Berberine IR
Isolated alkaloid from medicinal herbs with multiple health benefits

Berberine is an alkaloid found in many herbs traditionally used for fighting infection and improving the health of the gastrointestinal tract. It is a bright yellow color, which means some of the plants containing it have also been used as yellow dyes.

Berberine is a major component of the popular Western herbs goldenseal (Hydrastis canadensis), Oregon grape (Berberis aquifolium) and barberry (Berberis vulgaris). It is also found in the two popularly used Chinese herbs, Amur cork tree (Phellodendron amurense) and coptis or goldenthread (Coptis chinensis). Other plants containing this alkaloid include yerba mansa and yellowroot.

Although herbalists have benefited from these plants for many years, recent research into the properties of berberine has brought this compound to the attention of medical science. Here are some of the benefits showing up in the research.

Blood Sugar Regulation

Berberine has shown some benefits in the treatment of insulin resistant (type 2) diabetes. It helps to reduce blood glucose levels and appears to reduce insulin resistance. In one study, 36 adults who had been recently diagnosed with type 2 diabetes were given berberine or the drug metformin. The berberine performed as well as the drug in lowering blood sugar.

Blood Lipid Regulation

High levels of blood fats (triglycerides) are typically associated with diabetes and its precursor, metabolic syndrome. High levels of these free fatty acids are known to be toxic to the pancreas and increase insulin resistance. Berberine has been shown to help lower triglycerides and cholesterol, working by a different method than statins, so it lacks the dangerous side effects associated with these drugs.

Infections

Plants containing berberine have been used by many cultures to treat infectious diarrhea, intestinal parasites, urinary tract infections and other infections. Berberine has been shown to have antimicrobial activity against many types of bacteria, viruses and fungi. For example, goldenseal has been listed in the official materia medica of many countries as a cure for giardia (amebic dysentery) and herbs like barberry have been very effective in treating fungal infections.

Intestinal Dysbiosis

Intestinal dysbiosis is an imbalance in the microbes living in the gastrointestinal (GI) tract. One of these imbalances is small intestinal bacterial overgrowth (SIBO). SIBO causes belching, burping, acid indigestion about one hour following meals and bloating. SIBO is a primary cause of leaky gut syndrome and has been linked to numerous health problems, including acne, chronic fatigue, diabetes, fibromyalgia, Hashimoto’s thyroiditis, inflammatory bowel diseases and irritable bowel syndrome (IBS), non-alcoholic fatty liver disease and obesity. This does not mean that intestinal dysbiosis is the cause of all of these problems; it just means that it may be a contributing factor or a co-factor in these health problems. Helping to regulate the microbes in the GI tract may be part of the reason why berberine has such broad-reaching health benefits.

MRSA

Methicillin-resistant Staphylococcus aureus (MRSA) bacteria are problematic because they resist antibiotics. Berberine not only has activity against MRSA, it appears to help restore the effectiveness of other antibiotics by inhibiting the mechanisms these organisms use to resist the drugs.

Cardiovascular Health

By helping to reduce blood sugar and blood lipid levels, berberine is clearly beneficial to cardiovascular health. But, there is more. Studies suggest that berberine (or herbs containing it) may be helpful for heart problems. Coptis, one of the berberine-containing herbs, has been used in Chinese medicine to treat hypertension and chronic heart failure. A study published in the American Journal of Cardiology in 2002 showed that patients being treated medically for congestive heart failure showed greater improvement when berberine was added to their program in comparison to a placebo. Exercise capacity improved, heart function improved and mortality was reduced. Berberine also appears to help lower blood pressure.

Other Benefits

There is some researching suggesting that berberine (or herbs containing it) may be helpful in certain types of cancer, such as liver, breast and prostate cancer. Berberine also appears to have antidepressant activity, increasing norepinephrine and serotonin levels while lowering dopamine. It may also have protective effects against Alzheimer’s disease.

Suggested Use

Berberine IR contains 335 mg. of berberine from Indian Barberry. Suggested use is one capsule three times daily. One can also obtain the benefits of berberine by taking herbs like goldenseal and Oregon grape.

Selected References

Efficacy of Berberine in Patients with Type 2 Diabetes (http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2410097/)
Berberine supplement benefit, side effects by Ray Sahelian, M.D. (http://www.raysahelian.com/berberine.html)
Berberine hydrochloride: anticancer activity and nanoparticulate delivery system (http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3173044/)
Berberine (https://en.wikipedia.org/wiki/Berberine)