

Abstract

The Impact of Adolescents' Food Purchasing on Overall Dietary Quality Differs by Socioeconomic Status [†]

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[†] Presented at the 14th European Nutrition Conference FENS 2023, Belgrade, Serbia, 14–17 November 2023.

Abstract: During adolescence, many young people commence making more independent food purchases. Subsequently, these independent food choices will increasingly contribute to their overall diet quality; little is known, however, about this relationship. This study aimed to (1) understand the role adolescents' independent food purchases play in their overall diet quality and (2) explore if these relationships vary according to socioeconomic status (SES). A one-week observational study was conducted with 108 adolescents, aged 11–18 years, from Hampshire, UK. Participants completed a demographic questionnaire and a validated 20-item Food Frequency Questionnaire, which assessed diet quality. Participants also used a mobile phone app to record their food purchases. The healthfulness of food purchases was assessed against UK healthy eating guidelines. Linear regression models were used to investigate associations between the healthfulness of food purchases and diet quality. An interaction term was used to determine the modification effect of SES. During the study week, 583 food/drink items were purchased on 273 food-purchasing occasions by 80 participants. The majority of purchases ($n = 359$, 62%) were coded as 'not adhering' to the UK Eatwell Guide, 30% were coded as 'adhering' and 8% were coded as uncategorised foods. No notable differences were observed in the healthfulness of food purchases according to age, gender, ethnicity or SES. Healthier food purchasing was associated with better diet quality (β 0.52, (95% CI 0.06, 0.99) $p = 0.03$); the results were attenuated after adjustment (β 0.41, (95% CI -0.08 , 0.91) $p = 0.10$). Interaction analysis showed that the healthfulness of purchases was more strongly associated with diet quality among young people of lower SES ($p = 0.06$). Discussion: The majority of purchases made by adolescents were categorised as 'not adhering' to healthy eating guidelines. For adolescents experiencing disadvantage, these food choices had a more detrimental impact on their overall diet. We speculate this is because independent food choices represent a greater proportion of the foods consumed by these adolescents compared to those who are less disadvantaged. Finding ways to support more healthful independent food choices among adolescents, particularly those from disadvantaged backgrounds, is important to improve dietary quality and reduce inequalities.

Keywords: adolescents; diet; food purchasing; inequalities



Citation: Shaw, S.; Crozier, S.; Cooper, C.; Smith, D.; Barker, M.; Vogel, C. The Impact of Adolescents' Food Purchasing on Overall Dietary Quality Differs by Socioeconomic Status. *Proceedings* **2023**, *91*, 407. <https://doi.org/10.3390/proceedings2023091407>

Academic Editors: Sladjana Sobajic and Philip Calder

Published: 14 March 2024



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Author Contributions: Conceptualization, S.S. and C.V.; methodology, S.S. and C.V.; validation, S.C. and C.V.; formal analysis, S.S. and S.C.; data curation, S.S.; writing—original draft preparation, S.S.; writing—review and editing, S.C., D.S., C.C., M.B. and C.V.; supervision, S.C., D.S., C.C., M.B. and C.V.; project administration, S.S.; funding acquisition, S.S., M.B. and C.V. All authors have read and agreed to the published version of the manuscript.

Funding: This research and the authors of this paper are supported by the following funding sources: National Institute for Health Research Southampton Biomedical Research Centre; UK National Institute for Health Research Programme Grants for Applied Research (RP-PG-0216-20004); and UK Medical Research Council (MC_UU_12011/4). The views expressed in this publication are those of the author(s) and not necessarily those of the National Health Service, the National Institute for Health Research, and the UK Department of Health and Social Care.

Institutional Review Board Statement: The study was conducted in accordance with the Declaration of Helsinki, and approved by Faculty of Medicine Ethics Committee, University of Southampton (ERGO 57044, approved 7 September 2020).

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

Data Availability Statement: Study data is available upon request.

Conflicts of Interest: S.S., S.C., C.C., D.S., M.B. have no conflicts of interests to declare. C.V. has a non-financial research collaboration with a UK supermarket chain. The study described in this manuscript is not related to this relationship.

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