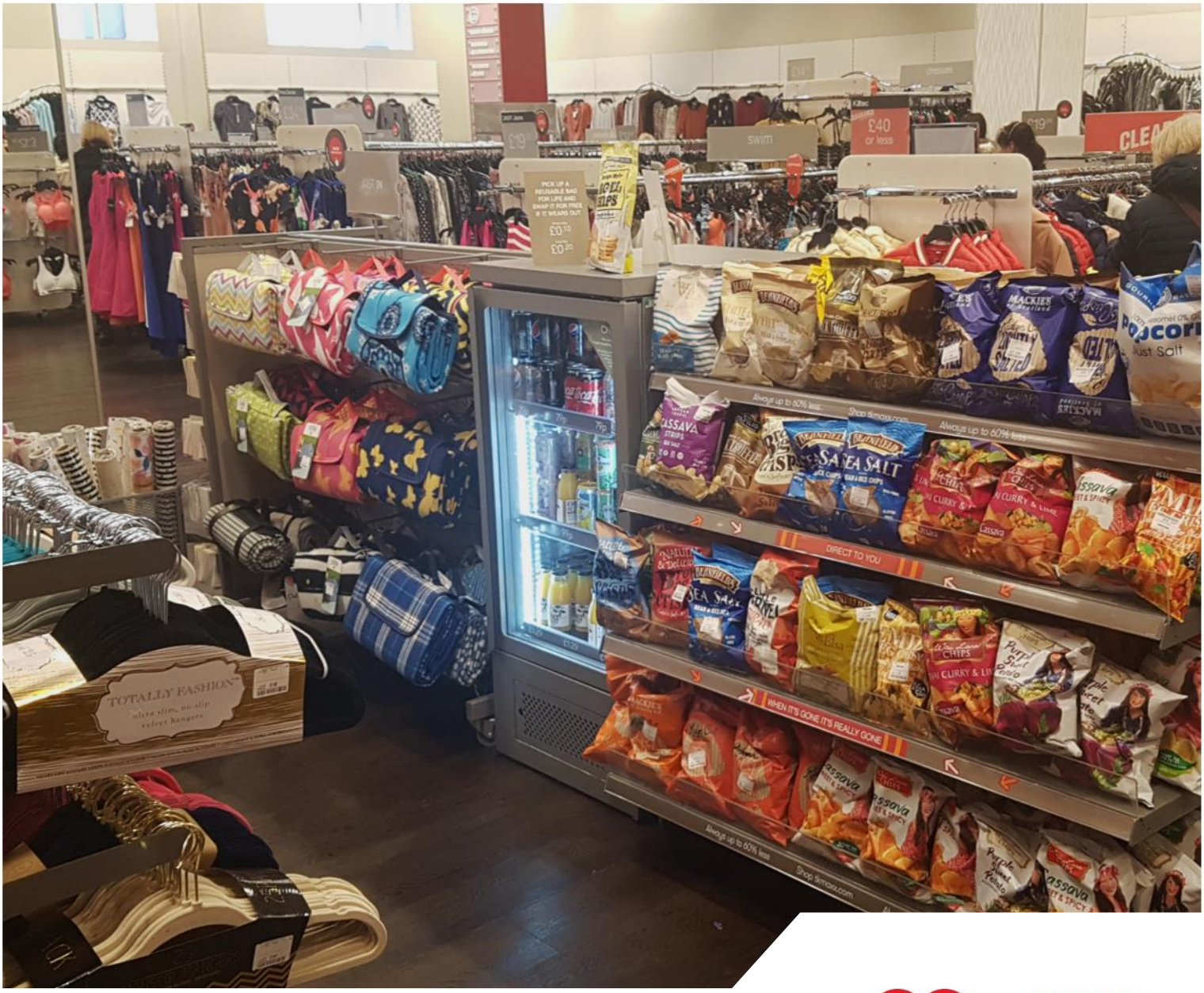

Availability, placement, marketing & promotions of HFSS content foods in traditional non-food retail environments

Strand 1:

Map and understand the availability and marketing of less healthy foods and drinks in traditional non-food retailers across three pilot areas of England.

UK Health Forum and the Health Equalities Group

Strand Lead: Health Equalities Group, March 2019

Report commissioned by Public Health England

UK HEALTH PREVENTION FIRST FORUM

FOOD ACT!VE

HEALTH EQUALITIES GROUP

Public Health England

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Executive Summary

Background

The availability and marketing of less healthy food and drinks is contributing to the current obesity epidemic. There is evidence to suggest the marketing of less healthy food and drinks can negatively influence eating habits and weight status amongst children and young people. Policymakers are keen to address the driving factors contributing to the obesogenic environment, with a view to tackling the rising tide of obesity in children and adults. In recent years, there has been an increase in the availability of food and drinks, particularly less healthy options, in a number of traditional non-food retailers such as clothing, department, cosmetic, pharmaceutical and homeware stores. This new form of marketing may be contributing towards increased exposure to less healthy food and the obesogenic environment. This report details the findings from preliminary field research attempting to understand the availability and marketing of less healthy food and drinks in the traditionally non-food retail environment.

Methods

The research conducted a cross-sectional survey using an online data collection tool to collect data across three regions of England (north, midlands and south) and across four types of retail environments (city centre, suburban high street, out of town shopping centre and retail parks) on the following variables: type of non-food retailer, type of food and drinks available, merchandising location, stock unit, food and drinks subject to promotions and type of promotional technique applied. The data collection took place from March-April 2018.

Results

330 retail outlets were visited across three regions of England, representing a range of retail environments. Just under one third of all stores (n= 97, 29.3%) sold food and drinks in store, with newsagents, stationery and gift stores being the types of retailer to most commonly sell food and drinks. Over one quarter of all stores visited, and nearly all stores selling food and drink, sold sweets and chocolate confectionery in store. 477 incidences of food and drinks were recorded across the fieldwork locations, the top three types being sweets and chocolate confectionery (n=195, 40.8%), sugary drinks (n=48, 10.1%) and biscuits (n=46, 9.6%). Nearly one third (n=145, 30.3%) of food and drink incidences recorded were subject to promotions, 34.4% (n=50) of which related to sweets and chocolate confectionery. 42% (n=196) of food and drink incidences were located in the checkout area, 50.5% (n=99) of which were sweets and chocolate confectionery. Just under one quarter (n=35, 24.1%) of all promotions were available at the checkout and 57.1% (n=20) of these promotions at the checkout were on sweets and chocolate confectionery. Nearly all (n=36, 94.7%) of food and drinks located in seasonal Easter and Mother's Day aisles were sweets and chocolate confectionery products.

Conclusions

These findings indicate that food and drinks can be found in many different types of traditional non-food retailers, particularly less healthy options such as sweets and chocolate confectionery products and particularly in newsagents, stationery and gift stores, department stores and pharmaceutical, medical and cosmetic stores. It is concerning that less healthy foods and drinks are also strategically marketed in store, being placed in targeted merchandising locations and subject to promotional activity. The findings from this research should also be cross-referenced with findings from Strand 2 of this project concerning a national opinion survey into experiences of food and drink items for sale in non-food retail settings.

Contents

1.0 Introduction

Obesity is posing a serious threat to public health in the UK. Latest figures show that 57% of women and 66% of men are overweight or obese in England, and over a third of children leave primary school an unhealthy weight [1, 2]. There is evidence to suggest the marketing of less healthy food and drink, particularly those high in fat, sugar and salt (hereafter HFSS), is leading to the overconsumption of several macronutrients that can influence weight status, including calories, saturated fat and free sugars [3]. As a result, campaign groups, health charities and academics are calling for stronger measures to reduce exposure to less healthy food and drink marketing.

In recent years, there has been an increase in the placement, availability and promotions of less healthy food and drink in traditional non-food retailers on the high street, such as at the tills of clothing and stationery and gift stores.

There is a limited amount of evidence on this type of marketing, and more research is required to help inform the Government's obesity strategy as to whether this is a contributing factor to the current obesity epidemic. To greater understand this area of marketing, the UK Health Forum developed a scoping review to inform Public Health England of the availability, placement, marketing and promotions of HFSS foods and drinks in the traditional non-food retail environment and to gauge public opinion and appetite for action in this area. The project was composed of three strands;

1. Map and understand the availability and/or marketing of foods and drinks in traditional non-food retailers across three pilot areas of England
2. Engage with people to assess their 'lived experience' of less healthy food marketing in traditional non-food retailers
3. Explore options on how to map the extent and impact of less healthy food placement in traditional non-food retailers across the UK

Health Equalities Group (HEG) was responsible for devising and undertaking strand one of the project. The data collected through this strand of the project aimed to provide an insight into the following:

- What types of traditional non-food retail outlets sell food and drinks
- What types of food and drink categories are typically available in these stores
- How these types of food are marketed; including the merchandising location (i.e. checkout area) and promotional activity.

The findings of this strand and the further two strands will help to inform options for future action on this new type of less healthy food marketing as a way of tackling and reducing obesity.

This report provides a brief overview of the research methodology applied to the fieldwork and results, including descriptive characteristics, top line data and discussion points.

2.0 Methods

The development of the methodology and data collection tool was carried out from January to March 2018 and was subject to approval from the working group (consisting of colleagues from UKHF, PHE and external partners).

The following section of this report provides an outline of this, including fieldwork locations, the data collection tool, pilot study and risk assessment.

2.1 Fieldwork locations

A broad north, midlands and south approach was used to select the locations for data collection. Data collection took place across three regions of England; Greater Manchester, Birmingham and Greater London. These locations were visited in March-April 2018. Specific locations can be seen in Table 1. In order to represent different types of traditional non-food retail environments, a city centre, out of town shopping centre, retail park and a suburban high street location were visited within each region to collect data. In total there were 12 fieldwork sites.

Table 1: Data collection sites

Area	Location	Name	Date
Midlands	City centre	Birmingham City Centre, Ladywood	Friday 9th March 2018
Midlands	Suburban high street	Edgbaston, Birmingham	Tuesday 27th March 2018
Midlands	Out of town shopping centre	Merry Hill, Brierley Hill	Wednesday 28th March
Midlands	Retail park	Selly Oak Retail Park, Birmingham	Tuesday 27th March 2018
South	City centre	Oxford Street, City of Westminster	Monday 9th April 2018
South	Suburban high street	Brixton, Lambeth	Tuesday 10th April 2018
South	Out of town shopping centre	Westfield Stratford City, Newham	Thursday 12th April 2018
South	Retail park	Staines Two Rivers Retail Park, Surrey	Friday 13th April 2018
North	City centre	Salford City, Greater Manchester	Thursday 20th April 2018
North	Suburban high street	Oldham, Greater Manchester	Thursday 20th April 2018
North	Out of town shopping centre	Trafford Centre, Greater Manchester	Friday 20th April 2018

North	Retail park	Cheetham Retail Park, Greater Manchester	Friday 20th April 2018

City centre locations were identified by researching the main shopping district/area of each city. Suburban areas were defined as the surrounding area of a large town or city, from where people often commute into the city district for work. Out of town shopping centres and retail parks in the surrounding areas of the city were identified from desk-based research. Retail parks were defined as unenclosed shopping parks, with large retail units encompassing a car park. In comparison, out of town shopping centres were typically enclosed buildings with retail units (of variable sizes) contained within the building.

As the researcher had to systematically collect retail data on foot, it was decided to select study areas at ward level to concentrate the data collection area and be time-efficient (as opposed to collecting data in multiple shopping districts within a city). Study areas were based on the boundaries of the ward, which were established during the mapping exercise before fieldwork in each area took place.

We used the Local Health database for all study areas, to identify statistics for deprivation (IMD score), population size and age, income deprivation, child poverty, ethnicity, obesity prevalence (in children and adults) and life expectancy at ward level [4]. These descriptive statistics provide an insight into the demographics and economy of each ward. Further detail on local income and affluence was sought from the Office for National Statistics annual report on Hours and Earnings by ward level, which identified average gross weekly incomes by household in each ward [5]. These figures were collated into tables per region, found in Appendices 1, 2 and 3 (section 10). This enabled HEG to select locations that represented different types of population groups/sizes, affluence and health. However, it is important to recognise that whilst these statistics represent the population of the area, the data does not necessarily relate to the population that uses these retail environments. Data capturing the type of people who use the shopping facilities was difficult to acquire, with the exception of some out of town shopping centres, although the reliability of this data was variable. Therefore, the data gathered in Appendix 1, 2 and 3 (section 10) was merely used as a guide to choose areas which represent a varied social gradient across the country.

The target sample size outlined for this project in the proposal was a minimum of 270 traditional non-food outlets across the three chosen regions. Within each location, it was decided that a minimum of 30 outlets were to be recorded for city centre high street locations, 30 outlets for out of town shopping centres, 20 in suburban high streets and a further 10 outlets to be recorded at retail parks.

2.2 Data collection techniques

After conducting an in-depth review of the existing literature and similar research designs, an observational methodology was selected as the best option to capture the required data. An example of this methodology in practice can be seen in a study investigating the availability and marketing of e-cigarettes in Scotland. Fieldworkers carried out a covert observational audit of specific products on sale and marketing techniques across 98 retail outlets in the UK, using an online data collection tool in store to collect the data [6]. Another example is a cross-sectional survey of food sold at checkouts in non-food outlets – one of the few similar studies to this scoping review. This research involved collecting data through an online survey tool, with digital photographs used to support the data collection [7].

A cross-sectional survey was then developed on an online data collection tool using Google Forms on an internet-enabled mobile phone device. The data was then exported into an Excel spreadsheet ready for analysis.

The cross-sectional survey was developed to include categories for traditional non-food retail store type, food and drink categories, stock unit, promotions, promotional techniques and merchandising location. The date, time, seasonality, area (north, midlands or south), location (city centre high street, out of town shopping centre, suburban high street or retail park), in-store food provision availability (for example in-store cafés or restaurants) name of store, type of retailer (chain or independent) and number of floors/checkouts were also recorded. Insights on methodologies and variables suitable for categorisation were also provided from the working group, of whom some had experience in similar research projects.

