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Can in-store product placement encourage purchases of side salads? A quasi-experimental study in a UK supermarket setting.

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Topic area:

- Food systems: encompasses food production, processing, reformulation; organic; food safety and toxicity; food systems and sustainability issues; functional foods etc.

Introduction:

Fruits and vegetables are rich in dietary fibre, vitamins and minerals making them beneficial for health. The UK's Eatwell Guide (EWG)(1) recommends fruits and vegetables make up 40% of the diet (by weight), but on average they contribute less than 29% to the UK diet(2). Prominent product placement can boost sales. We explored the effect of placing salads next to ready meals in a retail setting, on salad and total fruit and vegetable sales.

Methods:

In a 12-week intervention (July – October 2021), four bagged salad products were shelved above Italian ready meals in 23 stores. Salads displayed a 'healthy' on-pack symbol and shelf signposting encouraging customers to 'add salad to their baskets for a balanced meal'.

Two matched control store groups were identified, based on store area demographics (n=23 stores) and store-level pre-intervention bagged salad and Italian ready meal sales (n=21 stores), accounting for external sales influences, e.g. weather, supply chain shocks and Covid-19 lockdown behaviours. Transactions were shared by the retailer for 2 years before, 3 months during, and 9 months post-intervention.

Two years of pre-trial transactions (units and weight) were aggregated to the store level to produce an interrupted time series model quantifying changes in store-level daily sales of promoted salads, versus a predicted counterfactual. Analysis was repeated in control stores.

Within-group change in mean basket proportion (by weight) by EWG segment was examined via the Wilcoxon signed-rank test for difference, comparing the intervention period with two time-matched baseline (BL) periods (BL1 = July – October 2019, and BL2 = July – October 2020).

Results:

In the first three weeks of the intervention, unit sales of promoted salads increased by 35.74% (CI 25.91 - 45.72, $p<0.001$) vs counterfactual in the intervention stores. However, over the whole 12-

weeks, unit sales were down 18.34% (CI -26.17%, -10.35%, p<0.001) vs counterfactual. A similar trend was observed across control groups, indicating changes were independent of the intervention.

In intervention stores, fruits and vegetables made up 38.75% of baskets at BL1, but declined significantly over time, down 4.12 (p<0.001) percentage points in the intervention period vs BL1 and 1.43 (p<0.001) vs BL2. The proportion of composite (multi-ingredient) dishes rose; up 0.74 (p<0.001) percentage points vs BL1 and 1.35 (p<0.001) vs BL2, as did discretionary items; up 0.91 (p<0.001) percentage points vs BL1 and 0.45 (p<0.001) vs BL2. Similar patterns were observed in control stores.

Conclusion:

Salad sales increased at the start of the intervention relative to predicted sales, but the same change was observed in control stores meaning it cannot be attributed to the trial. Pre-intervention fruit and vegetable purchases with the retailer aligned with the EWG, indicating shoppers already had healthy purchase patterns which may have limited intervention effectiveness.

References:

1. Public Health England. The Eatwell Guide. London: UK Government; 2016. Available at: https://www.gov.uk/government/publications/the-eatwell-guide [accessed on 29/04/2024]
2. Cobiac LJ, Scarborough P, Kaur A, Rayner M. The Eatwell Guide: Modelling the Health Implications of Incorporating New Sugar and Fibre Guidelines. PLOS ONE. 2016;11(12):e0167859.

Conflicts of Interest Declaration:

The authors declare their work with UK retailers and the Institute of Grocery Distribution (IGD).

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