

Nut consumption, body weight, and adiposity in patients with type 2 diabetes: a systematic review and meta-analysis of randomized controlled trials

- Fernández-Rodríguez R.^a,
- Martínez-Vizcaíno V.^{a, b},
- Garrido-Miguel M.^{c, d},
- Martínez-Ortega I.A.^a,
- Álvarez-Bueno C.^{e, f},
- Eumann Mesas A.^{g, h}

Abstract

CONTEXT: It seems that nut consumption does not lead to weight gain in the general population. However, fewer studies have explored this relationship in individuals with type 2 diabetes (T2D). **PURPOSE:** To synthesize evidence on the effects of nut (specifically, tree nuts and peanuts) consumption on adiposity-related measures in individuals diagnosed with T2D. **DATA SOURCES AND STUDY SELECTION:** Four databases were searched up to December 31, 2020. Randomized controlled trials that examined the effects of nut consumption vs a control diet on body weight, body mass index, waist circumference, and percent body fat were included. **DATA EXTRACTION:** The pooled effect sizes (p-ESs) and 95% CIs of nut consumption were estimated using random effects models. **DATA SYNTHESIS:** A total of 15 randomized controlled trials including 899 individuals were included. No significant effects of nut-enriched interventions were found for body weight (p-ES = -0.04; 95%CI: -0.16 to 0.08), body mass index (p-ES = -0.05; 95%CI: -0.17 to 0.08), waist circumference (p-ES = -0.02; 95%CI: -0.20 to 0.15), or percent body fat (p-ES = -0.03; 95%CI: -0.28 to 0.21). **CONCLUSION:** Nut consumption has no effect, positive or negative, on weight or adiposity parameters in people with T2D. © The Author(s) 2021. Published by Oxford University Press on behalf of the International Life Sciences Institute. All rights reserved. For permissions, please e-mail: journals.permissions@oup.com.

Author keywords

diabetes; obesity; peanuts; tree nuts