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Evaluating the impact of the TfL 'Junk Food' Advertising Ban

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Background

- The advertisement of high fat, salt and sugar (HFSS) foods and drinks is as a key driver of unhealthy food purchasing
- In February 2019, the Mayor of London introduced restrictions on the advertisement of HFSS products foods across the Transport for London network
- The TfL estate accounts for 40% of all outdoor advertising in London. The policy therefore had the effect of significantly reducing population exposure to unhealthy food advertising
- Provides opportunity to assess impact


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Sunday 28 April 2019 4:18 pm

Critics slam 'absurd' TfL junk food ad ban as fast food delivery sites allowed to advertise on Tube and buses

TfL 'Junk Food Ad Ban' Evaluation

- **To evaluate the implementation and impact of the introduction of the restrictions on HFSS advertising on the TfL estate**

Timeline and details of the TfL HFSS advertising restrictions.

Date	Development
May 2018	Launch of the public consultation on the ban
November 2018	Announcement of the ban
February 2019	Implementation of the ban. No foods are banned automatically, rather individual products are objectively assessed against the NPM. A score of 4+ for foods and 1+ for drinks classifies them as HFSS. Products classified as HFSS can be considered for an exception if the advertiser can demonstrate that the product does not contribute to consumption of HFSS foods by children.
June 2019	TfL issues updated guidance to advertisers on what is acceptable to advertise

Three main project components

1. Implementation Study

- Qualitative process and implementation study exploring stakeholder roles, barriers and facilitators to policy development/implementation. Interviews with food industry stakeholders explored perceptions, acceptability of the policy, changes to business practice and impact on business.

2. Impact on HFSS purchases (grocery)

- Assess change at 10 months in average household grocery purchases of energy and nutrients (kcal, fat, saturated fat, sugar and salt) from HFSS products overall and from 5 key product categories

- Controlled interrupted time-series analysis using consumer purchase data comparing London with a control (counterfactual)

3. Impact on health

- Modelled how observed changes in HFSS purchases translate into changes in obesity, health and economic benefits to the NHS in London

- Simulation model

1. Implementation study – brief summary

- Development, design and implementation of the policy was influenced by **practical** and **political** factors.

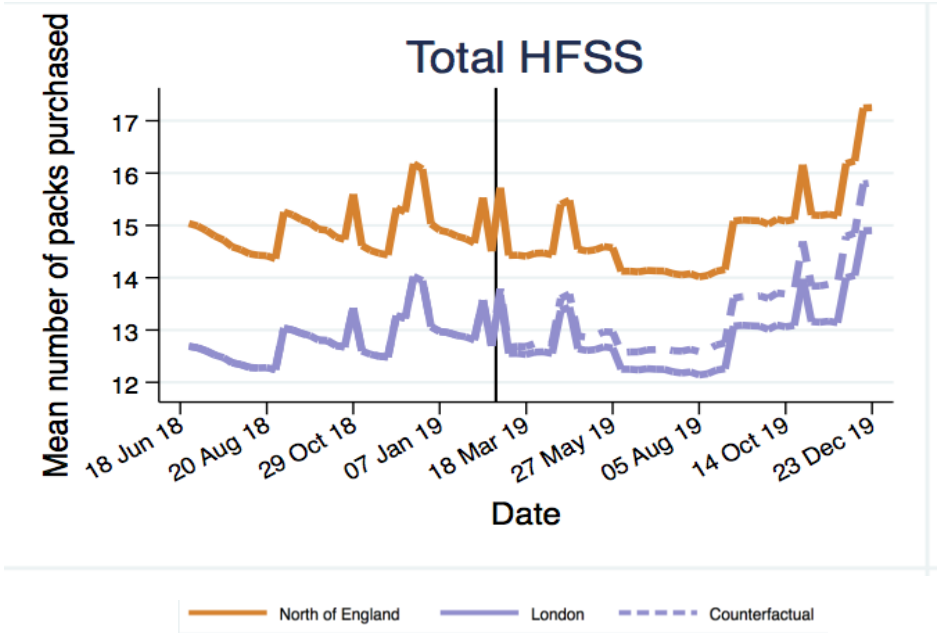
- **Practical challenges included:**
    - defining 'junk food' (NPM fit for purpose?)
    - navigating the legal landscape (contracts).

- **Political challenges included**:
    - balancing the health and financial impacts of the intervention
    - navigating putative impacts on revenue, supporting business

- **Navigating industry:** Consultation during policy development stage, close communication with industry stakeholders, building on existing legal frameworks and the development of an exceptions process (for products on the boundary of policy compliance) facilitated policy buy-in

2. Impacts on household grocery purchases of HFSS products

- **There was a 6.7% relative reduction in total weekly household purchases of energy and nutrients from HFSS products:**



- **Energy: -1001.0 kcal (-6.7%) (95% CI 456 to 1546)**
- **Fat: -57.9 g (-6.5%) (95% CI 22.1 to 93.7),**
- **Saturated fat: -26.4 g (-7.3%) (95% CI 12.4 to 40.4)**
- **Sugar: -80.7 g (-10.5%) (95% CI 41.4 to 120.1)**

