

Research & Clinical Studies on Cashew and its health benefits



INC: Cashews May Have Fewer Calories Than Previously Thought - New Scientific Findings

In a human-intervention trial published recently in the journal Nutrients, researchers at the USDA, ARS, Beltsville Human Nutrition Research Center, looked at the available energy content in cashew nuts[1].

Eighteen healthy volunteers were recruited to participate in this 9-week study. Participants consumed a controlled base diet supplemented with cashew nuts (42 g/day) during one treatment period of 4 weeks, or a controlled base diet with no-cashew supplementation during another treatment period of 4 weeks. Diet samples from the study, as well as feces and urine from eighteen volunteers, were

collected during the final week of each intervention phase and analyzed for protein, fat and energy content. From these, researchers were able to determine the actual digestible energy content of cashews.

Study results showed that the available energy (calorie) content of cashews is 16% lower than that which is typically stated on current food labels and databases in the United States, including the National Nutrient Database for Standard Reference. These must be corrected in order to provide consumers with accurate energy values. Whereas the current reported energy value is 163 kcal/serving, USDA researchers found that the metabolizable energy content of a 28 g (1 oz) serving of cashews is 137 kcal.

Meanwhile, another recent study published in The



American Journal of Clinical Nutrition concluded that 42 g/day of cashews does not increase LDL “bad” cholesterol levels[2]. The study also observed that adding 42 g of cashews every day to a typical Western diet may help reduce the enzyme PCSK9, and lower PCSK9 concentrations are associated with the removal of LDL “bad” cholesterol from the blood.

This study was supported by the Global Cashew Council and the INC International Nut and Dried Fruit Council.

1. 1. Baer, D., & Novotny, J. (2019). Metabolizable Energy from Cashew Nuts is Less than that Predicted by Atwater Factors. *Nutrients*, 11(1), 33.
2. 2. Baer, D. J., & Novotny, J. A. (2019). Consumption of cashew nuts does not influence blood lipids or other markers of cardiovascular disease in humans: a randomized controlled trial. *The American Journal of Clinical Nutrition*, 109(2), 269-275.

<https://www.prnewswire.com/in/news-releases/incashews-may-have-fewer-calories-than-previously-thought-new-scientific-findings-857448089.html>

Cashew Nut Consumption Increases HDL (Good Cholesterol) and Reduces Systolic Blood Pressure in Asian Indians With Type 2 Diabetes: A 12-Week Randomized Controlled Trial

Background: There is increasing evidence that nut consumption decreases the risk of cardiovascular disease. However, there are few data on the health effects of cashew nuts among adults with type 2 diabetes (T2DM).

Objective: The study aimed to investigate the effects of

cashew nut supplementation on glycemia, body weight, blood pressure, and lipid profile in Asian Indians with T2DM.

Methods: In a parallel-arm, randomized controlled trial, 300 adults with T2DM [mean \pm SD age: 51 \pm 9.3 y; body mass index (BMI; in kg/m²): 26.0 \pm 3.4; 55% male] were randomly assigned to receive advice to follow a standard diabetic diet (control) or similar advice plus 30 g cashew nuts/d (intervention) for 12 wk. The macronutrient composition of the prescribed diabetic diet was 60-65% energy from carbohydrates, 15-25% from fat, and the rest from protein. Differences between groups in changes in anthropometric and biochemical variables were analyzed using linear models with robust variance estimation under an assumed independence working correlation.

Results: Participants in the intervention group had a greater decrease in systolic blood pressure from baseline to 12 wk than did controls (-4.9 \pm 13.7 compared with -1.7 \pm 11.6 mm Hg; $P = 0.04$) and a greater increase in plasma HDL cholesterol compared with controls (+1.7 \pm 5.6 compared with +0.1 \pm 4.6 mg/dL; $P = 0.01$). There were no differences between the groups with respect to changes in body weight, BMI, blood lipid, and glycemic variables. Plasma oleic acid concentrations and self-reported dietary intake of nuts, oleic acid, and monounsaturated fatty acids suggested excellent compliance with the nut consumption.

Conclusion: Cashew nut supplementation in Asian Indians with T2DM reduced systolic blood pressure and increased HDL cholesterol concentrations with no deleterious effects on body weight, glycemia, or other lipid variables. This study was registered at the clinical trial registry of India as CTRI/2017/07/009022.



Keywords: body weight; cashew nut; high-density lipoprotein cholesterol; type 2 diabetes.

