

Abstract

Snacking on Almonds Reduces Short-Term Energy Intake [†]

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[†] Presented at the Nutrition Society of New Zealand Annual Conference, Online, 2–3 December 2021.

Abstract: Snacking has increased over recent years and may account for excess energy intake and observed increases in overweight and obesity. Whole nuts are more commonly consumed as snacks than meals. Research suggests that nut consumption increases satiety, and so may support energy balance, as well as improving diet quality compared to other commonly consumed snacks. We aimed to compare the effects of consuming almonds versus sweet biscuits on appetite, energy intake, and diet quality. We used an acute crossover study involving 25 males and 75 females. Participants consumed isocaloric amounts (energy equivalent to 1030 kJ (42.5 g almonds) or 10% total energy, whichever was higher) of almonds or sweet biscuits in random order. Participants attended two clinic sessions where they initially consumed a standardised breakfast, followed two hours later by consumption of the snack food. Appetite ratings were measured before consuming the snack and at 15- or 30-min time intervals for two hours post-snack consumption. Two hours after consuming the snack, participants were offered an ad libitum lunch. They were then asked to record their food and beverage intake for the remainder of the day. Appetite ratings over the two hours did not differ between snacks (all $p \geq 0.097$) and there was no difference in energy intake at the ad libitum lunch ($p = 0.113$). However, energy intakes over the remainder of the day were significantly lower after consuming almonds (mean (95% CI) difference: 638 kJ (44, 1233), $p = 0.035$). There was also a non-statistically significant pattern of lower absolute intakes of saturated fat ($p = 0.056$) and sugar ($p = 0.053$) after consuming the almond snack. Encouraging the regular consumption of nuts as a snack food may support energy balance and improve diet quality. Long-term studies are required to determine the effects on long-term anthropometry and nutrient intakes.

Keywords: almonds; nuts; snack foods; energy intake; diet quality; satiety



Citation: Ware, L.; Gray, A.R.; Chisholm, A.; Tey, S.L.; Brown, R. Snacking on Almonds Reduces Short-Term Energy Intake. *Med. Sci. Forum* **2022**, *9*, 37. <https://doi.org/10.3390/msf2022009037>

Academic Editors: Sally Mackay, Helen Eyles and Shabnam Jalili-Moghaddam

Published: 20 May 2022

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Author Contributions: All authors contributed to the study conception and design. Material preparation, data collection and analysis were performed by L.W., A.R.G. and R.B. The first draft of this manuscript was written by L.W. and R.B. and all authors commented on previous versions of the manuscript. All authors read and approved the final manuscript.

Funding: This work was funded by the Almond Board of California.

Institutional Review Board Statement: The study was performed in accordance with the ethical standards laid down in the 1964 Declaration of Helsinki and its later amendments. The study was approved by the Ethics Committee (Health) of University of Otago (protocol code H18/109), 24 September 2018.

Informed Consent Statement: Informed consent was obtained from all individual participants included in the study.

Data Availability Statement: Data are available upon reasonable request to the correspondent author.

Conflicts of Interest: The authors declare no conflict of interest. The funders had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript, or in the decision to publish the results.