2. Impacts on household grocery purchases of choc & confectionery

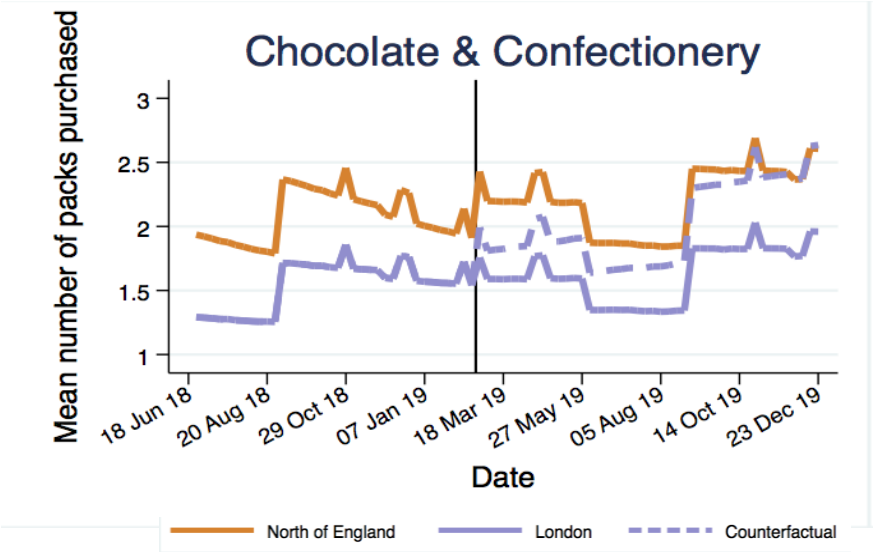
- **There was a 19.4% relative reduction in total weekly household purchases of energy from chocolate and confectionary:**

Energy: -317.9 kcal (-19.4%)
(95% CI -435.8 to -200.0)

Fat: -13.1 g (-18.2 %)
(95% CI -18.8 to -7.5),

Saturated fat: -8.7 g (-22.8%)
(95% CI -11.7 to -5.7)

Sugar: -41.4 g (-21.8 %)
(95% CI 41.4 to 120.1)



2. Impacts on household purchases of puddings and biscuits; sugary drinks and cereals

- **No significant change in the number of packs of pudding and biscuit purchases compared to the counterfactual (-0.1 packs, 95% CI -0.3 to 0.1)**

- **However, energy and salt purchased from puddings and biscuits decreased:**

  - **Energy: -198.3 kcal (-6.6%) (95% CI 6.9 to 389.7)**

  - **Salt: -0.4 g (-12%) (95% CI 0.1 to 0.8)**

- **No significant change in energy and nutrients purchased through sugary drinks compared to the counterfactual**

- **No significant change in energy and nutrients purchased through sugary cereals compared to the counterfactual**

Key messages - impact

- Ban was associated with a reduction in average household weekly purchases of energy of 1001 kcal (6.7%)
- Assuming a mean household size of 2.6 people in the sample, and an even energy distribution, this equates reductions in purchased energy of 385 kcal per person per week
- Largest relative reductions of 19.4% were observed for chocolate and confectionary
- c.95K fewer individuals with obesity, saving £218M in health/care costs
- CAVEAT: Secular increases in HFSS purchases in study locations over the study period mean intervention was effective in reducing growth of HFSS purchases; did not reduce absolute HFSS purchases.

Policy Implications (1)

- **Restricting the advertisement of HFSS products was associated with a decrease in total weekly household purchases of HFSS products, and changes were largest for chocolate and confectionery.**

- **Magnitude of impact on chocolate/confectionery is plausible as intervention 'dose' strongest for chocolate/confectionery (no policy-compliant products, product/brand advertising not possible).**

- **For brands with policy-compliant alternatives (e.g low or zero calorie drinks) brand advertising continued – could explain no impact on sugary drinks purchases**

- **Indicates potential importance of restrictions on brand, as well as product, advertising in optimising effectiveness of the policy.**

Policy Implications (2)

- **Impacts may differ outside London; London has more extensive public transport, higher public transport usage (i.e. greater exposure)**

- **In context: observed effects larger than SDIL for sugar reduction**

Bottom line:

- **Restricting the outdoor advertising of HFSS products is effective in reducing purchases of energy and nutrients from HFSS products.**

- **Benefits more likely to accrue to to more disadvantaged households, may therefore help reduce health inequalities**

- **Implementation study suggests policy highly feasible and can be successfully delivered by local authorities. This is very important given current national policy context (scrapping of advertising regulations).**

Supporting Evidence (published – all open access)

- **Yau A et al (2022) Changes in household food and drink purchases following restrictions on the advertisement of high fat, salt and sugar products across the Transport for London network: a controlled interrupted time series analysis *PLoS Medicine 19 (2), e1003915***

- **Meiksin R et al (2022) Restricting the advertising of high fat, salt and sugar foods on the Transport for London estate: process and implementation study *Social Science & Medicine 292, 114548***

- **Thompson C et al (2021) Media representations of opposition to the 'junk food advertising ban' on the Transport for London (TfL) network in UK news and trade press May 2018 to March 2019: a thematic content analysis *SSM Population Health 100828***

- **Yau A et al (2021) Sociodemographic differences in self-reported exposure to high fat, salt and sugar food and drink advertising: a cross-sectional analysis of UK panel data *BMJ Open* 11(4) e048139**

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TfL study team

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Design & Methods

Controlled Interrupted Time Series

Two-part model
Part 1: households reported purchases or not (logit)
Part 2: if purchased, how much? (generalised linear model)

- **Adjusted for:** sex, age, socioeconomic position, number of adults/children in the household, seasonality (two measures): festivals (Valentine's, Easter, Halloween, Christmas) and meteorological seasons (Spring, Summer, Autumn, Winter)

- **Primary outcome measure:** **avg. weekly household purchases of energy & nutrients** in London in post-intervention period compared to the counterfactual

- **Counterfactual:** based on extrapolation of the pre-intervention trend and incorporates changes post-intervention in the control (North of England)