2.2.1 Traditional non-food retail store types

HEG applied a simple inclusion criterion to determine the food and drinks the research project would be concerned with. It was decided that food and drink products available within the defined retail store types with the intention of consuming the products *outside* of the store were included. In essence, *'takeaway'* goods that were most likely to be consumed off premises at a later time or date. For example: sweets gift bags sold in Topshop, chocolate bars sold in Superdrug and chilled pre-packaged food in Boots. Note that vending machines were identified as a 'stock unit' variable. The research was not concerned with food and drink products that are intended for consumption *within* the outlet, for example: Costa Café inside of Primark, Joe and the Juice inside of John Lewis or M&S Café inside of M&S. However, information on the prevalence of in-store food provision in traditional non-food retailers was collected to provide additional context.

The final traditional non-food retail store types were:

- Electrical household appliances: e.g. Curry's and PC World
- Department stores: e.g. House of Fraser and Debenhams
- Clothing, textile and footwear stores: e.g. New Look and Topshop
- Watches and jewellery: e.g. Pandora and Goldsmiths
- Newsagents, stationery and gift store: e.g. WH Smith and Paperchase
- Pharmaceutical, medical and cosmetic stores: e.g. Boots and Superdrug
- DIY stores: e.g. B&Q and Wickes
- Homeware stores: e.g. DFS and Lakeland
- Telecommunications stores: e.g. Carphone Warehouse and EE
- Florists, garden centres and pet goods: e.g. Dobbies and Pets at Home
- Sport and outdoor retailer: e.g. JD Sports and Cotswold
- Audio and visual entertainment stores: e.g. HMV and GAME
- Musical instruments: e.g. Dawsons and Rimmers
- Games and toys stores: e.g. The Entertainer and Toys R Us
- Photo equipment and supplies: e.g. Jessops and Cannon
- Bookshops: e.g. Waterstones and Foyles

- Travel termini and ticket offices: e.g. Merseyrail and National Rail

2.2.1.1 Independent non-food retailers

It was decided that data should be collected on independent and chain traditional non-food retailers. We aimed to collect data on a minimum of three independent non-food retailers per location, to assist in determining any differences in the availability and marketing of food and drinks between chain and independent stores.

Independent non-food retailers were classified as businesses that operate from a single retail outlet or are structured as a small chain with no more than three stores. This was determined in the pre-fieldwork mapping exercise through an online search engine. Alternatively, if the fieldworker approached a possible independent retailer during the fieldwork, they could search for the business details and information on the internet-enabled mobile device prior to entering the store.

2.2.1.2 Discounter stores

It was decided that discounter stores, including non-food retailers such as Home Bargains, Poundland and B&M should be excluded from the research. Further detail on the rationale for this can be found in Appendix 4 and 5 (section 10).

However, the prevalence of these stores was recorded to provide some context on their presence across retail environments in England, which can be seen in Appendix 6 (section 10).

2.2.2 Food and drink categories

Food and drinks were recorded in terms of the total number of incidences of the food and drinks being available (irrespective of package size), rather than the total volume of food or number of packets of food displayed. However, if there were multiple incidences of the food and drink category available throughout the store, this was also collected.

These categories were selected based on the types of food and drinks likely to be available and also aligned with the categories in Public Health England's sugar reduction programme.

- Biscuits e.g. biscuit/cereal bars and cookies
- Cakes e.g. brownies and muffins
- Sweets and chocolate confectionery e.g. chocolate bars and boiled sweets
- Ice cream/lollies e.g. soft scoop or juice lollies
- Sweet pastries (morning snacks) e.g. croissants/Danish pastries
- Savoury pastries e.g. meat pies and sausage rolls
- Ready to eat foods e.g. pre-packaged sandwiches, ready meals and pasta.
- Savoury snacks e.g. crisps, salted/roasted nuts, dried meat snacks, sweet/salty popcorn.
- Healthier food options e.g. fresh fruit, vegetable batons, plain popcorn, salads, unsalted nuts
- Sugary drinks (including sports drinks) e.g. Coca-Cola, Oasis and Powerade
- Energy drinks e.g. Monster and Relentless
- Milkshakes e.g. Friji and Yop
- Diet/zero drinks e.g. Coke Zero and Pepsi Max

- Healthier drink options e.g. water, smoothies or fruit juice.

Products were categorised by the fieldworker evaluating each food or drink incidence and determining the most suitable category according to the labelling information. For example, on identifying a soft drink, the fieldworker would determine the product a 'sugary drink' if it contains added sugar or a 'diet/zero drink' if it contains artificial sweeteners and has no sugar. Both the fieldworkers who conducted the research were registered nutritionists and were familiar with the different food and drink types involved in this research.

2.2.3 Stock unit categories

- Dump baskets: a non-refrigerated container used to hold and display promotional goods in a store, often placed sporadically throughout the store.
- Multi-deck refrigerator: a large and open-fronted refrigerated unit with shelving designed to allow consumers to pick products directly off the shelf.
- Under counter display fridge: smaller, compact unit's ideal for small retail outlets or as additional display capacity i.e. near checkout area.
- Double door display fridge: upright refrigerated shelved unit with display double door opening.
- Gondola shelving: freestanding fixture used by retailers to display merchandise. Gondolas typically consist of a flat base and a vertical component featuring notches, pegboards, or slatwalls.
- Counter top unit: a small display unit positioned on the top of a surface, usually the near the cashier.
- Standing shelving unit: a standalone unit, with multiple shelves to store different types of products in or on.
- Branded free standing display unit: a standalone, branded off-fixture unit displaying one product.
- Wall shelving/displays: mounted shelving units attached to walls with adjustable pegboard backing depending on products.
- Freezer unit: refrigerated cabinet or room for preserving food at very low temperatures.
- Clip strips: material (either plastic or metal) with clips or hooks at regular intervals, upon which merchandise is hung.
- Vending machines: an automated *machine* that provides items such as snacks and drinks to consumers after money is inserted, or a paid by credit or debit card.

2.2.4 Promotional technique categories

- Point-of-purchase: retailer or manufacturer displays located at the window, floor and counter to enhance impulse purchase and to make customers aware of the promotion.
- Intercom promotions: a voice over intercom reiterating promotions.
- 2 for the price of 1: extra items of the *same* product are added to the sale free of charge to increase sales i.e. 3 for 2 or buy one get one free.
- Discounted price: items which have been reduced in price for a limited period of time.

- Samples: free samples of products, tastes and smells given away to consumers.
- Meal deals: products that are a set price when a combination of *different* items are purchased together. For example, buy a sandwich, snack and drink for £3.29.

2.2.5 Merchandising location categories

- Checkout area (including self-service)
- Entrance
- End of aisle
- Seasonal aisle
- Specialist food and drink department/aisle/location
- General floor space

A researcher protocol was developed to provide in-depth information about each step of the routine data collection, and to minimise intra- and inter- researcher variability. The protocol can be found in Appendix 7 (section 10).

2.3 Pilot study

A pilot study was carried out in the Liverpool City Region across seven different traditional non-food retailers in the city centre high street environment. The aim of the pilot was to test the compatibility between the data collection tool and the fieldworker's protocol and to identify any amendments needed.

However, there was some learning to take from the pilot which helped to inform the final iteration of the methodology. Fieldworkers reported that taking extensive photographic evidence proved difficult to achieve whilst trying to remain covert. Instead, the fieldworker tried to complete the data collection in store which proved to be suitable for most occasions, with the exception of stores that had areas with a large grouping of food and drinks particularly near the checkout area. In this situation, photographic evidence was taken, and the tool was completed outside of the store. However, in the main data collection the researchers were encouraged to take photographic evidence of examples of food and drinks, to help enrich the findings and provide case studies for the final report.

A further pilot test was carried out by the second fieldworker following these amendments and reported no discrepancies in the data collection methods and a full risk assessment was prepared to acknowledge any potential risks in the fieldwork. More detail on this can be found in Appendix 8 (section 10).

2.3.1 Seasonal promotions

During the pilot research in February-March 2018, it was recognised that there were a significant number of seasonal promotions available within many of the stores visited. This was owing to upcoming Valentine's Day (14th February), Mother's Day (11th March) and Easter celebrations (Friday 30th March – Monday 2nd April) that would continue throughout the proposed timeframe for data collection. These seasonal promotions could have skewed the data collection, as the food and drinks on sale may solely be there as part of a seasonal display. Following discussion with the working

group it was agreed that data would be collected both before and after Easter to give some indication as to whether these products are available all year round or simply as part of a seasonal offer, display or promotion.

Following the full completion of the methodology, the main data collection took place over a six-week period from Friday 9th March until Friday 20th April between two fieldworkers at HEG.

3.0 Data Analysis

The raw data was analysed in Microsoft Excel, which included data on all stores recorded in the research. The data was aggregated with subheadings for region, retail location, retail category, name of store, type of retailer, outlet size variables, instore provision of food and drink and multiple columns to record the food and drink type available, merchandising location, the stock unit, what food and drink was subject to promotions and what type of promotion was applied for each food and drink opportunity.

4.0 Results

Results from the fieldwork are presented underneath the subheadings below. Photographic evidence from the data collection can be found in Appendix 9 (section 10), which provides examples of food and drinks available in the traditional non-food retail environment.

4.1 Types of retailer and availability of foods and drinks

The sample size reached in the fieldwork was a total of 330 retail outlets, consisting of 99 (30%) in the north, 109 (33.3%) in the midlands and 122 (36.9%) in the south of England. This exceeded the minimum sample size set for the fieldwork (n=270), and the minimum number of outlets for each location within each region was achieved.

Table 2 shows the number of traditional non-food retail outlets visited and the proportion which were found to sell food and drink. Clothing, textile and footwear stores (22.4%), newsagents, stationery and gift stores (10.6%) and pharmaceutical, medical and cosmetic stores (9.1%) were the three most represented traditional non-food retailers in the fieldwork. All types of retail store types were recorded in the data collection, however the likes of musical instrument stores, photo equipment supplies, DIY stores and florist, garden and pet stores are underrepresented due to difficulties in locating these traditional non-food retailers in the fieldwork sites.

Department stores were most likely to sell food and drinks in store, as 74% of all of this type of stores visited sold food and drinks on the premises. This is compared to 62.8% of all newsagents, stationery and gift stores and 40% of pharmaceutical, medical and cosmetic stores.

Only 18.9% of the 74 clothing stores visited sold food and drinks, compared to 30% of sport and outdoor retailers, 44.4% of games and toy stores and 45.4% of bookshops visited.

None of the audio and visual entertainment stores, telecommunications stores and musical instrument stores visited sold any food and drinks.

Table 2: Traditional non-food retail store types contribution for total sample and for retailers selling food and drink

	n = sample	n = selling food and drink	Proportion selling food and drink
BASE	330	97	29.4%
Clothing, textile and footwear store	74	14	18.9%
	22.4%	14.4%	
Newsagents, stationery and gift store	35	22	62.8%
	10.6%	22.6%	
Pharmaceutical, medical and cosmetic store	30	12	40.0%
	9.09%	12.3%	

Department store	27	20	74.1%
	8.18%	20.6%	
Homeware store	23	1	4.35%
	6.96%	1.03%	
Watches and jewellery store	22	3	13.6%
	6.66%	3.1%	
Sport and outdoor store	20	6	30.0%
	6.06%	6.1%	
Games and toys store	18	8	44.4%
	5.45%	8.2%	
Audio and visual entertainment store	17	0	0
	5.15%	-	
Electric household appliances store	14	1	7.14%
	4.24%	1.03%	
Telecommunications store	13	0	0
	3.93%	-	
Bookshop store	11	5	45.5%
	3.33%	5.15%	
DIY store	7	1	14.3%
	2.12%	1.03%	
Photo equipment and supplies store	6	0	0
	1.81%	-	
Travel termini and ticket store	6	2	33.3%
	1.81%	2.06%	
Florists, garden centres and pet store	4	2	50.0%
	1.21%	2.06%	
Musical instruments store	2	0	0
	0.60%	-	

Other	1	0	0
	0.30%	-	

Figure 1 demonstrates the proportion of traditional non-food retailers making up the 97 retailers that sold food and drink. Newsagents, stationery and gift stores and department stores both make up over one fifth of the sample, with clothing, textile and footwear stores and pharmaceutical, medical and cosmetic stores both making up over 10% of the sample. The remaining 29% of the sample is distributed between the remaining non-food retail store types.

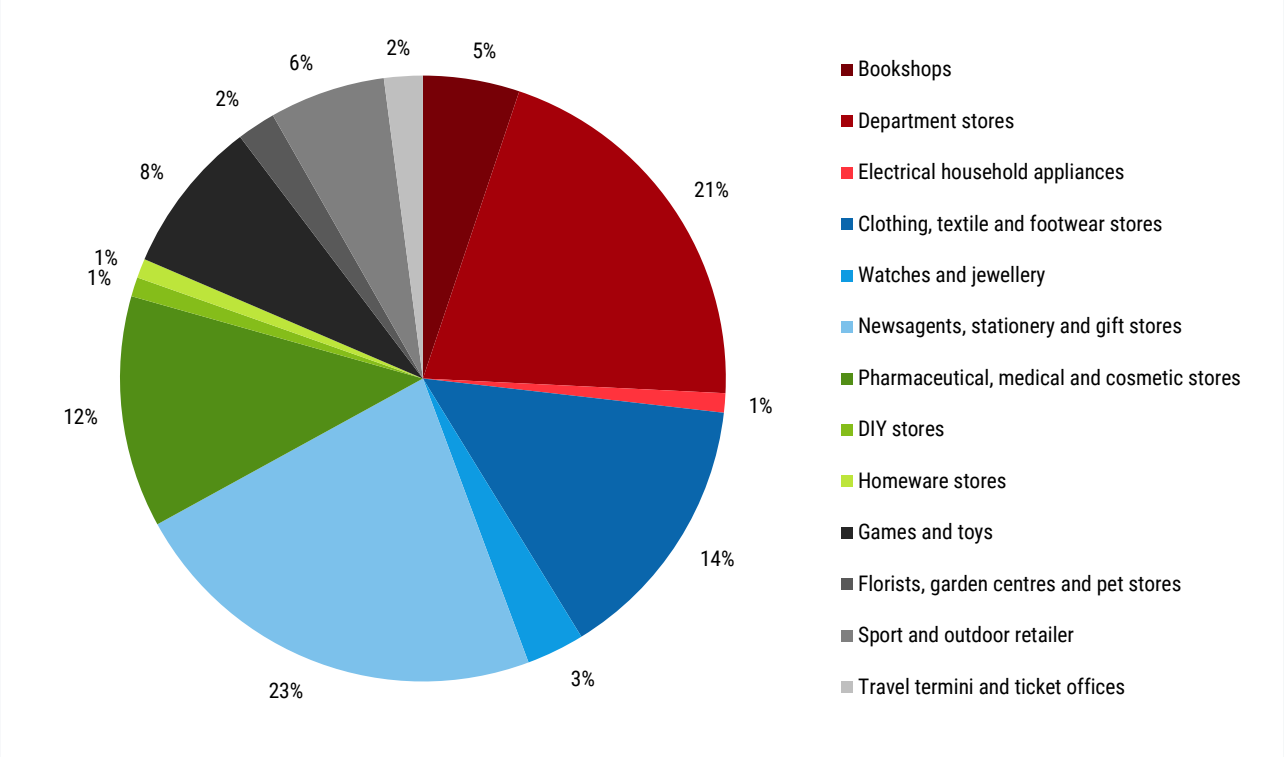


Figure 1: Retail store types selling food and drinks by proportion

4.1.1 Types of food and drink categories available

29.3% (n=97) of the traditional non-food retailers visited sold food and drink products. Of those, 93.8% (n=91) sold sweets and chocolate confectionery, 39.1% (n=38) sold sugary drinks and 32.9% (n=32) sold biscuits.

