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The impact of price promotions on confectionery and snacks on the energy content of shopping baskets: a randomised controlled trial in an experimental online supermarket

M. Luick¹, R. Pechey¹, G. Harmer¹, L. Bandy¹, S.A. Jebb¹ and C. Piernas^{1,2}

¹Nuffield Department of Primary Care Health Sciences, Radcliffe Observatory Quarter, University of Oxford, Oxford, UK and

²Department of Biochemistry and Molecular Biology II, Institute of Nutrition and Food Technology, Center for Biomedical Research (CIBM), University of Granada, Spain

Poor diets, including overconsumption of foods high in fat, sugars, and salt (HFSS) increases the risk of premature death⁽¹⁾. In an attempt to limit purchasing and subsequent consumption, the government in England has passed legislation to limit some price promotions of HFSS foods within supermarkets from October 2022⁽²⁾, but evidence regarding the likely impact of these policies, especially in online settings, is limited. This study aimed to determine whether there were any differences in the energy and nutrient content of shopping baskets after removing promotions on HFSS foods in an online experimental supermarket. UK adults (n = 511) were asked to select food from four categories with a £10 budget in an online experimental supermarket: confectionery; biscuits and crackers; crisps, nuts and snacking fruit; and cakes and tarts. They were randomly allocated to one of two trial arms: (1) promotions present (matched to promotion frequency seen in a major UK retailer) (n = 257), or (2) all promotions removed from all products within the target food categories (n = 254). The primary outcome analysis used linear regression to compare the total energy (kJ) of items placed in shopping baskets when promotions were present vs. absent, while secondary analyses investigated differences in nutrients and energy purchased from individual food categories. Ethics approval was granted by the Central University Research Ethics Committee, University of Oxford (Ref: R65010/RE006) and participants provided informed consent. Mean energy in food selected without promotions was 21,573 kJ per basket (SD 6776), compared to 23,162 kJ (SD 7610) with promotions, a difference of -2308 kJ (95% CIs: -3622 to -994), equivalent to 10%. There were no significant differences in the energy purchased for any individual category between groups, though the trend in each was in the expected direction. There was no evidence of other changes in the nutritional composition of the baskets. There were no significant interactions between the impact of promotions and participant characteristics (gender, age, ethnicity) on energy purchased. Removing promotions on HFSS foods resulted in significantly less total energy selected in an online experimental supermarket study. This provides preliminary evidence of the potential effectiveness of the forthcoming legislation in England to limit promotions on HFSS foods, with no evidence that this policy will exacerbate health inequalities.

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References

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