Berberine Now Available – A Phytochemical with “Anti-Aging” Potential

NutriGuard is pleased to introduce its new Berberine Sulfate supplement. Berberine is a key component of several herbs long used in traditional Chinese medicine, such as Coptis chinensis. These herbs were initially used to treat certain diarrheal infections, as berberine is toxic to many microbes which cause such infections. But doctors eventually noticed that diabetics receiving treatment with berberine-rich herbal extracts tended to achieve better control of their blood sugar; as a result, berberine is now commonly used as an aid for diabetes management in China.

Recent studies have revealed that berberine has the same molecular target as the diabetes drug metformin – it activates a key enzyme known as “AMP-activated kinase”, or AMPK. This enzyme is sometimes referred to as the “fuel gauge” of cells, as it is activated when cellular fuels such as glucose or fatty acids are in short supply. In fact, scientists have long speculated that AMPK activation may mimic some of the health-protective effects of calorie restriction; indeed, they have shown that lifelong treatment with metformin can increase the average lifespan of certain strains of rodents. Hence, metformin is sometimes referred to as an “anti-aging” drug.

Metformin has become the most widely used diabetes drug in the world, and this has enabled researchers to examine the long term health impacts of metformin use. These studies have concluded that diabetics using metformin, as opposed to other common diabetes medications that achieve comparable blood sugar control, are at lower risk for heart attack, stroke, and a number of common types of cancer. Moreover, there is growing evidence that metformin may be a useful adjuvant for cancer treatment; in some studies, diabetics afflicted with cancer have tended to survive longer if treated with metformin, and rodent and cell culture studies concur that metformin has potential for cancer control.

Insulin, and the diabetes drugs that boost insulin secretion, have a tendency to promote weight gain in diabetics – a sad irony in light of the fact that overweight is the underlying cause of diabetes in many patients. In contrast, diabetics treated with metformin tend to lose a little weight. And metformin therapy has been found to delay the onset of diabetes in people prone to this disorder.

Scientists have proposed that chronic activation of AMPK has potential for protecting vascular health, reducing cancer risk, improving outcomes in cancer therapy, aiding weight control, helping to preserve proper bone density and cartilage health, and even possibly reducing risk for dementia. Such broad claims are reasonably credible because AMPK appears to regulate the aging process.

From the standpoint of “life extension” benefits, metformin has one major drawback – it’s a prescription drug. Berberine has the considerable advantage that it can be legally sold as a nutraceutical. In published Chinese clinical studies with diabetics, berberine intakes of 500 mg two or three times daily, or 300 mg three time daily, have been reported to achieve glucose control comparable to that seen with metformin. A small minority of diabetics treated with 500 mg twice daily are reported to experience constipation; this effect tends to remit with time, and berberine otherwise seems to be well tolerated. A further advantage of berberine is that it can modestly decrease LDL cholesterol.

Please note that NutriGuard’s berberine product is not a proven therapy or preventive for diabetes or any other health disorder; if you are diabetic, or have cancer, it should be used only with your doctor’s knowledge and assent.