Healthier drink options and healthier food options were also available to purchase in 29.8% (n=29) and 25.7% (n=25) of these stores respectively.

Sweets and chocolate confectionery products were available in all 20 of the department stores and 22 newsagents, stationery and gift stores that sold food and drinks.

A full representation of the number of traditional non-food retailers (n=97) selling food and drink categories can be seen in Figure 2.

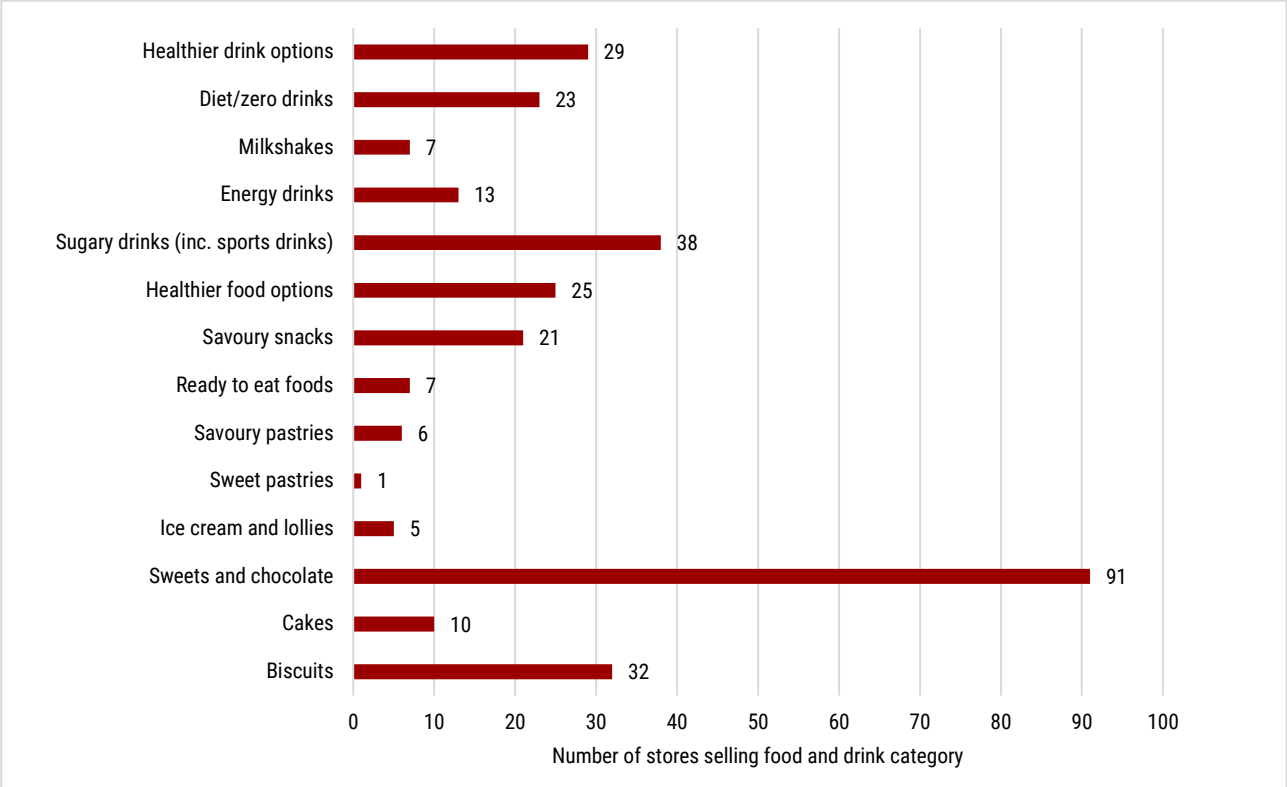


Figure 2: Number of traditional non-food retailers selling food and drink type.

4.2 Food and drink incidence

Within the 97 traditional non-food retailers selling food and drinks, a total of 477 incidences of food and drinks were recorded. As mentioned in the methodology, this figure does not represent the total volume of food or number of packets of food displayed, rather the incidence within the store. However, if there were multiple incidences of the food and drink category available at different locations in the store, this was collected. For example, a department store may sell a range of bags of confectionery in the children's department – this was recorded as a single incidence of confectionery. Confectionery may also be available at the checkout area, which would also represent one incidence, irrespective of the quantity as long as it was the same food and drink category.

The store type which reported the largest number of food and drink incidences in the research was pharmaceutical, medical and cosmetic stores (n=145, 30.4%). This was followed by newsagents, stationery and gift stores (n=94, 19.6%) and department stores (n=94, 19.6%).

4.3 Food and drink incidence by food and drink category

By far the most frequent food and drink category recorded in the research was sweets and chocolate confectionery (n=195, 40.8%) followed by sugary drinks (n=48, 10.1%) and biscuits (n=46, 9.6%). This was followed by healthier food and drink options which represented 7.6% (n=37) and 8.4% (n=40) of the total number of food and drink incidences recorded respectively.

The three least frequent food and drink types recorded in the research were sweet pastries (n=1, 0.2%), savoury pastries (n=4, 0.8%) and ready to eat foods (n=7, 1.4%). A full illustration of food and drink incidences (n=477) by food and drink category can be found in Figure 3.

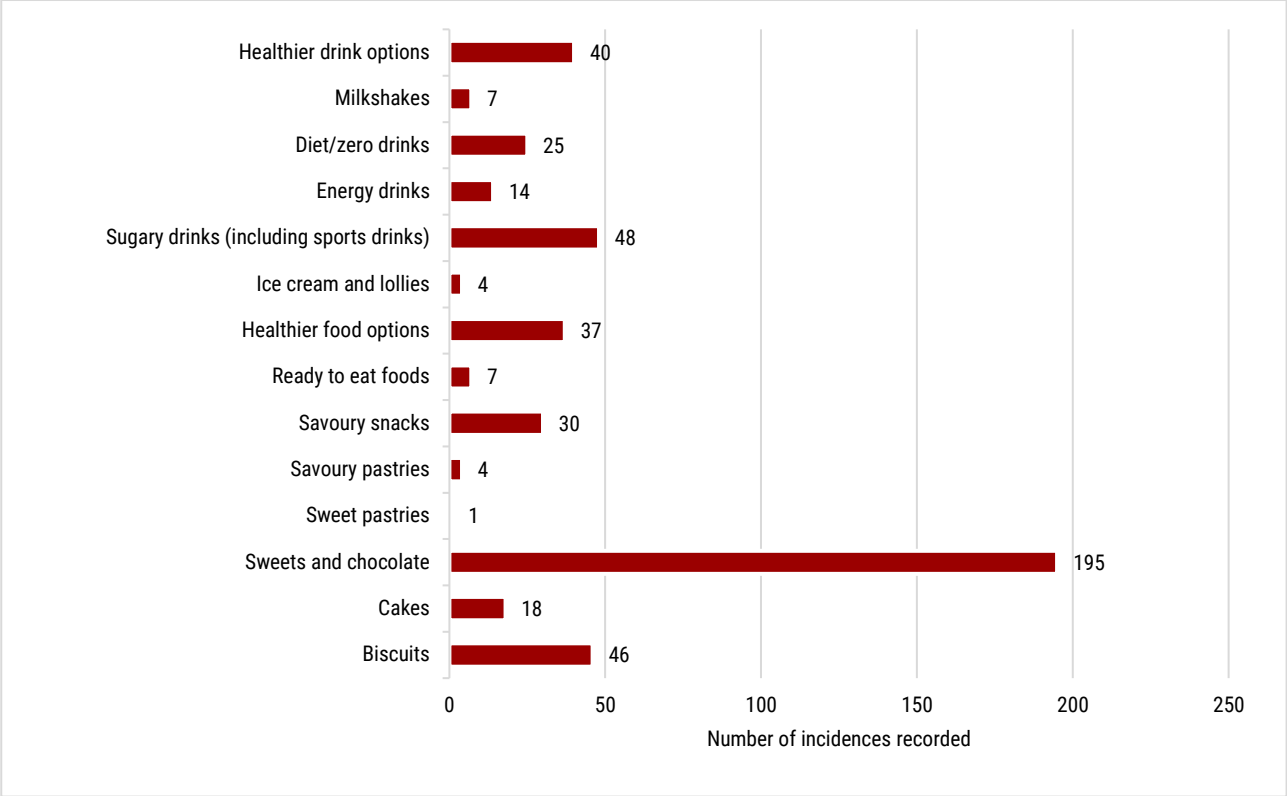


Figure 3: Food and drink incidences by food and drink category

4.4 Food and drink incidence by retail type

As the number of some food and drink categories was minimal, for the purposes of illustration we have grouped the categories into less healthy food and drink options, healthier food and drink options and other for some of the analysis and presentation of results.

Detail on the classification of these groups can be found in Table 3 below. There was no pre-existing methodology in place that could be used to classify these groupings. As a result, groupings were largely based on the types of food and drinks that are associated with higher proportions of fat, sugar and salt. With many of the categories identified by Public Health England's Sugar Reduction Programme as important contributors towards total sugar intakes in children and adults. 'Ready to eat' foods were placed in the 'other' grouping, as these products were more difficult to classify.

Table 3: Food and drink category groupings

'Less healthy' food and drink	• Biscuits e.g. biscuit/cereal bars and cookies • Cakes e.g. brownies and muffins • Sweets and chocolate confectionery e.g. boiled sweets and chocolate confectionery bars • Ice cream/lollies e.g. soft scoop and juice lollies • Sweet pastries e.g. croissants and Danish pastries • Savoury pastries e.g. meat pies and sausage rolls • Savoury snacks e.g. crisps, salted/roasted nuts, dried meat snacks, sweet/salty popcorn. • Sugary drinks (including sports drinks) e.g. Coca-Cola, Oasis and Powerade • Energy drinks e.g. Monster and Relentless • Milkshakes e.g. Friji and Yop
'Healthier' food and drink	• Diet/zero drinks e.g. Coke Zero and Pepsi Max • Healthier food options e.g. fresh fruit, vegetable batons, plain popcorn, unsalted nuts • Healthier drinks e.g. water, smoothies or fruit juice
Other (not categorised according to healthiness)	• Ready to eat foods e.g. pre-packaged sandwiches, ready meals and pasta

The proportion of 'less healthy' and 'healthier' food and drink incidences available in each non-food retail store type is shown in Figure 4, which demonstrates that less healthy options dominate food and drink availability across the different types of traditional non-food retailers. However, pharmaceutical, medical and cosmetic stores also sold a large number of healthier options, with department stores, travel termini, clothing, textile and footwear stores, newsagents, DIY, stationery and gift stores and sport and outdoor retailers also offering some healthier options. Games and toy stores, bookshops, watches and jewellery stores, florists, pet and garden stores and homeware stores offered no healthier options.

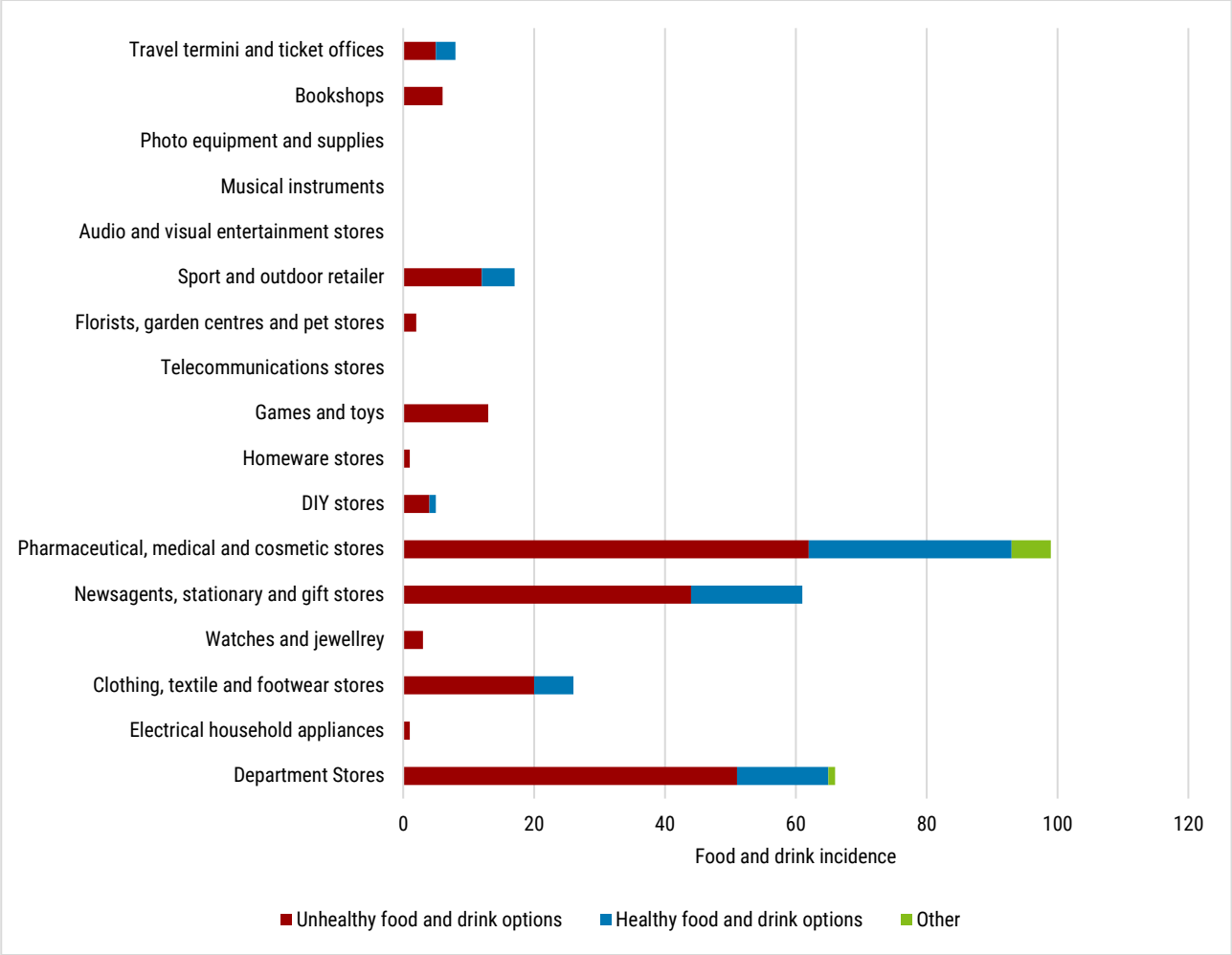


Figure 4: Proportion of less healthy and healthier food and drink options available in retail store types

Distribution on the distribution of food and drink incidence by store type and food and drink category can be found in Appendix 10 (section 10).

