Flavonoid supplement improves leg health and reduces fluid retention in pre-menopausal women in a double-blind, placebo-controlled study.

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Flavonoid extracts derived from plant foods have been shown to benefit certain types of fluid retention. However, no studies have investigated these compounds for use in premenstrual fluid retention, a complaint common among women with otherwise normal menstrual cycles. Therefore, we conducted a double-blind, placebo-controlled, pilot study into the effect of a daily flavonoid extract (Colladeen, 320 mg oligomeric procyanidins) on premenstrual fluid retention. Fluid retention was assessed at baseline and throughout 4 menstrual cycles of the intervention using validated questionnaires. Leg girth was also measured at baseline and at the end of the study. Thirty subjects completed the study (n = 18 active treatment; n = 12 placebo). Although no significant changes in leg girth measurements were noted, there was a significant improvement in subjective "leg health" scores after flavonoid treatment compared to placebo (p = 0.013). Furthermore, this was accompanied by an improvement in reported premenstrual fluid retention nearing significance (p = 0.066). We conclude that flavonoids supplements may provide a new therapeutic direction to counter premenstrual fluid retention and improve leg health. A larger study is now warranted.