaglutide) are different from the active ingredient in Berberine. Some experts say that while Berberine has proven metabolic effects on the body, limited studies have indicated Berberine could play a role in weight loss,



What do we know about Berberine?

Berberine is an alkaloid found in medicinal plants such as barberry and goldenseal and is known for its bright yellow colour and bitter taste. Berberine has been used in Indian and Chinese medicine for centuries; today, it is still used as an over-the-counter (OTC) drug in China, where it is used to treat gastrointestinal infections.

Berberine has been the subject of some published research for blood sugar control -- (insulin resistance, pre-diabetes, diabetes and metabolic syndrome. Additional investigations have examined Berberine's impact on quantitative measures of the body, such as body weight and body mass index (BMI). In a review of 12 studies, Daily use of Berberine led to significant reductions in body weight, BMI, waist circumference, and inflammation markers. In another review, berberine significantly reduced weight, BMI, and other measures such as triglycerides, total cholesterol, and fasting blood glucose. It also deserves accolades for its positive effect on liver health, heart health -- (reduction of high cholesterol), intestinal health/gastrointestinal challenges, non-alcoholic fatty liver disease, and polycystic ovarian syndrome.

How Does Berberine Work?

To understand Berberine's amazing benefits, you need to know how it works. After ingesting Berberine, it is absorbed into the bloodstream and then travels to all cells in the body, similar to some vitamin and mineral supplements. However, it differs when it gets to the cells because it binds to several different cells and targets and changes their functions (similar to how pharmaceuticals work). The primary role of Berberine, once in your cells, is to activate a particular enzyme called AMP-Activated Protein Kinase (AMPK), also referred to as the master switch that regulates all aspects of cell function and metabolism. Once Berberine has reached your cells, it works on several systems. Berberine also increases the production of GLP-1, a gut hormone that reduces appetite and food intake, while increasing insulin secretion and sensitivity, among other actions.

Overview of Berberine Benefits!

Berberine has gained attention in recent years because of its positive effects on Type II diabetes (a metabolic disorder) characterized by reduced insulin production or insulin resistance. Berberine may benefit blood sugar because it stimulates glucose uptake into the muscle cells and lowers fasting glucose, fasting insulin and post-prandial glucose. Berberine may also help to lower blood glucose in type II diabetes by increasing receptor expression.



- ✓ Berberine is also known to delay the breakdown of carbs into simple sugars, reducing sugar spikes and protecting the pancreas from repeated damage due to blood sugar diseases.
- ✓ There have also been clinical studies on Berberine and its short-term effect on the metabolic characteristics of women with polycystic ovary syndrome. (a metabolic disorder associated with insulin resistance)
- ✓ Berberine use has been associated with decreased systolic blood pressure, BMI, triglycerides, and total cholesterol. It also may inhibit inflammation through various pathways.
- ✓ Berberine has anti-microbial benefits and helps prevent fungal, parasitic and bacterial infections. It seems to inhibit the secretions of some detrimental bacteria in your intestines, which may explain its use in Chinese medicine as an anti-diarrhea supplement. It also helps with bile and bilirubin secretion, which further aids in digestion.

- ✓ Berberine shows promise in lowering total cholesterol triglycerides and low-density protein (LDL) and helps increase high-density protein (HDL)
- ✓ Berberine may help with weight loss because it affects fat-regulating hormones such as insulin, adiponectin and leptin. It may also inhibit the growth of fat cells at the molecular level (studies were done on 500 mg 3 times a day).
- ✓ Berberine also seems to inhibit the secretions of some toxins produced by bacteria in your intestines, which may explain its use in Chinese medicine as an anti-diarrhea supplement.
- ✓ In preliminary studies, Berberine can "increase neurotransmitters including serotonin (47%), dopamine (31%) and norepinephrine (31%) in the brain." Researchers state that "Berberine exerted an antidepressant-like effect."

How you use Berberine Makes A Difference.

Berberine only stays in your cells for a few hours, so it is suggested that you spread out your dosage throughout the day. Based on the studies, the dosage is 500 mg three times a day. It would be best if you did not stay on this supplement all the time. It is recommended that you take Berberine for 8 weeks and then take a break of 4 weeks before resuming another 8-week program.

What Brand of Berberine You Use is Important!

With the increase in research and media attention, Berberine supplements can be found on most store shelves. But buyer beware. Ensure you are taking your Berberine supplement from a reputable brand, and if that brand has third-party independent testing for quality, ingredients, and pill structure oversight, even better. Natural Factors WellBetX Berberine, Natural Factors Berberine LipoMicel, Regnerlife Berberine and Preferred Nutriton Berberine all contain a natural compound extracted from barberry roots, and these products go through rigorous testing. Natural Factors Berberine LipoMicel is an advanced form of Berberine provided in a clinically effective dose. LipoMicel technology creates a liquid micelle matrix that disperses the berberine into tiny microdroplets, resulting in a highly stable delivery system for this remarkable supplement.



Cautions

If you take blood sugar medications, you cannot use this supplement without supervision as it may affect your blood sugar. Some reported possible side effects are related to digestion, and there are some reports of cramping, diarrhea, flatulence, constipation and stomach pain. You should not take Berberine if you are pregnant or trying to conceive. Berberine also acts as a "perpetrator," meaning that when you take certain drugs alongside Berberine, you effectively get a higher concentration of the drugs in your blood.

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[term effect of berberine in comparison to metformin on the metabolic characteristics of women with polycystic ovary syndrome](https://www.researchgate.net/publication/51742152)