4.6 Promotions

A total of 145 food and drink incidences were subject to promotions, representing 30.4% of the total number of food and drink incidences (n=477) recorded in the fieldwork.

4.6.1 Promotions by food and drink incidence

More than one third of all promotions (n=50, 34.4%) related to sweets and chocolate confectionery, followed by sugary drinks (n=13, 8.96%) and healthier drink options (n=13, 8.96%). There were also a number of promotions on diet/zero drinks (n=11, 7.58%), healthier food options (n=10, 6.89%), cakes (n=9, 6.20%), savoury snacks (n=9, 6.20%) and energy drinks (n=9, 6.20%). No promotions were recorded on ice cream/lollies and sweet pastries.

A full illustration of the types of food and drinks subject to promotion, and in proportion to the total number of incidences by food and drink category is shown in Figure 5 and Table 4.

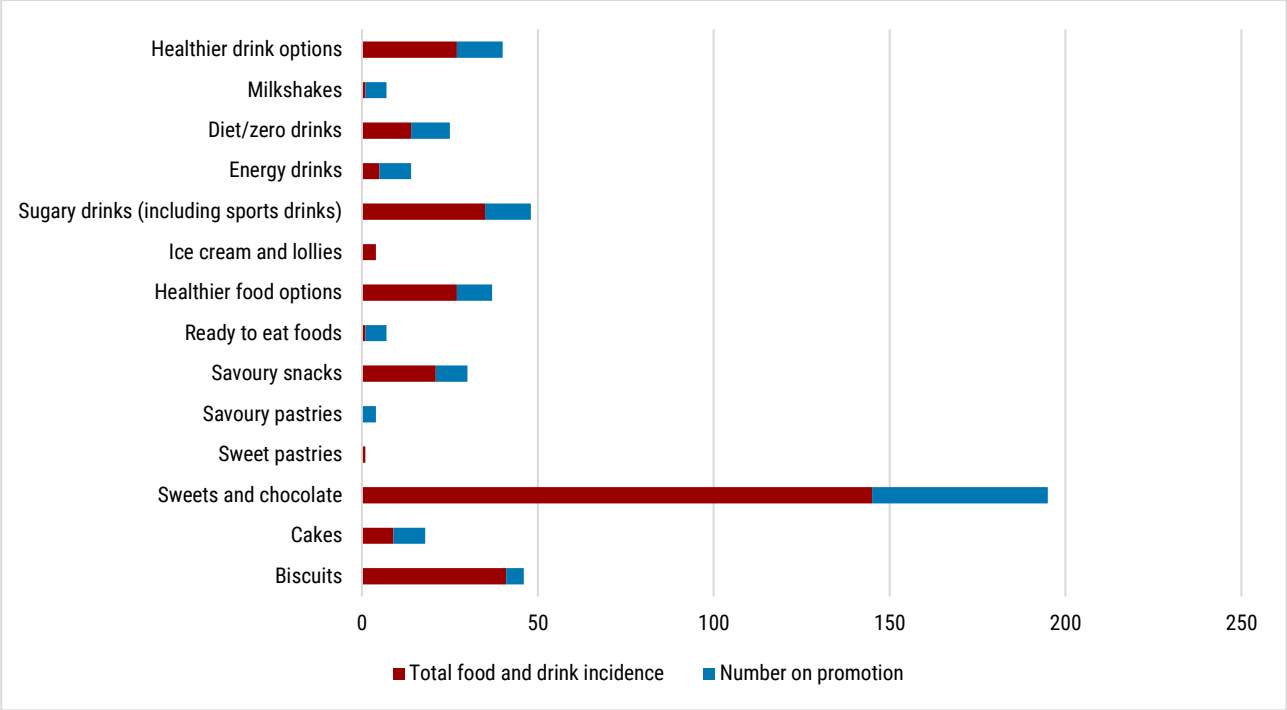


Figure 5: Promotions on food and drink incidence

Table 4: Promotions on food and drink incidence

Food and drink categories	Number of foods and drink incidences (% of base)	Number subject to promotions (% of base)	Proportion of food and drink incidence on promotion
BASE	477	145	30.39%
Biscuits	46	5	10.9%
	9.6%	3.44%	
Cakes	18	9	50.0%
	3.7%	6.20%	
Sweets and chocolate	195	50	25.6%
	40.8%	34.48%	
Sweet pastries	1	0	0
	0.21%	-	

Savoury pastries	4	4	100.0%
	0.83%	2.75%	
Savoury snacks	30	9	30.0%
	6.28%	6.20%	
Ready to eat foods	7	6	85.7%
	1.46%	4.13%	
Healthier food options	37	10	27.0%
	7.75%	6.89%	
Ice cream and lollies	4	0	0
	0.83%%	-	
Sugary drinks (including sports drinks)	48	13	27.1%
	10.06%	8.96%	
Energy drinks	14	9	64.3%
	2.93%	6.20%	
Diet/zero drinks	25	11	44.0%
	5.24%	7.58%	
Milkshakes	7	6	85.7%
	1.46%	4.13%	
Healthier drink options	40	13	32.5%
	8.38%	8.96%	

25.6% of the total number of incidences of sweets and chocolate confectionery were subject to promotions (n=50). In comparison, 50.0% of the total number of incidences of cakes (n=9) were subject to promotion and over two thirds of the total number of incidences of energy drinks (n=8, 64.3%) were subject to promotions.

Biscuit products had the lowest proportion of incidences on promotion (n=5, 10.9%). 27.0% (n=10) of healthier food products and 32.5% (n=13) of healthier drink options incidences were also subject to promotion respectively.

4.6.2 Promotions on food and drink incidence by retail category

A total of 40 traditional non-food retailers offered promotions on food and drinks in store, meaning two fifths (41.2%) of retailers selling food and drinks also offered promotions on some of these products.

Table 5 shows pharmaceutical, medical and cosmetic stores was the retail category with the largest proportion of stores offering promotions on food and drinks (n=11, 91.6%).

No promotions were found in electrical household appliances, DIY stores, sport and outdoor retailers and ticket offices.

Table 5: Number of traditional non-food retailers with promotions on food and drink

	Total number of stores selling food and drink (%)	Number of stores with promotions (%)	Proportion of stores selling food and drink with promotion
BASE	97	40	41.2%
Department stores	20	10	50%
	20.6%	25.0%	
Electrical household appliances	1	0	-
	1.03%	-	
Clothing, textile and footwear stores	14	6	42.8%
	14.4%	15.0%	
Watches and jewellery	3	1	33.3%
	3.09%	2.5%	
Newsagents, stationery and gift stores	22	3	13.6%
	22.6%	7.5%	
Pharmaceutical, medical and cosmetic stores	12	11	91.6%
	12.3%	27.5%	
Games and toys	8	3	37.5%
	8.2%	7.5%	

DIY stores	1	0	-
	1.03%	-	
Homeware stores	1	1	100%
	1.03%	2.5%	
Telecommunications stores	0	0	-
	-	-	
Florists, garden centres and pet stores	2	1	50%
	2.06%	2.5%	
Sport and outdoor retailer	6	0	-
	6.18%	-	
Audio and visual entertainment stores	0	0	-
	-	—	
Musical instruments	0	0	-
	-	—	
Photo equipment and supplies	0	0	-
	-	—	
Bookshops	5	4	80%
	5.15%	10%	
Travel termini and ticket offices	2	0	-
	2.06%	-	

Figure 6 shows that the most food and drink incidences on promotion were found in pharmaceutical, medical and cosmetic stores (n=100), representing 68.9% of the total number of promotions recorded. This was followed by newsagents, stationery and gift stores (n=13, 8.96%) and department stores (n=10, 6.89%).

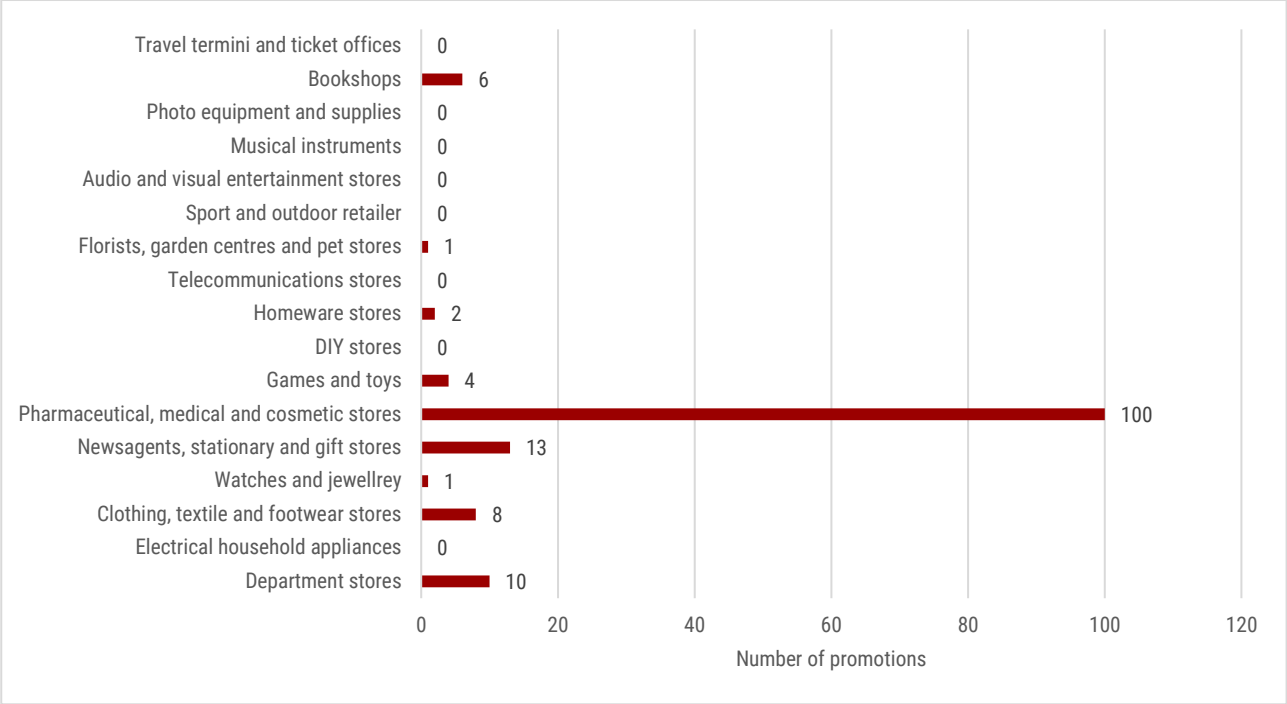


Figure 6: Number of food and drinks incidences subject to promotion by retail category

4.6.1 Statistical analysis

To test whether some types of foods and drink items were more likely to be on promotion, we grouped items into three categories: 'less healthy' food and drink, 'healthier' food and drink and other (seen in Table 3).

To test the association, we used a chi-squared test. The difference was statistically significant if $p < 0.05$.

There was a statistically significant association between the types of food and drinks available at the store and their chances of being on promotion (x^2 =6.93, p-value= 0.031). The products most commonly put on promotion in studied stores were less healthy drinks with 41.1% being on promotion, followed by healthier food or drink options with 32.0% and less healthy foods with 25.9% being on promotion.

4.7 Promotional techniques

The most frequently used promotional technique was meal deals (n=63, 43.1%), followed by two for the price of one deals (n=38, 26.0%) and discounted price (n=33, 21.9%).

Intercom promotions and free samples were two promotional techniques that were not reported across any of the fieldwork locations, despite being indicated by some of the pilot testing.

4.7.1 Promotional technique by food and drink category

Figure 7 demonstrates the proportion of promotional techniques applied to each food and drink category on promotion.

Over half (n=29, 55.1%) of all promotions found on sweets and chocolate confectionery were discounted price, yet this was much less frequently applied to other food and drink categories. 2 for

1 promotions accounted for a large proportion of promotional activity on healthier drink options (n=4, 40%) and biscuits (n=3, 60%).

