

Effect of tocotrienol on waist circumference in healthy subjects: A pilot study

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ABSTRACT

Introduction: Tocotrienols have been shown to possess antioxidant, anti-inflammatory, and neuroprotective properties in preclinical and clinical studies. This study aimed to investigate the effects of tocotrienol-rich vitamin E (Tocovid Suprabio™) on visceral fat levels. Anthropometry measurements were measured during the study. **Methods:** This was a parallel, double-blinded, randomized, placebo-controlled pilot study that involved 60 healthy subjects in Penang. Subjects (n=50 males and n=10 females) were sampled from the adult population with age 18 years old and above in Seberang Jaya Hospital, Penang, Malaysia. Two interventions involved in this trial were treatment and placebo. Subjects were randomized to receive 200mg of Tocovid twice daily, or a matching placebo for 6 months. Data was analyzed by using SPSS version 22.0. **Results:** A total of 45 participants were followed up after 6 months. The majority were males (82.2%, n=37) and 17.8% were females. Mean waist circumference for the treatment group for pre- and post-6 months treatment were 97.13 and 95.81 respectively. For the placebo group pre- and post-6 months were 97.43 and 98.09 respectively. There seems to be a reduction (mean difference 1.32, 95% CI (-0.03, 2.67)) in the treatment group post 6 months as compared to the placebo group (mean difference -0.65, 95% CI (-1.98, 0.67)) in waist circumference in the treatment group after 6 months. **Conclusion:** There seems to be a reduction in waist circumference however larger sample size is required to confirm the statistical significance.