ABSTRACT

Objectives The objective of this study was to evaluate the effect of long-term consumption of green tea containing quercetin glucoside on body fat accumulation and the safety in obese subjects.

Methods We performed a randomized double-blind, placebo-controlled trial on subjects (81 men and 119 women) aged from 20 to 65 years old with BMI < 30 kg/m². They were randomly assigned into two groups and consumed the beverages containing 0 mg or 110 mg of quercetin glucoside for 12 weeks.

Results Both total fat area and visceral fat area were significantly reduced in test group compared with placebo group. No adverse effect related to the test beverage containing quercetin glucoside was observed in this study.

Conclusions The results of this study suggest that the long-term consumption of green tea containing quercetin glucoside reduced body fat in safe, and could be useful for prevention and amelioration of obesity and metabolic syndrome.

(Jpn Pharmacol Ther 2012; 40: 495–503)

KEY WORDS Quercetin glucoside, Total fat area, Visceral fat area, Obesity, Metabolic syndrome