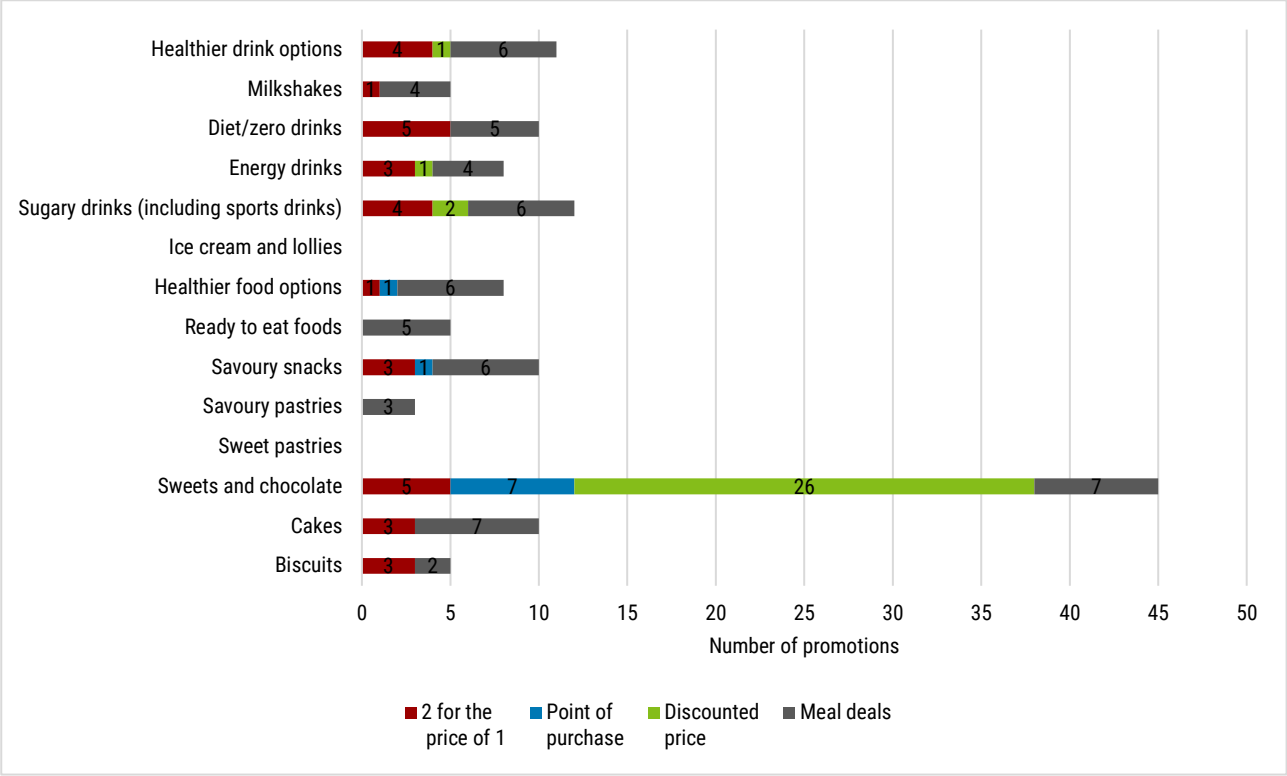


Figure 7: Promotional techniques applied to food and drink products

4.7.2 Promotional technique by traditional non-food retailer

Figure 8 illustrates the promotional techniques available in each traditional non-food retail store type.

Meal deals were only found in pharmaceutical, medical and cosmetic stores and newsagents, stationery and gift stores. Clothing, textile and footwear stores, bookshops and watches and jewellery stores only offered discounted price promotions.

Pharmaceutical, medical and cosmetic stores was the only retailer type to offer all four types of promotional techniques on food and drinks.

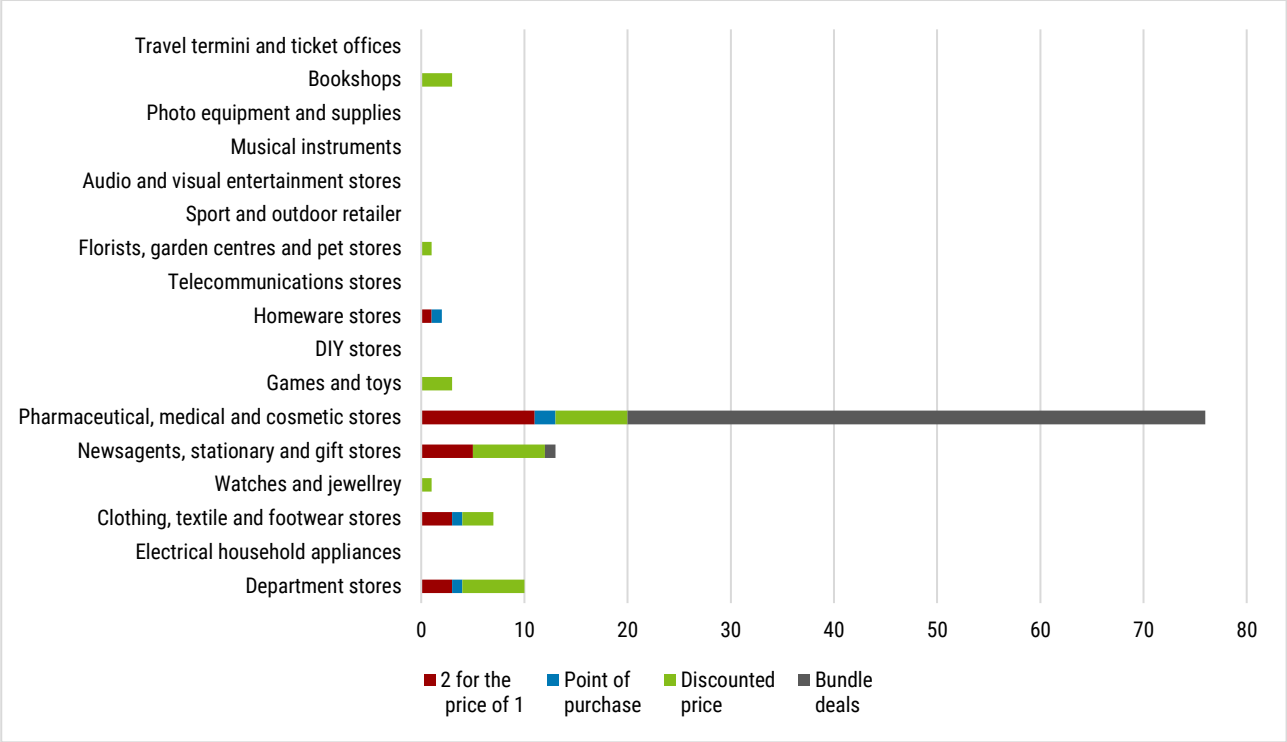


Figure 8: Promotional techniques available by retail category.

4.8 Merchandising location

Figure 9 illustrates that 41.0% (n=196) of all food and drink incidences recorded in the research were located in the checkout area. This was followed by specialist food and drink aisle/location (n=138, 28.9%), general floor space (n=99, 20.7%) and seasonal aisle/location (n=37, 7.7%).

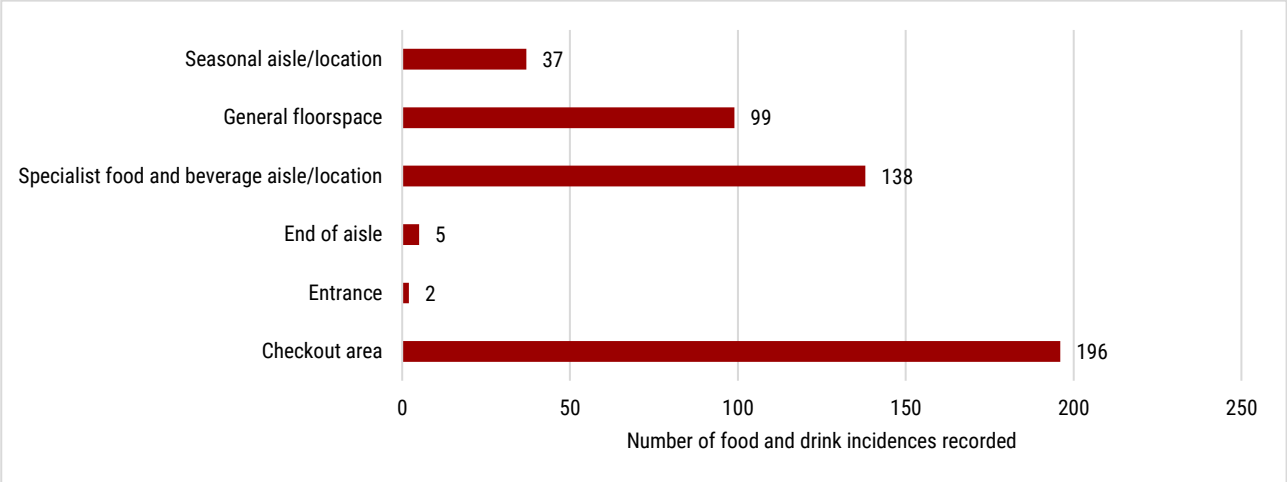


Figure 9: Merchandising location of all food and drinks recorded

4.8.1 Food and drink incidence and promotions by merchandising location

As can be seen in Figure 10, just over half (n=99, 50.5%) of all food and drink incidence located in the checkout area were sweets and chocolate confectionery.

Some food and drink categories could only be found in one particular location of the store, for example ready to eat foods, savoury pastries and sweet pastries could only be found in specialist food and drink locations in store.

The majority of food and drinks found in the seasonal aisle were sweets and chocolate confectionery.

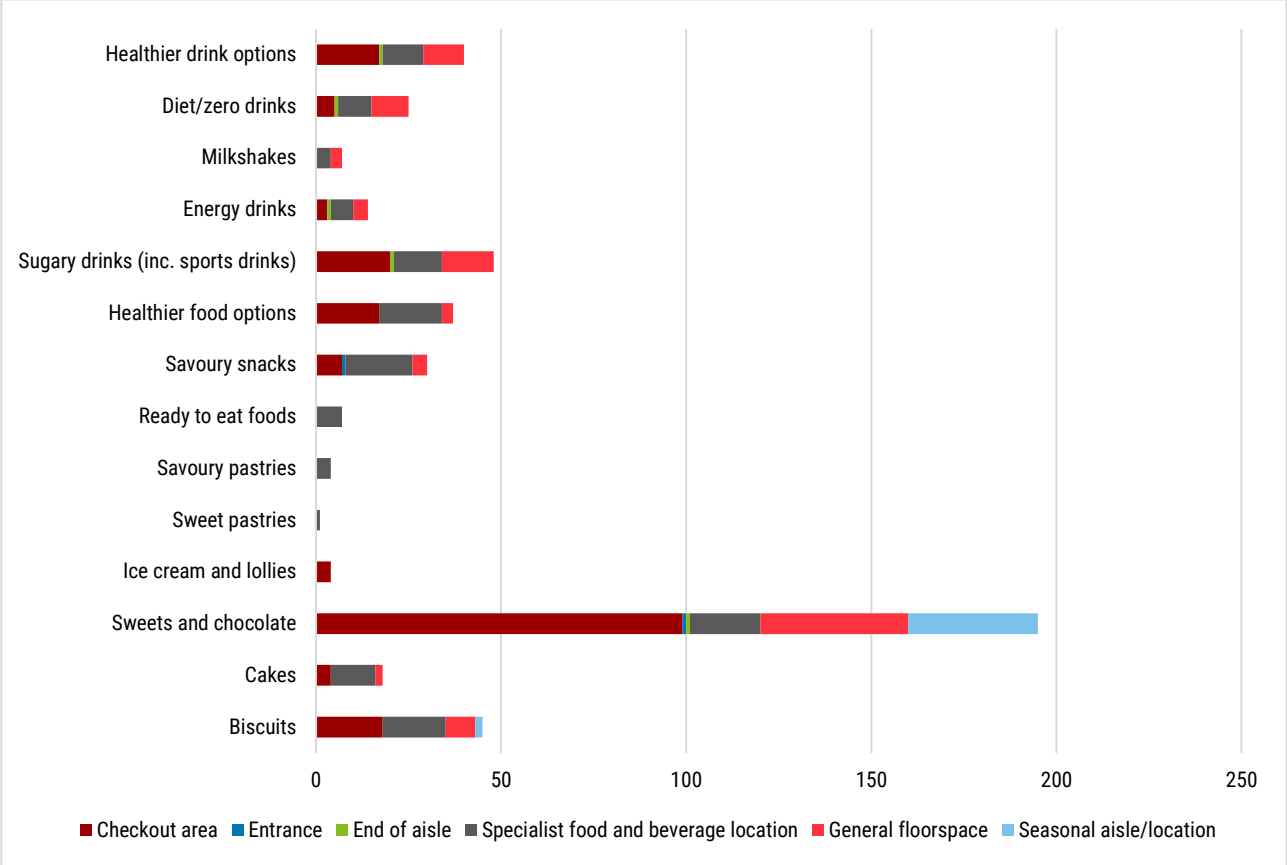


Figure 10: Food and drink incidence by merchandising location

A full illustration of the merchandising location of food and drinks on promotions can be found in Figure 11. Two fifths of sweets and chocolate confectionery on promotion was located at the checkout (n=22, 40.0%). Sugary drinks, sweets and chocolate confectionery and diet/zero drinks were the only categories on promotion found at the end of aisles.