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Cashew Consumption Reduces Total and LDL Cholesterol: A Randomized, Crossover, Controlled-Feeding Trial

Background: Cashews are the third most-consumed tree nut in the United States and are abundant with monounsaturated fatty acids and polyunsaturated fatty acids, which are associated with reduced cardiovascular disease risk. Although a qualified Food and Drug Administration health claim exists for nuts and heart health, cashews have been exempt from its use because cashews exceed the disqualifying amount of saturated fatty acids. Approximately one-third of the saturated fat in cashews is stearic acid, which is relatively neutral on blood lipids, thereby suggesting that cashews could have effects that are similar to those of other nuts. However, clinical data on cashews and blood lipids have been limited.
Objective: We investigated the effect of reasonable intakes of cashews on serum lipids in adults with or at risk of high LDL cholesterol.
Design: In a randomized, crossover, isocaloric, controlled-feeding study, 51 men and women (aged 21–73 y) with a median LDL-cholesterol concentration of 159 mg/dL (95% CI: 146, 165 mg/dL) at screening consumed typical American diets with cashews (28–64 g/d; 50% of kilocalories from carbohydrate, 18% of kilocalories from protein, and 32% of kilocalories from total fat) or potato chips (control; 54% of kilocalories from carbohydrate, 18% of kilocalories from protein, and 29% of kilocalories from total fat) for 28 d with a ≥2-wk washout period.
Results: Consumption of the cashew diet

resulted in a significantly greater median change from baseline (compared with the control, all $P < 0.05$) in total cholesterol [-3.9% (95% CI: -9.3%, 1.7%) compared with 0.8% (95% CI: -1.5%, 4.5%), respectively], LDL cholesterol [-4.8% (95% CI: -12.6%, 3.1%) compared with 1.2% (95% CI: -2.3%, 7.8%), respectively], non-HDL cholesterol [-5.3% (95% CI: -8.6%, 2.1%) compared with 1.7% (95% CI: -0.9%, 5.6%), respectively], and the total-cholesterol:HDL-cholesterol ratio [-0.0% (95% CI: -4.3%, 4.8%) compared with 3.4% (95% CI: 0.6%, 5.2%), respectively]. There were no significant differences between diets for HDL cholesterol and triglyceride.
Conclusions: In comparison with a control diet, the incorporation of cashews into typical American diets decreases total cholesterol and LDL cholesterol. Results from this study provide support that the daily consumption of cashews, when substituted for a high-carbohydrate snack, may be a simple dietary strategy to help manage total cholesterol and LDL cholesterol. This study was registered at clinicaltrials.gov as NCT02769741.

Keywords: cardiovascular; cashew; cholesterol; clinical trial; hypercholesterolemia.

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<https://pubmed.ncbi.nlm.nih.gov/28356271/>

Cancer Treatment

<https://meyercancer.weill.cornell.edu/news/2017-05-17-can-cashews-keep-colon-cancer-patients-alive>

<https://moffitt.org/endeavor/archive/thinking-of-eating-almonds-and-cashews-go-nuts/>

Consumption of Cashew Nuts Does Not Influence Blood Lipids or Other Markers of Cardiovascular Disease in Humans: A Randomized Controlled Trial



Background: The US Food and Drug Administration (FDA) approved a qualified health claim for tree nuts and reduction of cardiovascular disease. However, cashews are excluded from that claim due to their content of saturated fats, which is predominantly stearic acid. Because stearic acid is neutral with respect to blood lipids, several studies have been conducted to test the effect of cashew nuts on blood lipids, and these studies have produced conflicting results.

Objectives: The aim of this study was to conduct a highly controlled intervention to determine the effect of cashews fed at the amount specified in the health claim on risk factors for cardiovascular disease.

Methods: A total of 42 adults participated in a controlled-feeding study conducted as a randomized crossover trial with 2 treatment phases. The volunteers were provided the same base diet in both treatment phases, with no additions during the control phase and with the addition of 1.5 servings (42 g) of cashews/d for the cashew nut phase. During the cashew nut phase, the amount of all foods was decreased proportionally to achieve isocaloric overall diets in the 2 phases. After 4 wk of intervention, assessments included blood lipids, blood pressure, central (aortic) pressure, augmentation index, blood glucose, endothelin, proprotein convertase subtilisin/kexin type 9 (PCSK9), adhesion molecules, and clotting and inflammatory factors.

Results: There were no significant differences in blood lipids, blood pressure, augmentation index, blood glucose, endothelin, adhesion molecules, or clotting factors in this weight-stable cohort. PCSK9 was significantly decreased after cashew consumption, although there was no change in LDL cholesterol.

Conclusions: Consumption of 1.5 servings of cashew nuts/d, the amount associated with the FDA qualified health claim for tree nuts and cardiovascular disease, did not positively or adversely affect any of the primary risk factors for cardiovascular disease. This trial was registered at clinicaltrials.gov as NCT02628171.

<https://pubmed.ncbi.nlm.nih.gov/30753323/>

More links:

<https://clinicaltrials.gov/ct2/show/NCT02628171>
<https://www.medicalnewstoday.com/articles/269206#The-more-nuts-people-ate,-the-less-likely-they-were-to-die>

https://www.m3india.in/contents/editor_pick/66726/surprising-results-about-cashew-nuts-intake-from
<https://www.deccanchronicle.com/lifestyle/health-and-wellbeing/060218/cheer-for-cashew-lovers.html>