

**Independent Study Title** Effects of Green Tea Extract on Body Composition in Overweight

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## **ABSTRACT**

Previous researches have reported several positive effects of green tea on weight control and body composition, mainly focusing on weight and body fat loss. In this 12-week experimental cross-over control study, effects of green tea extract on body composition, specifically body fat percentage and visceral fat level, were investigated. Fifteen overweight Thais (age 30-40 with BMI between 23.0 to 27.5 kg/m<sup>2</sup>) were assigned to a 6-week control period with no green tea extract consumption, then continued with a 6-week experimental period of green tea extract consumption (103.56 mg daily). Their body composition (weight, BMI, body fat percentage, visceral fat level, and waist-to-hip ratio) was obtained at baseline, Week 6, and Week 12. Results analyzed with repeated measures ANOVA showed significant differences between means of body weight, BMI, and visceral fat level. Pairwise comparison revealed further that a statistically significant decrease in visceral fat level (with mean difference of 0.53 and p-value of 0.044) was evident after 6 weeks of green tea extract consumption.

**Keywords:** Green Tea Extract, Overweight, Body Composition, Body Fat, Visceral Fat