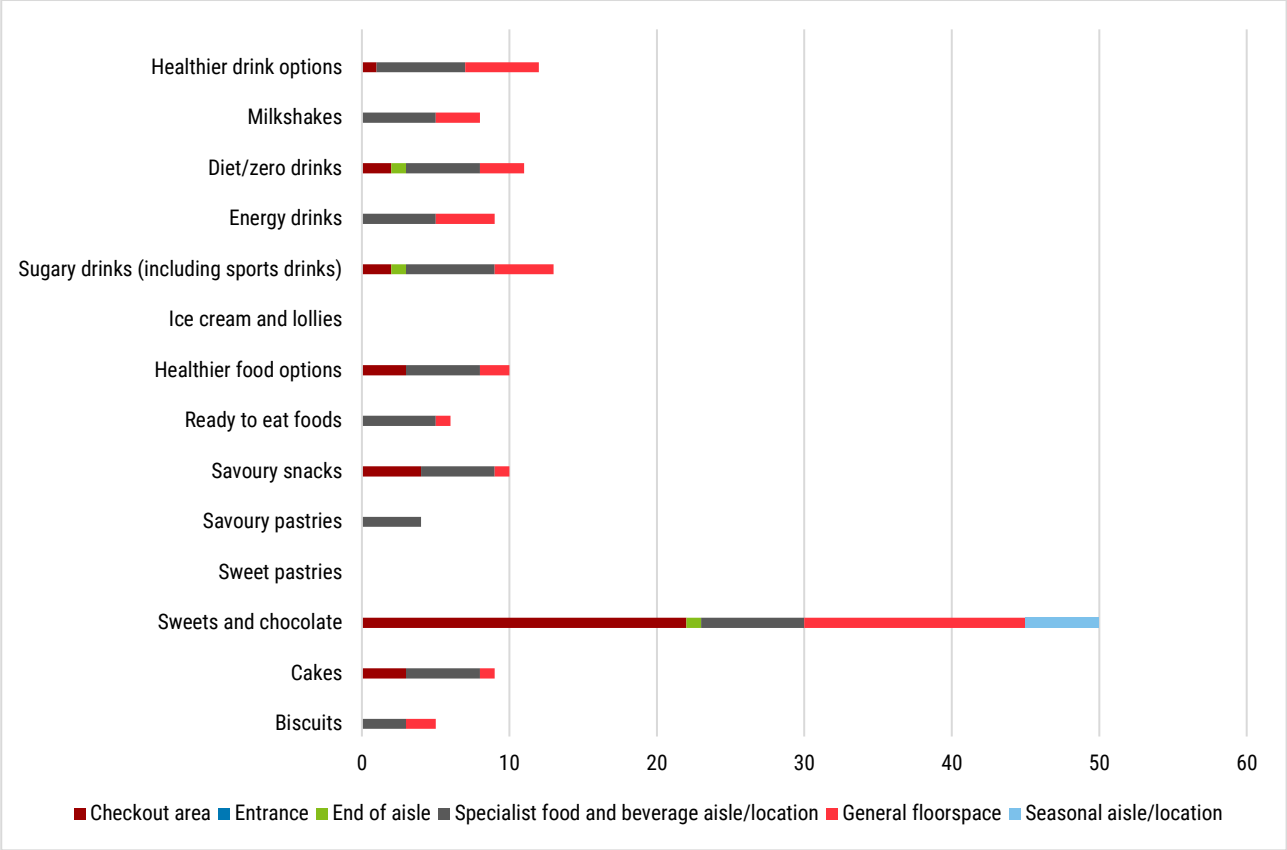


Figure 11: Merchandising location of food and drinks on promotions

4.9 Seasonal promotions

As the research was conducted between March and April 2018, a period encompassing Mothers' Day and Easter, data on the number of seasonal promotions was collected. This was aggregated in the data collection as 'Pre-Easter' and 'Post-Easter' fieldwork.

The Pre-Easter fieldwork was carried out in the midlands study area.

4.9.1 Food and drink availability and type in the seasonal aisle

7.8% (n=38) of the total number of food and drink incidences were located in the seasonal aisle/area. This included Valentines (n=1), Easter (n=27) and Mother's Day (n=10).

Over one third of all food and drink incidences found in the seasonal aisle/areas were found in Newsagents, stationery and gift stores (36.8%).

All but two of the food and drink incidences found in the seasonal aisle/areas were recorded in the 'Pre-Easter' fieldwork, which was carried out in the weeks running up to Mother's Day and Easter. These two incidences were both found in newsagents, stationery and gift stores and relating to sweets and chocolate confectionery, of which one was subject to a discounted price promotion.

The only two food and drink categories recorded in the seasonal aisle were biscuits (n=2, 5.2%) and sweets and chocolate confectionery (n=36, 94.7%).

4.9.2 Food and drink availability before and after Easter

Table 6 presents the differences in the number of stores selling food and drink types between the pre- and post- Easter locations. Note that the sample sizes for the two sets of data are different. Of the 110 stores visited in the pre-Easter, 32.5% (n=38) sold food and drink in store compared to 26.2% (n=59) of the 220 stores in the post-Easter fieldwork.

A greater proportion of stores in the pre-Easter sold biscuits (n=19, 50%) in comparison to the post-Easter fieldwork (n=13, 22%). Healthier food options and diet/zero drinks were offered in a greater proportion of stores post-Easter.

Table 6: Number and percentage of stores selling food and drinks before and after Easter

BASE: Stores selling food and drink (%) of sample	Total 97/330 (29.3%)	Pre-Easter 38/110 (32.5%)	Post Easter 59/220 (26.2%)
Biscuits	32	19	13
	32.9%	50%	22.0%
Cakes	10	4	6
	10.3%	10.5%	10.1%
Sweets and chocolate confectionery	92	37	55
	94.8%	97.3%	93.2%
Sweet pastries	1	0	1
	1.03%	-	1.6%
Savoury pastries	4	2	2
	6.1%	5.2%	3.3%
Savoury snacks	22	9	13
	22.6%	23.6%	22.1%
Ready to eat foods	7	3	4
	7.2%	7.8%	5.1%
Healthier food options	26	7	19
	26.8%	18.4%	32.2%
Ice cream and lollies	5	1	4
	5.1%	2.6%	6.7%
Sugary drinks (including sports drinks)	38	14	24
	39.1%	36.8%	40.6%
Energy drinks	13	5	8
	13.4%	13.1%	13.5%

Diet/zero drinks	23	7	16
	23.7%	18.4%	27.1%
Milkshakes	7	0	7
	7.2%	-	11.8%
Healthier drink options	29	11	18
	29.8%	28.9%	30.5%

4.10 Regional comparisons

Data was collected across three pilot locations across England in the north (Greater Manchester), midlands (Birmingham) and south (Greater London).

Data collection took place at different time points. The midlands data collection took place week commencing 26th March 2018, south data collection began week commencing 9th April 2018 and finally north data collection week commencing 16th April 2018. The findings may have been influenced by the fact the data collection took place at different times, particularly seasonal promotions as discussed in this report.

4.10.1 Food and drink type availability

Of the 99 stores recorded in the data collection across the northern locations, 23.2% sold food and drinks (n=23). Of the 109 stores visited across the midlands fieldwork, 33% sold food and drinks (n=36). Of the 122 stores included in the fieldwork across the southern locations, 31.9% sold food and drinks in store (n=39).

Table 7 demonstrates that sweets and chocolate confectionery was the most frequent food and drink category available across all three fieldwork locations. In the midland's fieldwork, all of the stores that sold food and drink sold sweets and chocolate confectionery. This was largely consistent in the remaining two locations, with 91.3% (n=21) in the north and the lowest in the south with 87.1% (n=32).

The availability of biscuits was significantly greater in stores in the midlands, with 52.7% (n=19) of all stores with food and drink available selling biscuits, compared to 28.2% (n=11) in the south and just 8.6% (n=2) across the north fieldwork locations.

There was also a difference in the availability of healthier food options across the three regions, with these options available in 35.8% of all stores selling food and drink in the south fieldwork, compared to 21.7% in the north and 19.4% in the midlands. As reported above, stores in the south also had the lowest prevalence of sweets and chocolate confectionery.

Table 7: Number and percentage of stores selling food and drinks types across regions

BASE: Stores selling food and drink	Total 97/330 (29.3%)	North 23/99 (23.2%)	Midlands 36/109 (33.02%)	South 39/122 (31.9%)
Biscuits	32	2	19	11
	32.9%	8.6%	52.7%	28.2%
Cakes	10	2	5	4
	10.3%	8.6%	13.8%	10.2%
Sweets and chocolate confectionery	92	21	36	34
	94.8%	91.3%	100%	87.1%
Sweet pastries	1	0	0	1
	1.03%	-	-	2.5%
Savoury pastries	4	0	2	2
	4.1%	-	5.5%	5.1%
Savoury snacks	22	3	9	10
	22.6%	13.1%	25%	25.6%
Ready to eat foods	7	2	3	2
	7.2%	8.6%	8.3%	5.1%
Healthier food options	26	5	7	14
	26.8%	21.7%	19.4%	35.8%
Ice cream and lollies	5	4	1	0
	5.1%	17.3%	2.7%	-
Sugary drinks (including sports drinks)	38	5	12	22
	39.1%	21.7%	33.3%	56.4%
Energy drinks	13	2	4	7
	13.4%	8.6%	11.1%	17.9%
Diet/zero drinks	23	3	7	13
	23.7%	13.1%	19.4%	33.3%
Milkshakes	7	2	0	5
	7.2%	8.6%	-	12.8%
Healthier drink options	29	2	11	16
	29.8%	8.6%	30.5%	41.1%

Regional differences in the availability of different types of food and drink categories may have been influenced by the differences in stores visited in each region. For example, earlier findings in this

report indicate that food and drink were more frequent in certain types of non-food retailers, such as newsagents, stationery and gift stores and department stores. Fewer newsagents, stationery and gift stores and department stores were recorded across the north fieldwork locations (8 stores compared to 15 in the south and 12 in the midlands, see Appendix 9). This may have influenced the food and drink availability by region as captured in Table 7.

4.11 Other variables for data collection

4.11.1 Outlet size

79.1% (n=261) of outlets had one floor, a further 13.6% (n=45) had two floors and the remaining 7.2% (n=24) were recorded as having three or more floors. 74.8% (n=248) of stores visited had one checkout area, 13.6% (n=45) had two checkouts and the remaining 11.2% (n=37) had 3 or more checkouts. In some of the department stores visited during the fieldwork, up to eight checkouts were recorded across the store.

4.11.2 In-store cafés and restaurants

15 outlets were reported as having in-store cafés and restaurants, accounting for 4.5% of the total number of stores selling food and drink (n=97). 86.6% (n=13) were located in department stores and the remaining 13.4% (n=2) were found in clothing, textile and footwear stores.

4.11.3 Stock unit

Gondola shelving was the most frequent stock unit recorded in the research, accounting for 28.5% of the total sample. This was followed by counter-top display units (18.2%) and standing shelving units (16.4%). As some merchandising locations, in particular specialist food and drink departments, had several different stock units holding various types of goods (dry goods in gondola shelving, chilled food and drinks in multi-deck refrigerators and double door refrigerators) we were unable to align the stock unit to food and drink type.

4.11.4 Independent stores

Of the 330 retail outlets visited, 37 were classified as independent non-food retailers, accounting for 11.2% of the total sample. Chain non-food retailers account for the remaining 293 stores in the sample. The initial target for independent non-food retailers was 36, visiting three independents at each of the fieldwork sites. Whilst the target sample size was reached, the target per location was not met in some of the fieldwork sites. In particular, independent non-food retailers were largely underrepresented in the north fieldwork locations, which may reflect the composition of retail environments in the sub-locations visited.

30.7% (n=90) of all chain retailers visited sold food and drink, compared to 18.9% (n=7) of all independent stores visited, as illustrated in Table 8.

Table 8: Number and proportion of chain and independent retailers selling food and drink

BASE:	Total sample 330	Number of stores selling food and drink 97	Proportion selling food and drink (%) 29.3%
Chain retailers	293	90	30.7%
Independent retailers	37	7	18.9%

Table 9 presents the differences in food and drink incidence between chain and independent non-food retailers. A total of 16 food and drink incidences were recorded across independent non-food retailers. compared to 461 incidences across chain non-food retailers. The data suggests that independent non-food retailers offer a more limited range of food and drinks in store, as only five out of the 14 food and drink categories were represented whereas non-food chain retailers recorded incidences of all food and drink categories. Sweets and chocolate confectionery made up over two thirds (68.7%, n=11) of all incidences recorded across independent retailers, compared to 39.91% (n=184) in chain retailers. However, it is important to consider the difference in sample sizes when comparing these statistics.

Table 9: Number and percentage of food and drink incidence by type of retailer

ALL: Food and drink incidence by type of retailer BASE	Total food and drink incidences 477	Chain retailers (n=293) 461	Independent retailers (n=37) 16
Biscuits	46	46	0
	9.64%	9.97%	-
Cakes	18	18	0
	3.77%	3.90%	-
Sweets and chocolate confectionery	195	184	11
	40.8%	39.91%	68.7%
Sweet pastries	1	1	0
	0.20%	0.21%	-
Savoury pastries	4	4	0
	0.83%	0.86%	-
Savoury snacks	30	30	0
	6.28%	6.50%	-
Ready to eat foods	7	7	0
	1.46%	1.51%	-

Healthier food options	37	35	2
	7.75%	7.59%	12.5%
Ice cream and lollies	4	4	0
	0.83%	0.86%	-
Sugary drinks (including sports drinks)	48	47	1
	10.06%	10.19%	6.25%
Energy drinks	14	14	0
	2.93%	3.03%	-
Diet/zero drinks	25	24	1
	5.24%	5.20%	6.25%
Milkshakes	7	7	0
	1.46%	1.51%	-
Healthier drink options	40	39	1
	8.38%	8.47%	8.45%

5.0 Discussion

The findings from this fieldwork suggest a number of traditional non-food retailers across England are offering a wide range of food and drinks in store, the majority of which are typically less healthy products such as sweets and chocolate confectionery, sugary drinks and biscuits. In addition to this, findings suggest that these products, particularly sweets and chocolate confectionery, are the most likely food and drink type to be subject to promotions and marketed at strategic locations in store, such as the checkout area. These findings suggest that consumers are exposed to these foods and targeted through promotions and marketing in many different types of traditional non-food outlets. By contrast, the availability and promotions relating to healthier food and drink options were much lower in traditional non-food stores.

Less healthy options dominate the types of food and drink currently available in traditional non-food retailers

The most commonly reported food and drink categories available in the research were sweets and chocolate confectionery, sugary drinks and biscuits. In light of the current obesity crisis across all ages of the population, these findings are concerning and shed light on another environment where less healthy food and drink products are marketed to consumers and undermine healthy eating behaviours and guidance.

These findings reflect those of the consumer survey, in which consumers reported seeing sweets and chocolate confectionery and sugary drinks as the most common food and drink types available in traditional non-food retailers.

The availability of these of foods and drink may in response to retailers' understanding what sells best, and that less healthy foods are perhaps more favourable among consumers. Other potential reasons include lower cost price per unit and ambient goods typically having a long shelf life, which reduces the chances of profit loss through food waste.

A case study of the availability of less healthy foods and drink in traditional non-food retailers can be seen in Figure 12. Further examples can be found in Appendix 11 (section 11).

Type of retailer: Department store

Food and drink item: Sweets and chocolate confectionery

Merchandising location: Checkout area

Promotions: N/A

Stock unit: Standing shelving unit

Fieldworker commentary: The 'The Sweet Co' product line was noted in all of the Next stores visited across the fieldwork locations, of which all were located in the checkout area. The products available were mainly sweets, including jars of boiled sweets and 'sweet shop classics' such as rhubarb and custards.

