

## The Effects of Tart Cherry Supplement on Markers of Inflammation and Quality of Life in Arthritic Patients

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Limited research suggests that supplementing with tart cherry juice reduces inflammation and decreases symptoms of arthritis in adults. The majority of research with tart cherries utilizes a juice form of supplementation, which is high in sugar and may increase inflammation. An alternative is powdered cherry capsules, which contain 435 mg of freeze dried Montmorency cherry, the equivalent of 16 oz. of tart cherry juice and less than 1g sugar. However, it is not known how the powdered cherry supplement affects markers of inflammation in patients with arthritis. **PURPOSE:** to investigate the effects of tart cherry powder supplement as compared to a placebo on inflammation and quality of life in patients diagnosed with arthritis. **METHODS:** 10 participants (2 Male; Age:  $51 \pm 11$  yo, Height:  $165 \pm 8$  cm, Weight:  $75 \pm 19$  kg) previously diagnosed by a physician with arthritis consumed either placebo or freeze dried tart cherry capsules twice daily for 20 days. Biomarkers of inflammation, cholesterol, body composition and blood pressure were assessed at baseline, 10 days and 20 days. **RESULTS:** There were no significant changes in blood pressure or body composition over the supplementation period. Similarly, uric acid (TC:  $5.3 \pm 1.2$  vs.  $5.5 \pm 1.1$  and PL:  $4.9 \pm 0.6$  vs.  $4.5 \pm 0.7$ ), erythrocyte sedimentation rate (TC:  $16.6 \pm 9.0$  vs.  $14.8 \pm 10.08$  and PL:  $12.8 \pm 8.6$  vs.  $10.2 \pm 11.1$ ) and quality of life (TC:  $8.0 \pm 6.0$  vs.  $7.8 \pm 5.9$  and PL:  $5.4 \pm 5.5$  vs.  $4.0 \pm 3.7$ ) were not changed pre to 20 days post supplementation. **CONCLUSION:** 20 days of supplementation with powdered tart cherry did not significantly affect inflammation or quality of life in arthritic patients. Sample size was small as this was a pilot study, therefore larger scale studies need to be performed.

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