

Quercetin May Benefit Cell Health in Patients with Sarcoidosis

By Greg Arnold, DC, CSCS, March 16, 2011, abstracted from "Quercetin Reduces Markers of oxidative stress and inflammation sarcoidosis" printed online in Clinical Nutrition

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Sarcoidosis is a disease that can affect any organ or system in the body where there are unexplained developments of small abnormal clumps of tissue called "granulomas". Sarcoidosis is most common in people between 20 and 40 years of age. Its symptoms vary, depending on where the granulomas are located, such as breathing problems if in the lungs, vision problems if in the eye, and irregular heartbeat if in the heart (1).

Since the most common medical treatment for sarcoidosis is corticosteroids (2), alternative methods are always being sought, due to the side effects of corticosteroids that include high blood pressure, weight gain, and blood sugar problems (3). Now a new study (4) has suggested that quercetin may benefit those with sarcoidosis.

In the study, 12 patients were given 2,000 mg (4 500-mg capsules) or a placebo (6 patients) within 24 hours of being diagnosed with sarcoidosis. Blood samples were taken before and after the supplementation to measure for malondialdehyde, a marker of oxidative damage (5) as well as inflammatory proteins that included TNFa/IL-10 (6) and IL-8/IL-10 (7).

The researchers found that malondialdhyde levels in the quercetin group were 3 times lower than those in the placebo group (drop of 0.5 microMolar compared to 0.15 in the placebo group) while the TNFa/IL-10 ratio decreased by 0.1 microMolar in the quercetin group compared to a 0.05 increase in the placebo group. Finally, the IL-8/IL-10 levels in the quercetin group dropped by 0.1 microMolar compared to a 0.025 increase in the placebo group.

For the researchers, "Sarcoidosis patients might benefit from the use of antioxidants, such as quercetin, to reduce the occurring oxidative stress as well as inflammation."

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