What Can Berberine Do For You?

Berberine is a yellow alkaloid found in goldenseal root, barberry bark, Oregon grape root, and coptis (goldthread) root. It is an antioxidant that is antibacterial, antiparasitic, antifungal, antiviral, anti-amoebic and has also been shown to:

- Decrease insulin resistance
- Stabilize blood sugar
- Activate AMPK
- Increase glycolysis inside the cells
- Slow the breakdown of carbohydrates in the gut
- Increase some beneficial bacteria in the gut
- Reduce triglycerides
- Balance cholesterol
- Lower blood pressure
- Increase mitochondria production
- Reduce the risk of heart disease
- Reduce fatty liver

Berberine For Weight Loss

Berberine studies produced weight loss and improvement of triglyceride, leptin, and cholesterol levels in obese patients (leptin is a hormone involved in hunger). Berberine has also been shown to inhibit the production of body fat cells.

Berberine is believed to activate the enzyme called AMP-activated protein kinase (AMPK). AMPK, sometimes referred to as a “metabolic master switch,” is an enzyme inside our cells that plays a major role in cellular energy homeostasis, activating glucose and fatty acid uptake when cellular energy is low. This enzyme plays a major role in regulating blood sugar and metabolism.

Berberine For Diabetes

Berberine has been shown in studies to work as well as the most commonly prescribed drugs taken for diabetes, metformin, rosiglitazone, and glipizide, to control blood sugar. Berberine reduces insulin resistance and lowers blood sugar levels. It also increases glycolysis inside cells, signals the liver to decrease glucose production, and slows the breakdown of carbohydrates in the gut. Berberine may also positively affect other enzymes and genes that affect blood sugar.

Berberine For Heart Health

Studies have shown that berberine can improve overall heart function in more than one way. Berberine may help repair and protect heart muscle cells. Berberine seems to improve the quality of life for patients with chronic congestive heart failure by helping to exercise lung capacity and reducing fatigue. Berberine also lowers lipid levels, prevents harmful fat deposition, increases fat burning in the mitochondria, relaxes the arteries, lowers blood pressure, and increases blood flow.

Berberine For Gut Health and the Immune System

Berberine exerts selective antimicrobial action, killing a wide range of harmful organisms without harming the microbiome. In fact, it promotes a healthy gut colony.

Many, if not all of berberine’s health benefits may be more a result of berberine’s effect on the gut microbiome than anything else. Researchers have shown that a very low percentage of berberine is actually absorbed from our gut into the rest of the body. But berberine increases the quantity of Akkermansia muciniphila, a beneficial gut bacteria that has

been inversely associated with obesity, diabetes, inflammation, and metabolic disorders. This bacteria is necessary for sufficient mucin thickness, which lines the gut, protects the intestines and the microbiome from damage, and keeps undigested food particles and pathogens from entering the rest of the body.

Without enough of the mucin layer, the gut becomes leaky and inflamed, which leads to chronic inflammation and insulin resistance, and then many more autoimmune symptoms result from this.

Low concentrations of berberine have also been shown to increase other beneficial bacteria including Bacillus subtilis, Bifidobacterium adolescentis, and Lactobacillus acidophilus but high concentrations can inhibit many of these microorganisms.

For more on gut health, see *How To Heal Your Gut.*

What Supplements Go Well With Berberine?

If you suffer from autoimmune disease or are dealing with an infection it’s probably wise to start off with a higher dosage of berberine and then after a week or two to scale back to a lower dosage to allow more of the beneficial bacteria to flourish.

In an unhealthy gut, fungal activity is virtually always present and proper enzymatic activity is certain to be lacking. In this supplement stack we include SF722 which is the best supplement we know of to kill fungi. There is also the AMD probiotic which is designed not just to supply the gut with beneficial bacteria but also to help the friendly microbes flourish with prebiotics and enzymes. The bacteria in this supplement work well with berberine. The MycoCeutics

complex is a mushroom complex. Just like bacteria, there are beneficial fungi and pathogenic fungi. I take the MycoCeutics and the SF722 separately, at least a few hours apart.

- **Berberine 500mg – Thorne Research**
- **Formula SF722 – Thorne Research**
- **Syntol AMD – Arthur Andrew Medical**
- **MycoCeutics MycoPhyto Complex – EcoNugenics**

Recommended Reading:

- *Best Supplements To Kill Candida and Everything Else You Ever Wanted To Know About Fungal Infections*
- *Holistic Guide to Healing the Endocrine System and Balancing Our Hormones*
- *Best Supplements To Kill Lyme and Everything Else You Ever Wanted To Know About Lyme Disease*

Sources:

- *Berberine: The Microbiome's Super Booster* – Enzymedica
- *Berberine – A Powerful Supplement With Many Benefits* – Healthline
- *Effect of berberine on Escherichia coli, Bacillus subtilis, and their mixtures as determined by isothermal microcalorimetry* – NCBI
- *6 Proven benefits of Berberine* – Selfhacked
- *Berberine to Boost Weight Loss & Lower Blood Sugar* – Alive By Nature
- *Meta-analysis of the effect and safety of berberine in the treatment of type 2 diabetes mellitus, hyperlipemia and hypertension* – NCBI
- *Berberine in the Treatment of Type 2 Diabetes Mellitus: A Systemic Review and Meta-Analysis* – NCBI