# Study suggests walnuts in diet can improve endothelial functions for overweight adults

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Medical researchers from the Yale-Griffin Prevention Research Center in Connecticut have found evidence suggestive that adding walnuts to one's diet can protect against diabetes and heart disease in at-risk individuals. Their original research article, "Effects of Walnuts on Endothelial Function in Overweight Adults with Visceral Obesity: A Randomized, Controlled, Crossover Trial," is now available in the *Journal of the American College of Nutrition*, the Official Publication of the American College of Nutrition, and a publication from Routledge.

For the study, a sample of 46 adults aged 30-75 were selected. Participants had a Body Mass Index larger than 25, and a waist circumference exceeding 40 inches for men and 35 inches for women. They were also required to be non-smokers, and all exhibited one or more additional risk factors for metabolic syndrome, a precursor of diabetes and cardiovascular disease. The group was randomly assigned to two 8-week sequences of either a walnut-enriched ad libitum diet or an ad libitum diet without walnuts. Those chosen for the walnut diet were instructed to consume 56g of shelled, unroasted English walnuts per day as a snack or with a meal.

"We know that improving diets tends to be hard, but adding a single food is easy," explained Dr. David Katz, Director of the Yale-Griffin Prevention Research Center and lead author of the research team. "Our theory is that if a highly nutritious, satiating food like walnuts is added to the diet, there are dual benefits: the benefits of that nutrient rich addition and removal of the less nutritious foods."

The research found that daily intake of 56g of walnuts improves endothelial function in overweight adults with visceral adiposity. The addition of walnuts to the diet does not lead to weight gain. Further study on the topic is still suggested. "The primary outcome measure was the change in flow-mediated vasodilatation (FMD) of the brachial artery," wrote the research group. "Secondary measures included serum lipid panel, fasting glucose and insulin, Homeostasis Model Assessment–Insulin Resistance values, blood pressure, and anthropometric measures. FMD improved significantly from baseline when subjects consumed a walnut-enriched diet as compared with the control diet. Beneficial trends in systolic blood pressure reduction were seen, and maintenance of the baseline anthropometric values was also observed. Other measures were unaltered."

**More information:** www.tandfonline.com/doi/full/1 … 315724.2012.10720468

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