

# An environmental scan of food advertising on buses and train stations

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# **Summary**

Each month, children under 15 years old in NSW make over 3.3 million bus trips and over 2 million train trips. With such a large volume of regular trips travelled by children, they are vulnerable to both conscious and unconscious influences of unhealthy food advertising.

Restricting unhealthy food promotion in areas controlled and managed by NSW government was identified to be one of the most achievable actions according to a recent report on government initiatives to tackle obesity.<sup>2</sup>

Unhealthy food advertisements dominate food advertisements on Sydney buses and at train stations.

State government commitment to stop junk food marketing on public transport would improve the food environment and address childhood obesity by protecting children from the unhealthy influence of junk food marketing.

# **Findings and Solutions**

Eighty-two percent of food advertisements were for discretionary foods and only 12% were for healthy foods.

One third of the food advertisements were for sugar sweetened drinks (soft drinks, frozen drinks and teas) and one in five for meals such as burgers and chicken products. Ice creams were also commonly advertised.

These findings reflect advertising on buses and train stations in summer in Sydney. While they cannot be extrapolated beyond that, the results are similar to a previous study showing that about 80% of advertisements at Sydney train stations are for discretionary foods.<sup>3</sup>

State government action to remove junk food advertising from state-owned property including on public transport would reduce NSW children's exposure to unhealthy messages and help them develop healthy eating habits for life.

### **Methods**

This project investigated junk food advertising on some NSW government transport facilities, including buses, trains and train stations.

For 4 days in February 2018, food advertising data was collected in the vicinity of six train stations; Hornsby, Chatswood, Macquarie University, Central, Town Hall and Parramatta. These were chosen as they are transport hubs in Sydney where large numbers of schoolaged children commute.

Details about advertisements on trains and train stations including platforms, concourses and inside and outside the entry gates were documented. Over 30 minutes, buses within close proximity of the train stations were also observed and advertisements on their sides and rear were documented. The content of the advertisements was coded using a system previously developed for use in research for a comparable purpose.<sup>4, 5</sup> This included a definition of discretionary food, based on the Australian Dietary Guidelines.<sup>6</sup>

# Childhood obesity and the power of advertising

Food marketing influences children's food preferences, encourages purchase requests and ultimately influences food consumption.<sup>7-9</sup> Currently 21.4% of NSW children aged 5-16 years are overweight or obese<sup>10</sup> and a high proportion will go on to become overweight adults,<sup>11</sup> increasing their risk of 12 different types of cancer.<sup>12</sup> Only 1 in 20 NSW children eat the recommended amount of vegetables daily, 1 in 2 children eat an unhealthy snack every day and 45% are regularly drinking sweetened beverages.<sup>13</sup> Over 35% of Australian children's energy intake comes from discretionary foods, those not recommended as part of a healthy diet.<sup>14</sup>

# **Key findings**

### The majority of food advertisements are for unhealthy food

A total of 292 food advertisements were identified across the 6 sampled areas, 78 at train stations and 214 on buses. Among the food advertisements 82% were for discretionary foods and 12% were foods from the five food groups. The remainder of the advertisements were classified as miscellaneous, for example, ingredients or food services. Thirty-three percent of advertisements were for sugar sweetened drinks such as soft drinks, frozen drinks and teas while 13% were for ice creams. Twenty-two percent were for meals such as burgers and chicken products.

Among the advertisers, 50% were fast food restaurant chains and 44% were grocery products, with the remainder being supermarkets and food delivery companies.

### Buses

Nearly 60% of advertisements on buses were fast food restaurant chain advertisements and 37% were for grocery products. Eighty-three percent of the bus advertisements were for discretionary foods. Soft drinks and frozen drinks and burgers, chicken products and noodles were the main food categories in bus advertisements (Figure 1). Five food group foods advertised included mangoes, a milk drink and a vegetable juice. Some buses had multiple advertisements along the side (Figure 3).

### **Train stations**

No food advertisements were seen on trains during the study period. On the train stations, 78% of the advertisements were for discretionary foods with ice cream and sugar sweetened drinks (energy drinks and frozen drinks) being the most common foods advertised (Figure 2). Of note, in a high pedestrian traffic area at Central railway station, a series of ice cream advertisements featuring a large poster on a main wall, a large poster on the ground and smaller posters on all pillars was observed (Figure 4). Several advertisements for an alcoholic drink were observed at two train stations. The most commonly advertised food from the five food groups was a milk drink. Grocery company advertisements made up 64% of the food advertisements at train stations.