Figure 12: Less healthy food and drink provision in traditional non-food retailers

Differences in food and drink provision across traditional non-food retail store types

Findings suggest the provision of food and drinks in the non-food retail market in England is largely dominated by department stores, newsagents, stationery and gift stores, pharmaceutical, medical and cosmetic stores and clothing, textile and footwear stores. Many of these traditional non-food retailers sell day-to-day items and are frequent and popular shopping destinations for consumers. Therefore, consumers may find themselves being exposed to this new form of marketing on a regular basis, acting as yet another negative influence on the diet in an already obesogenic environment.

However, it is also important to note that several games and toy stores also sold food and drink, mostly sweets and chocolate confectionery and sugary drinks which were located in the checkout area. This finding is particularly important, given that the demographic targeted by these stores will be children and young people out shopping with their family and friends. Several sport and outdoor retailers also sold food and drinks, predominantly sugary drinks (including sports drinks) and healthier drink options. This is an unsurprising finding, given these drinks are commonly associated with participation in physical activity and hydration.

Food and drink promotions are primarily for less healthy foods

Just under a third of food and drinks available were subject to promotions, with the large majority relating to sweets and chocolate confectionery products and most frequently at a discounted price. Compared to healthier options, less healthy food and drink items were more likely to be subject to

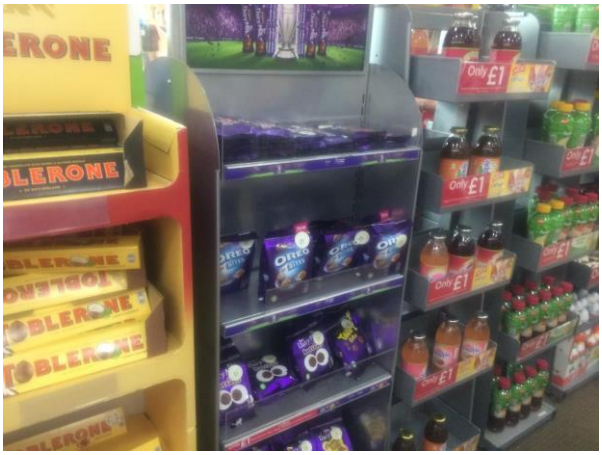
promotions, which is consistent with the findings of Wright et al.'s survey of food sold at the checkout of traditional non-food retailers [7].

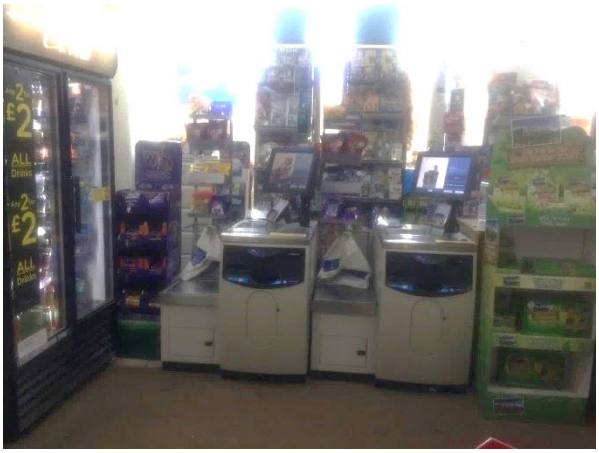
Examples of promotions on less healthy food can be found in Appendix 11 (section 10), in case studies C, E, H and I. This is particularly concerning, as two fifths of consumers in the consumer survey report claimed they were influenced by promotions to purchase food and drink. This level of incidence on promotions may have several implications for consumer's health, given that promotions on less healthy food and drinks have been repeatedly named as a key contributor towards the obesity crisis by the public health community [11]. Perceived value is an important driver in consumer purchasing decisions, and promotions are an effective way of driving sales for this exact reason [12].

The findings of this research are consistent with other studies which identify that promotions and marketing are skewed towards less healthy food products. In a recent study commissioned by the Obesity Health Alliance, only a small number of the advertisements on television during general audience viewing time advertised healthier options. By contrast, the large majority of advertised foods were high in fat, sugar and salt [7]. Another study suggested that more than half of promotions in supermarkets were on less healthy food and drinks [13]. The contrast in the availability and marketing of foods we are recommended to consume and those that are discouraged presents a highly conflicting message to consumers.

The placement of these products is also cause for concern. Checkout areas are a strategic and effective merchandising location for promoting and boosting sales [14, 15, 16]. Examples of this can be found in Appendix 9 (section 10), in case studies B, E, F and G. The findings show that a large proportion of the food and drinks available in traditional non-food retailers are placed at this location in the store. These findings are again consistent with the findings of Wright et al., where less healthy foods were more likely to be sold in the checkout area of traditional non-food retailers [7].

To add to the concern, sweets and chocolate confectionery dominate the types of food and drink found in these areas and the findings show that a large number of sweets and chocolate confectionery in the checkout area were also subject to promotions. A clear example of this can be seen in the case study in Figure 13, where chocolate and confectionery and sugary drinks are subject to promotions whilst located in the checkout area.





Type of retailer: Newsagents, stationery and gift stores

Food and drink item: Sweets and chocolate confectionery, sugary drinks.

Merchandising location: Checkout area

Promotions: Reduced price, point of purchase, meal deal

Stock unit: Freestanding branded shelving units, shelving units, double door refrigerator

Fieldworker commentary: These photos were taken whilst waiting at the checkout in WH Smith, which demonstrates the high volume of less healthy products on promotion at the checkout.

Figure 13: Promotions on less healthy food and drink in the checkout area

Pharmaceutical, medical and cosmetic stores sell a broad range of food & drinks

Pharmaceutical, medical and cosmetic stores were the fourth most frequent retail category to sell food and drinks. However, these stores represented the widest range of food and drink categories within the research. This could be explained by the high proportion of food and drink departments located in these stores, often selling high volumes of food and drinks as part of a 'meal deal' or 'snack deal' – for example, the Boots lunchtime meal deal or Superdrug's snack deal (recorded in the fieldwork as the meal deals). Meal deals, by their nature, include a range of different food and drink categories. The combination (of which there will be many) in which these foods and drinks are purchased will determine how healthy these meal deals are. The findings of this research reinforce that – with meal deal promotions reported as having a relatively equal distribution across the food and drink categories. Pharmaceutical, medical and cosmetic stores are where all ready to eat foods (pre-packaged sandwiches, pasta pots, salads etc.) recorded in the research were found, with the exception of one item recorded in department stores.

Sweets and chocolate confectionery dominate seasonal displays

Most of the food and drinks located in the seasonal aisle were sweets and chocolate confectionery. A clear example of this can be found in case study C, Appendix 11 (section 11). These products are synonymous with gifts and particularly for Easter celebrations (i.e. Easter eggs). Due to differing sample sizes, we were not able to directly compare whether were are more food and drink items

available during seasonal events or whether they simply replace a food and drink sales opportunity in store.

Possible explanations of regional variations in food and drink availability

There were some differences in the types of stores available in the north compared to the midlands and south. For example, just five department stores were identified and visited in the north locations, compared to 13 in the south and 9 in the midlands (making up 5.0%, 9.2% and 10.6% of stores in the samples respectively). This was also reflected in the data from the national opinion survey in Strand 2, where people from the midlands (34%) and south (35%) were more likely to visit a department store compared to people from the north (26%).

It is also worth noting that results from the national opinion survey reported that department stores were more likely to be visited by individuals from higher socioeconomic groups and incomes, and that the fieldwork locations in the north were in more deprived than those located in the midlands and south.

As discussed in the results section, there are notable differences in the availability of heathier food and drink options regionally, with the north typically offering fewer healthier options across the stores that did sell food and drink. The lack of department stores and newsagents, stationery and gift stores in the north may explain at least the regional differences in availability of food and drinks, given that these two types of stores were some of the most common stores to sell food and drinks in the fieldwork. It is also important to consider that there may be regional differences in what stores offer. Please also see notes on higher prevalence of charity shops across locations in the north in the Limitations section below.

Possible explanation behind food and drink availability in the traditional non-food retail environment

One possible explanation behind this form of marketing is the competition that the UK retail environment faces against internet shopping. Profits are falling, combined with unit rent price increases, and latest figures suggest that footfall in traditional non-food retailers has fallen by 12.8% in the year-on-year period to April 2018 [18, 19]. Retailers may be seizing any opportunity or market share to boost sales and profits, and food and drink may be a quick win in this regard, particularly those products with long shelf lives and easily stored at ambient temperatures, such as sweets, chocolate and savoury snacks.

6.0 Limitations

The primary aim of this study was to conduct a scoping review of 270 traditional non-food retailers (minimum) across three regions of England to provide an insight into the availability and marketing of less healthy food and drinks in the non-food retail environment, with a view to highlighting key areas for further research.

- Differences in sample sizes between a number of the traditional non-food retail store types and chain and independent non-food retailers meant that some of the findings must be interpreted with caution, as they may exaggerate any comparisons. However, the over and under-representation of various types of retail store types is reflective of the current status and dominance of retailers on the high street. In addition, none of the audio and visual entertainment stores, musical instruments, telecommunication stores and photo equipment supply stores visited across the fieldwork locations sold food and drink. However, the number of stores visited for these traditional non-food retailers was relatively small, therefore it cannot be assumed that food and drinks are not sold in these types of stores at all.

- As noted in the methods section, the data collected from local health profiles only provides an indication of the habitual population. In order to make any associations between the availability of less healthy food in traditional non-food retailers with the socioeconomic status of the population, further information on the population that visits these shopping destinations would be required.

- The nature of the data collection may have been susceptible to bias, owing to the fact the fieldworkers had to record a considerable amount of data whilst ensuring they remained covert. This may have led to human error and missing some incidences of food and drink in store. To reduce time pressures and therefore reduce bias, it may be suitable to deploy two fieldworkers to carry out the research together to distribute the data collection duties. A similar approach was taken by Wright et al. [7].

- Whilst a researcher protocol was developed to help ensure the reliability and consistency of data collection methods between the two researchers, there was no opportunity to assess the intra/inter-reliability of the methods and therefore findings may be susceptible to bias.

- Sample sizes for traditional non-food retail store types and food and drink categories were unequal, which meant few statistical tests could be conducted. In those that were conducted, the food and drink categories were grouped to allow for similar sized comparable groups. The clusters used were not based on any existing methodologies and should therefore be interpreted with caution, however this was the only suitable way to conduct the analysis.

- The nutritional quality of food and drinks recorded in the research may have been more accurately measured. A similar study from Wright et al. used the Nutrient Profiling Model to determine 'less healthy' foods and 'healthier' foods by scoring each product in relation to its nutritive quality [7]. However, collecting nutritional information for each product category was outside the scope of this study, given that it may have significantly compromised the fieldworker's ability to remain covert, and would have taken a significant amount of time to collate and score each product individually which has cost implications. In the future, if more accurate and reliable data on the nutritional value of food and drink products is to be available, fieldworkers may wish to condense the study area of stores to perhaps one merchandising

location, such as the checkout area, or change the research methodology to an unconcealed approach and ask the store manager's permission to record this information, although this may result in a smaller sample size due to refusals and time constraints.

- Including 'fruit juice and smoothies' as a 'healthier drink option' may also be a limitation of this study, owing to the high proportion of sugars typically contained in these products. Whilst public health guidance recommends a 150ml portion of 100% unsweetened fruit juice and smoothies can be part of a healthy balanced diet and contributes to one portion of fruit a day, the portion sizes typically available for consumers in the out-of-home sector is often much greater. For example, Tropicana Orange Juice is available as part of the Boots meal deal as a 300ml portion, containing 26g of sugars. The recent caps set by Public Health England to limit fruit juice and smoothies to 150ml portion sizes for bottles intended for single consumption is a positive step, and should industry respond appropriately this may not be an issue for future research projects.

- The data collection tool was a successful platform to record the data on most occasions, however it was unable to align the type of stock unit to food and drink type, owing to some locations having several different stock units.

- Given the wide range of food and drinks sold within pharmaceutical, medical and cosmetic stores and that the likes of Boots and Superdrug are where many people buy their lunch daily, it may have been useful to exclude these 'specialist food and drink' or 'food-to-go' departments within stores from the research on the basis that many recognise and use these outlets almost exclusively as a food and drink destination. However, there were many other food and drink sale opportunities located across these types of stores which captured the type of data the project was looking for.

- It was discovered that some independent and chain stores that had been located in the pre-fieldwork mapping exercise were no longer in business, despite being advertised as open on local service and shopping information websites. This was particularly common in suburban areas and in the northern fieldwork locations. This information was clearly updated irregularly and on reflection, perhaps not the most reliable source of information to use. It may be more suitable and reliable to conduct a pre-fieldwork analysis of the retail outlets present at each location in person to ensure the required number of independent non-food retailers is met and there are a wide range of retail store types to approach.

- Finally, it was particularly obvious in the northern locations that a large number of retail units were occupied by charity shops. These types of shops now represent a large part of the UK high street but were not included in the data capture as a specified retail category, despite being a form of traditional non-food retail outlet. Firstly, this made it quite difficult to achieve the target sample size for each fieldwork location in the north (but was less of an issue in the midlands and southern data collection sites). Furthermore, there is evidence that charity shops sell food and drink products, with the likes of Oxfam selling Fairtrade products such as chocolate bars, and smaller independent charity shops selling ranges of additional sweet and chocolate items, in particular charity branded bags of traditional 'penny sweets'. In future studies, it may be useful to incorporate this category into the research to accurately represent the contemporary retail environment across the country and understand whether these types of stores do indeed sell food and drink.

7.0 Conclusions

Given the current obesity crisis, reducing the availability and marketing of foods that are less healthy is crucial. This research shows that consumers are now exposed to a large volume of these foods in retail outlets that are traditionally un-related to food and drinks.

Many supermarkets in the traditional food retailing environment have committed to removing food that is less healthy from the checkout area, following pressure from the public health community that this type of marketing may have a detrimental impact on the health of consumers. This study suggests that promoting less healthy food at the checkout is a marketing strategy in many traditional non-food retailers across England.

Less healthy options at the checkout are being marketed to consumers; particularly in newsagents, stationery and gift stores, department stores and pharmaceutical, medical and cosmetic stores. In light of these findings, efforts to reduce the availability of less healthy food at the checkout should extend across all retailers.

