

Effects of peanut and peanut butter consumption on waist circumference and body weight in adults with type 2 diabetes

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ABSTRACT

Background: Whole foods that contain fiber and high levels of unsaturated fatty acids (peanuts and peanut butter) may have benefits for persons with type 2 diabetes mellitus (T2DM) by reducing cardiovascular risk factors.

Study Objective: To assess the effect of a peanut and peanut butter-enriched American Diabetes Association (ADA) meal plan in adults with type 2 diabetes mellitus (T2DM) on changes in body weight (BW) and waist circumference (WC).

Methods: We performed a parallel randomized controlled 12 week dietary intervention trial in free-living adults. Twenty-nine subjects followed ADA meal plans [moderate fat (35% en), Control; and, moderate fat (35% en) inclusive of 32 g peanuts or 2 Tbsp. peanut butter daily, Intervention]. BW and WC measurements were obtained at baseline and 12 weeks.

Results: From baseline to week 12, a larger reduction in mean BW was found in the Intervention group (-0.82 ± 0.70 kg) as compared to the Control group (-0.35 ± 1.47 kg) ($p=0.44$). A greater reduction in mean WC was observed in the Control group (-0.81 ± 2.21 cm) as compared to the Intervention group (-0.21 ± 1.93 cm) ($p=0.45$). No difference in WC or BW change between the groups was observed when the data was controlled for gender.

Conclusion: Studies with larger sample sizes are warranted to further detect differences in anthropometric measurements among persons with T2DM following an ADA diet enriched with peanuts and peanut butter.

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