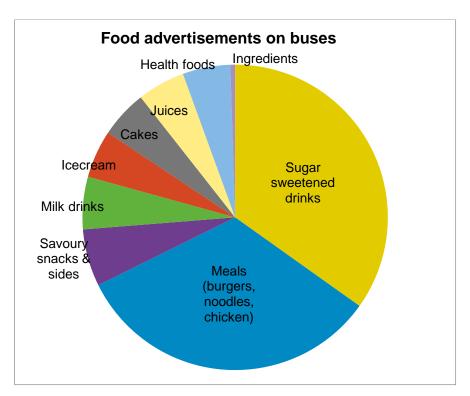


Figure 1: Proportion of different food categories advertised on buses

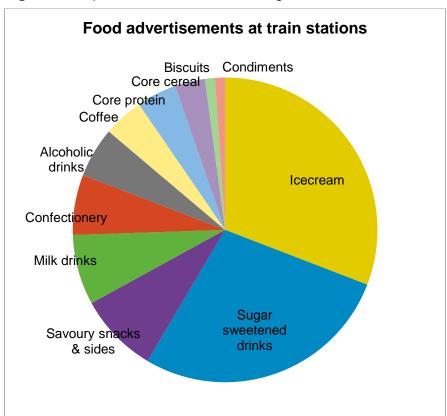


Figure 2: Proportion of different food categories advertised at train stations



Figure 3: Some buses had multiple advertisements

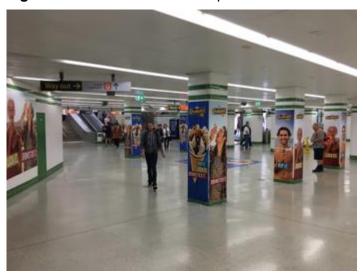


Figure 4: Central Train Station

## References

- NSW Government. Monthly Opal Bus Trips by Operator. Sydney: Transport for NSW; 2017.
- 2. Sacks G for the Food-EPI Australia project team. Policies for tackling obesity and creating healthier food environments: scorecard and priority recommendations for Australian governments. Melbourne: Deakin University; 2017.
- 3. Sainsbury E, Colagiuri S, Magnusson R. An audit of food and beverage advertising on the Sydney metropolitan train network: regulation and policy implications. BMC Public Health. 2017;17(1):490.
- 4. Watson W, Johnston A, Hughes C, Chapman K. Determining the 'healthiness' of foods marketed to children on television using the Food Standards Australia New Zealand nutrient profiling criteria. Nutr Diet. 2014;71(3):178-83.
- 5. Kelly B, Cretikos M, Rogers K, King L. The commercial food landscape: outdoor food advertising around primary schools in Australia. Aust N Z J Public Health. 2008;32:522-8.
- 6. Australian Government. Australian Dietary Guidelines. Canberra; 2013 2013.
- 7. Sadeghirad B, Duhaney T, Motaghipisheh S, Campbell NRC, Johnston BC. Influence of unhealthy food and beverage marketing on children's dietary intake and preference: a systematic review and meta-analysis of randomized trials. Obesity Reviews. 2016;17(10):945-59.
- 8. Cairns G, Angus K, Hastings G, Caraher M. Systematic reviews of the evidence on the nature, extent and effects of food marketing to children. A retrospective summary. Appetite. 2013;62:209-15.
- 9. Norman J, Kelly B, Boyland E, McMahon AT. The impact of marketing and advertising on food behaviours: evaluating the evidence for a causal relationship. Current Nutrition Reports. 2016:1-11.
- 10. Centre for Epidemiology and Evidence. Healthstats NSW Sydney: NSW Ministry of Health; 2018 [Available from: <a href="https://www.healthstats.nsw.gov.au/">www.healthstats.nsw.gov.au/</a>.
- 11. Simmonds M, Llewellyn A, Owen CG, Woolacott N. Predicting adult obesity from childhood obesity: a systematic review and meta-analysis. Obesity Reviews. 2016;17(2):95-107.
- 12. World Cancer Research Fund/ American Institute for Cancer Research. Continuous Update Project Expert Report 2018. 2018.
- 13. Centre for Epidemiology and Evidence. What NSW children eat and drink. Report of the Chief Health Officer 2017. Available from:

  <a href="http://www.health.nsw.gov.au/hsnsw/publications/chief-health-officers-report-2017.pdf">http://www.health.nsw.gov.au/hsnsw/publications/chief-health-officers-report-2017.pdf</a>.
- Australian Bureau of Statistics. 4364.0.55.007 Australian Health Survey: Nutrition First Results Foods and Nutrients 2011-12 2014 [updated 16/09/2015. Available from:
  - http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/4364.0.55.007main+features12011 -12.

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