Chromium Found to Benefit Blood Sugar, Lipids

Chromium, a trace mineral that is often deficient in adults, may help to prevent or treat metabolic problems, including obesity, glucose intolerance, and unhealthy lipid profiles, according to Georgetown University researchers. The investigators report that supplementation with niacin-bound chromium, or ChromeMate®, improved blood sugar and lipid measures in volunteers.*

Although chromium is easily obtained through diet and supplements, a significant number of adults are unknowingly deficient, and no test exists to make the diagnosis. The appearance of metabolic syndrome may be the first sign of chromium deficiency. In the body, chromium improves the sensitivity of insulin receptors, helping to promote optimal metabolism of sugars.

In this double-blind study, volunteers received 300 mcg per day of niacin-bound chromium or placebo for three months. At the trial’s end, the supplemented group had lower fasting glucose and triglyceride levels than the control group, and also had lower levels of glycosylated hemoglobin, or hemoglobin A1c, a measure of long-term blood sugar control. The niacin-bound chromium supplement was well tolerated, with no adverse effects reported.

Niacin-bound chromium supplementation may thus reduce the risk for glucose intolerance, prevent the progression of glucose intolerance to frank diabetes, improve glucose control in diabetics, and assist in managing elevated triglyceride levels.

—Linda M. Smith, RN

Reference

Low Testosterone Linked to Multiple Sclerosis

Abnormal hormone levels may play a role in the development of multiple sclerosis, report researchers at University La Sapienza in Italy.* The investigators measured hormone levels in 35 women and 25 men with multiple sclerosis, and in 36 people without the disease.

Women with low testosterone levels were found to have more brain tissue damage, as determined using magnetic resonance imaging. The women with multiple sclerosis had lower levels of testosterone throughout their monthly cycle compared to women who did not have the condition.

Testosterone levels did not vary between men with multiple sclerosis and unaffected men. However, men with multiple sclerosis who had the highest levels of the female hormone estradiol were found to have the greatest degree of brain tissue damage.

Multiple sclerosis is an inflammatory disease causing symptoms such as fatigue, numbness, and difficulties in movement, speech, and memory. Its course is marked by remissions and relapses. Multiple sclerosis affects twice as many women as men, and is significantly less active during pregnancy, suggesting that hormones influence its development. The Italian study further supports the hypothesis that sex hormones play a role in the inflammation, damage, and pathology of multiple sclerosis.

—Elizabeth Wagner, ND

Reference