

Meta-Analysis Supports Curcumin's Anti-Inflammatory and Metabolic Benefits

By Stephen Daniells



Supplementation with curcumin from turmeric may boost levels of adiponectin, a protein hormone with multiple beneficial effects, including regulating blood sugar levels and anti-inflammatory action.

Despite a relatively small body of science to date, scientists from Coventry University (UK) and Tehran University of Medical Sciences (Iran) reported that data from six randomized controlled trials with human subjects showed that, compared to placebo, curcumin supplementation significantly increased adiponectin concentrations.

“[C]urcumin has been approved by the United States FDA and considered a ‘generally recognized as safe’ supplement, whilst its tolerability has been confirmed in several clinical studies,” they wrote in the journal Diabetes & Metabolic Syndrome: Clinical Research & Reviews.

“Therefore, owing to its safety and beneficial effects on several features of metabolic syndrome, and results of the present meta-analysis, curcumin may be suggested as a routine supplement for patients with metabolic syndrome, and other metabolic disorders.”

Blockbuster

The study adds to the ever-growing body of science supporting the potential health benefits of turmeric and curcumin.

According to the 2017 Herb Market Report published by the American Botanical Council (HerbalGram 119), turmeric is the number one selling herb in the natural channel, with \$50.3 million (12% growth year-over-year). It is number five in the mass channel (MULO) with \$32.5 million in sales (48% growth y-o-y).

The new meta-analysis focused purely on adiponectin, and included data from a total of 652 people.

Key findings

“Adiponectin is an anti-inflammatory cytokine produced and secreted by adipose tissue. Adiponectin serum level reportedly has an inverse relationship with insulin resistance, dyslipidaemia, CVDs, and obesity, whilst decreases in adiponectin may resultantly increase the risk of atherosclerotic disease,” explained the authors. “Adiponectin has a positive effect in reducing the risk of cardiometabolic disease, which is associated with lipid and glucose metabolism, anti-inflammatory, and anti-atherosclerotic properties.

“In the present study, we were able to confirm the veracity of a number of independent studies, highlighting that curcumin supplementation, particularly when consumed for less than 10 weeks, ay significantly increase adiponectin levels, even when controlling for numerous biological and sociological variables.”

Commenting on the potential limitations of the current analysis, the authors noted that the small number of studies in the literature show that there is a need for more high-quality RCTs to strengthen the association between curcumin and adiponectin levels.

Source: Diabetes & Metabolic Syndrome: Clinical Research & Reviews

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“The effect of curcumin supplementation on circulating adiponectin: A systematic review and meta-analysis of randomized controlled trials”

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