

BOTTOM LINE
Natural Healing
With Dr. Mark Stengler

www.BottomLinePublications.com

281 Tresser Boulevard,
Stamford, CT 06901-3229
203-973-5900

DEEPER CURES FROM AMERICA'S TOP NATURAL PHYSICIAN

Mark A. Stengler, NMD ■ Stengler Center for Integrative Medicine

SAY GOOD-BYE TO YOUR DIABETES MEDICATION

Some of my patients who have type 2 diabetes are able to keep the disease under control with diet, exercise and supplements. Lucky them! But for other diabetes patients, that's not enough and they must take pharmaceutical medications.

I'm happy to report that there is another natural treatment option for diabetes patients who currently take pharmaceutical medications. Research has found that a plant extract called *berberine* can control diabetes as well as, or better than, common medications such as *metformin* (Glucophage) and *rosiglitazone* (Avandia). And it does this with no side effects—and without damaging the liver, as some medications do. *Here's how berberine can help people with diabetes...*

A naturally occurring chemical compound, berberine is found in the roots and stems of several plants, including *Hydrastis canadensis* (goldenseal), *Coptis chinensis* (coptis or goldthread) and *Berberis aquifolium* (Oregon grape). Long used as a remedy in Chinese and Ayurvedic medicines, berberine is known for its antimicrobial properties and as a treatment for bacterial and fungal infections. Several decades ago, berberine was used to treat diarrhea in patients in China. That was when doctors noticed that the blood sugar levels of diabetes patients were lower after taking the herbal extract—and berberine began to be investigated for this purpose.

Over the past 20 years, there has been much research on berberine

and its effectiveness in treating diabetes. In 2008, Chinese researchers published a study in *Metabolism* in which adults with newly diagnosed type 2 diabetes were given 500 milligrams (mg) of either berberine or the drug metformin three times a day for three months. Researchers found that berberine did as good a job as metformin at regulating glucose metabolism, as indicated by *hemoglobin A1C* (a measure of blood glucose over several weeks)...fasting blood glucose...blood sugar after eating...and level of insulin after eating. Berberine even reduced the amount of insulin needed to turn glucose into energy by 45%! In addition, those taking berberine had noticeably lower triglyceride and total cholesterol levels than those taking metformin.

In another 2008 study published in *Journal of Clinical Endocrinology and Metabolism*, researchers found that type 2 diabetes patients who were given berberine had significant reductions in fasting and postmeal blood glucose, hemoglobin A1C, triglycerides, total cholesterol and LDL (bad) cholesterol—and also lost an average of five pounds, to boot, during the three-month study period.

In a 2010 study in *Metabolism*, Chinese researchers compared people with type 2 diabetes who took either 1,000 mg daily of berberine or daily doses of metformin or rosiglitazone. After two months, berberine had lowered subjects' fasting blood glucose levels by an average of about

30%, an improvement over the rosiglitazone group and almost as much as people in the metformin group. Berberine also reduced subjects' hemoglobin A1C by 18%—equal to rosiglitazone and, again, almost as good as metformin. In addition, berberine lowered serum insulin levels by 28.2% (indicating increased insulin sensitivity)...lowered triglycerides by 17.5%...and actually improved liver enzyme levels. Pharmaceutical medications, on the other hand, have the potential to harm the liver.

These were remarkable findings. Here was a botanical that was holding up to scientific scrutiny—and performing as well as, or better than, some drugs that patients had been taking for diabetes for years.

HOW BERBERINE WORKS IN THE BODY

Berberine helps to lower blood glucose in several ways. One of its primary mechanisms involves stimulating the activity of the genes responsible for manufacturing and activating insulin receptors, which are critical for controlling blood glucose.

Berberine also has an effect on blood sugar regulation through activation of *incretins*, gastrointestinal hormones that affect the amount of insulin released by the body after eating.

HOW BERBERINE CAN HELP

I recommend berberine to my patients with newly diagnosed type

Mark A. Stengler, NMD, licensed naturopathic medical doctor in private practice, Stengler Center for Integrative Medicine, Encinitas, California...adjunct associate clinical professor at the National College of Natural Medicine, Portland, Oregon...author of many books, including *The Natural Physician's Healing Therapies* and coauthor of *Prescription for Natural Cures* (both from Bottom Line Books)...and author of the *Bottom Line/Natural Healing* newsletter. www.DrStengler.com

Copyright © 2011 by Boardroom Inc., 281 Tresser Blvd., Stamford, Connecticut 06901-3229. www.BottomLinePublications.com

2 diabetes to reduce their blood sugar and prevent them from needing pharmaceutical drugs. When a diet, exercise and supplement program (including supplements such as chromium) is already helping a diabetes patient, I don't recommend that he/she switch to berberine.

Some patients are able to take berberine—and make dietary changes—and stop taking diabetes drugs altogether. People with severe diabetes can use berberine in conjunction with medication—and this combination treatment allows for fewer side

effects and better blood sugar control. I don't recommend berberine for prediabetes unless diet and exercise are not effective. Berberine is sold in health-food stores and online in tablet and capsule form. The dosage I typically recommend for all diabetes patients is 500 mg twice daily.

For patients with diabetes who want to use berberine, I recommend talking to your doctor about taking this supplement. It's also important for every patient with diabetes to participate in a comprehensive diet and exercise program.

Note that berberine helps patients with type 2 diabetes, not type 1 diabetes (in which the body does not produce enough insulin). ■ ■

References

J. Yin, et al., "Efficacy of Berberine in Patients with Type 2 Diabetes Mellitus," *Metabolism* (2008).

Y. Zhang, et al., "Treatment of Type 2 Diabetes and Dyslipidemia with the Natural Plant Alkaloid Berberine," *Journal of Clinical Endocrinology and Metabolism* (2008).

H. Zhang, et al., "Berberine Lowers Blood Glucose in Type 2 Diabetes Mellitus Patients Through Increasing Insulin Receptor Expression," *Metabolism* (2010).