These findings also have wider implications for efforts to tackle the 'obesogenic environment' and help to add evidence to support aspects of the Government's Childhood Obesity Plan Chapter 2. Particularly, proposals to restrict the promotion of less healthy food and drink by location (i.e. checkouts) and price, as this research suggests less healthy products can often be found at the checkouts of different types of traditional non-food retailers and price promotions on less healthy food are prevalent in some retail store types in the traditional non-food retail environment. This research demonstrates that issues around the promotion and marketing of less healthy food are not isolated to the traditional food retail sector, but also the traditional non-food retailers that previously may not have been associated with promoting and marketing less healthy food and drink.

There have been some recent positive developments and publicity in this field. In April-May 2018, celebrity chef Hugh Fearnley-Whittingsall aired a series of programmes which largely tackled junk food marketing to children, including the availability of less healthy foods in the likes of WH Smith and Topshop. Pressure from social media campaigning and increased support has led to Topshop committing to ban the sale of sweets at the checkout. However, WH Smith has yet to comment or announce any action in response to the pressure from both the general public and Hugh. From this research we know that these two retailers represent a small fraction of the large number that sell and promote less healthy food choices. These recent developments are just a scratch on the surface, and the findings from this research may help to aid discussions in the future.

8.0 Recommendations for follow up research

- The retail environment and consumers' shopping habits are constantly changing. Given that so many consumers now shop online for both food and non-food products, it may be of interest to review the availability of these products on traditional non-food retailers online shopping stores.

- Acquire and analyse sales data on food and drink sales in traditional non-food retailers.

- More accurate nutritional analysis of food and drink categories. This could be achieved by concentrating the study area in stores (i.e. the checkout area) or overtly carrying out the data collection.

- Incorporate charity shops into the data collection, given the large number of these stores now currently occupying retail units on the high-street.

- Future research should explore how consumers use different types of stores. For example, in the case of pharmaceutical, medical and cosmetic stores which sold a range of different food and drinks, it would be useful to understand how many consumers use these stores specifically for these items or whether they visit primarily for non-food goods.

9.0 References

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10.0 Appendices

10.1 Appendix 1: Northern fieldwork locations: demographics and health data

	SALFORD (CITY CENTRE)	OLDHAM (SUBURB)	TRAFFORD CENTRE (SHOPPING CENTRE)	MANC FORT, CHEETHAM (RETAIL PARK)	ENGLAND AVERAGE
POPULATION SIZE	13,646	13,347	9,670	24,181	54,786,327
AVERAGE WEEKLY HOUSEHOLD INCOME (£)	415.3	403.8	560	430	
IMD SCORE 2016	56.6*	54.5*	11.8	41.1	21.8
INCOME DEPRIVATION %	33.4*	35*	8.8*	28.5*	14.6
CHILD POVERTY %	48.4*	39.9*	10.2*	34.6*	19.9
CHILDHOOD OVERWEIGHT OR OBESE %					
RECEPTION	26.3*	21.8	21.7	24.1	22.2
YEAR 6	40.0*	38.3*	33.2	38.9	33.6
ADULT OBESITY %	21.6	26.1	24.3	22.9	24.1
POPULATION AGE					
UNDER 16	16.6	28.9	19.2	25.2	19
WORKING AGE	70.5	60.9	61.2	68.3	63.3

OVER 65	12.6	10.2	19.6	6.2	17.8
ETHNICITY					
BME	14.6	35.2	6.1	62.8	14.6
NOT WHITE UK	20.7	39.2	9.8	71.4	20.2
LIFE EXPECTANCY AT BIRTH 2011-2015					
MALES	71.4*	72.7*	80.7	73.6*	77.3
FEMALES	78.9*	77.3 *	82.7	79.1*	82

10.2 Appendix 2: Midlands fieldwork locations: demographics and health data

	LADYWOOD (CITY CENTRE)	EDGBASTON (SUBURB)	MERRY HILL (SHOPPING CENTRE)	SELLY OAK (RETAIL PARK)	ENGLAND AVERAGE
POPULATION SIZE	34,504	20,749	14,214	25,792	54,786,327
AVERAGE WEEKLY HOUSEHOLD INCOME (£)	530	540	510	550	
IMD SCORE 2016	37.2	24.9	34.9	21.6	21.8
INCOME DEPRIVATION %	18.8*	12.7*	23.6*	9.5*	14.6
CHILD POVERTY %	38.4 *	19.5	28.1*	20.8	19.9

CHILDHOOD OVERWEIGHT OR OBESE %					
RECEPTION	29.2 *	22.7	28.4*	23.6	22.2
YEAR 6	39.2 *	39.5*	35.7	38.6*	33.6
ADULT OBESITY %	26.1	15.7	29.1	14.6	24.1
POPULATION AGE					
UNDER 16	12.3	13.6	21.2	10.2	19
WORKING AGE	83.2	75.5	64.2	82	63.3
OVER 65	4.5	10.9	14.6	7.9	17.8
ETHNICITY					
BME	50.6	42.2	9.5	28.8	14.6
NOT WHITE UK	60.4	49.7	11.1	35.5	20.2
LIFE EXPECTANCY AT BIRTH 2011-2015					
MALES	75.4	78.2	77.4 *	79.2	77.3
FEMALES	81.5	82.8	82.6	80.8	82

10.3 Appendix 3: London fieldwork locations: demographics and health data

	WEST END (CITY CENTRE)	BRIXTON HILL (SUBURB)	WESTFIELD STRATFORD (SHOPPING CENTRE)	STAINES TWO RIVERS (RETAIL PARK)	ENGLAND AVERAGE
POPULATION SIZE	12,114	16,998	27,139	8,247	54,786,327
AVERAGE WEEKLY HOUSEHOLD INCOME (£)	920	690	590	560	
IMD SCORE 2016	22	26.8	32.6	12.1	21.8
INCOME DEPRIVATION %	8.8*	17.6*	18.8*	7.8*	14.6
CHILD POVERTY %	13.5 *	31.2*	32.5*	11.8*	19.9
CHILDHOOD OVERWEIGHT OR OBESE %					
RECEPTION	19.2	28 *	26.3 *	19.8	22.2
YEAR 6	35.5	42.3*	43.4 *	30.3	33.6
ADULT OBESITY %	14.1*	18.6	25.9	21.9	24.1
POPULATION AGE					
UNDER 16	8.2	15.3	15.9	18.3	19
WORKING AGE	80.7	78.3	79.8	68.7	63.3
OVER 65	11.1	6.4	4.3	13	17.8

ETHNICITY					
BME	32.4	41.5	59.2	18	14.6
NOT WHITE UK	68.8	58.6	79.1	28.9	20.2
LIFE EXPECTANCY AT BIRTH 2011-2015					
MALES	82 *	76.7 *	77.5	79.2	77.3
FEMALES	84.5	82.8	83.1	84	82

*significantly worse than the England average

*significantly better than the England average

10.4 Appendix 4: Discounter stores exclusion rationale

Further to discussions during the development of the methodology, it was debated whether discounter stores would be included in the research as a non-food retailer, given the high quantities of food sold in these retailers. There were also concerns that carrying out the data collection in these stores would be difficult and unsuited to the data collection methods proposed. HEG conducted some initial pilot research in three local discounters, both on the prevalence of food and drink sold using the data collection tool, and conducted a literature search to help inform discussions going forward.

As can be seen in Appendix 6, the three discounter stores visited in Liverpool sold a range of dry goods and groceries and fresh fruits and drinks. Some of the stores sold fresh produce such as meat, cheese, milk and frozen goods. In addition to these products, a significant number of the food and drink categories outlined in the data collection tool were also available in the three stores. Given the high levels of food and drinks on sale and located in aisles, it was difficult to apply the food and drink grouping method in these stores. The photos, found in Appendix 3, demonstrate that the stores have multiple long aisles of food and drinks available for consumers to purchase – similar to that of a supermarket.

Furthermore, in a report by The Grocery 'Retail Structure of 2016', stores such as B&M, Home Bargains, Poundland, Wilko and Pound Stretcher were categorised as specialist grocers, within the traditional retail and developing convenience store environment (see Figure 16). The report also stated that stores such as B&M and Poundland are increasingly targeting grocery sales, due to the popularity and growth in sales for this market [5].

A study of 15,000 households also found that discounter stores were the cheapest place to do weekly shops, which indicates that many households use discounter stores for the majority or a part of their weekly food shop. The research also found that in the UK more than £5bn is spent in bargain stores such as Poundland, B&M and 99p stores in a 12 month period, due to the increasing range of fresh fruit and vegetables available to purchase in store. Together they are more popular than discount supermarket chains Aldi and Lidl.

Whilst traditionally these stores have predominantly sold non-perishable goods, the research shows that fresh fruit and vegetables have recorded the biggest rise in popularity in discounter store sales, in terms of number of shoppers and frequency of purchase [6].

Traditional Retail and Developing Convenience Stores - This retail sector encompasses small chains of specialist Confectionery, Tobacco and Newsagents (CTNs), specialist grocers, package liquor stores (off-licenses), and food specialists. There are also a large number of independent specialists, with just one or a very small number of stores. Below are the key players in each category, and their number of UK stores.

MULTIPLES (10+ STORES)				INDEPENDENT
Specialist CTNs	Specialist Grocers	Specialist Off-License	Food Specialists	Specialists (1 or more stores)
Martins, McCool (460)	Poundland (802)	Bargain Booze (465)	Greggs Bakers (1,698)	CTNs (2,301)
Rippleglen, Supercigs/ Supernews (86)	B&M Retail (504)	Majestic Wine Warehouses (216)	Holland & Barrett Health Food (741)	Off-Licences (2,003)
Aleef (30)	Home Bargains (400)	Whittall's Wine EFB Retail (135)	Thorntons Chocolate (410)	Forecourts/ Gas Marts (3,816)
	Wilko (387)	Wine Mark (80)	Whittard (48)	Food Specialists: Greengrocers (1,832) Butchers (6,140) Fishmongers (1,021) Bakers (5,488) Farm shops (3,517) Others (3,372)
	PoundStrecher (381)	G101 Off Sales (43)		

Source: The Grocer, Retail Structure - May 2016

Figure 16: Traditional Retail and Developing Convenience Stores, The Grocer.

The pilot study and literature research concluded that these types of stores are expanding their food and drink sales and many consumers in the UK are using these stores as one of their shopping destinations. As a result, they would not fit the definition of a 'non-food retailer' and should be excluded from the research.

10.5 Appendix 5: Food and drink sold in discounter stores, pilot study

10.6 Appendix 6: Discounter stores

A total of 17 discounter stores were recorded in the fieldwork (in addition to the 330 traditional non-food retailers), seven located in the northern and midlands regions, with the remaining three in the south. Full details of these stores and their location can be seen in Figure 13. The frequency of these stores reached four in the northern city centre location, yet in the southern city centre location no discounter stores were present. The only location in the southern fieldwork locations with discounter stores present was the suburban high street, in Brixton. Discounter stores were found in all suburban locations, yet in two out of the three out of town shopping centres visited, no discounter stores were found. The outlets reported were predominantly chain discounter stores, such as Home Bargains and Poundland, however some independent discounters were also recorded, and these are highlighted using an asterisk in the table below.

Figure 13: Prevalence of discounter stores across regions/locations

Area	Location	Discounters	Outlets
Midlands	City centre	2	Poundland Poundland
Midlands	Suburban high street	1	Home Bargains
Midlands	Out of town shopping centre	3	Poundworks Poundland Shop saver*
Midlands	Retail park	1	Poundland
South	City centre	0	/
South	Suburban high street	3	Poundland Poundland One pound shop*
South	Out of town shopping centre	0	/
South	Retail park	0	/
North	City centre	4	Home Bargains Poundland Pound World Super Extra Pound*
North	Suburban high street	2	B&M Poundland
North	Out of town shopping centre	0	/
North	Retail park	1	Pound World

10.7 Appendix 7: Researcher protocol

The data will be collected by two fieldworkers, both qualified nutritionists who are fully informed with the project, methodology and data collection methods.

Step 1

Carry out desk based mapping exercise for location before fieldwork commences. See full categories Methodology doc for more detail.

Step 2

Travel to each pre-determined location and using the results from the mapping exercise in Step 1 and approach a store.

Open up the data collection tool on an internet-enabled mobile phone device and record the region, location, shop name and outlet type. These data fields are ordered at the start of the tool.

This should be done before entering the store to minimise the time spent in the store, to avoid any suspicions from members of staff or security guards.

Step 3

Enter the store and starting from the ground floor of the premises, work your way up to the top floor. Record the following variables: number of entrances, number of floors and number of checkouts (including self service). In stores with one floor, cover each corner of the store.

If an outlet has an in-store café/restaurant or self-serve coffee machine, then make a note of this in the tool.

Step 4

In larger stores, once the top floor has been reached and all outlet size variables recorded, begin to search for groupings of food and drinks and repeat this process, working back down towards the ground floor.

In stores with one floor, trace back around the store and up/around all aisles to search for groupings of food and drinks on the shop floor.

If no food or drinks can be found, enter this into the data field and the tool will automatically close. Vacate the store and approach the next retailer.

Step 5

In stores with large groupings of food and drinks, it may be suitable to take photographic or video evidence of the products, location in the store, stock unit and any visible promotions. Repeat this process for each grouping of food and drinks across the store. In order to minimise time spent within the store, the data fields can be completed for each grouping outside of the store, using the photographic or video evidence to help classify each data field.

In stores with smaller or more dispersed groupings (or staff are not in close promximity), completing the data fields in store should not be difficult. For each grouping of food and drinks, enter the merchandising location within the store and stock unit. Next, select which food and drinks are on sale followed by those which are subject to promotions and what type of promotion is applied.

If any food and drinks products are located in the checkout area, and are not easily accessible, it may be appropriate for a token purchase to be made. The fieldworker is then able to place themselves in the checkout que thereby allowing closer analysis of products near the checkout. Repeat this process for each checkout with food and drink products within the store.

Step 6

Before leaving the store, ensure the whole surface area of the retail space has been convered, including all aisles and corners. Take a blank photograph to indicate the end of a store visit.

If the store had mulitple groupings of food and drinks and photographic evidence was taken instead of completing data fields in store, go to Step 7.

If the fieldworker was able to complete all data entries for food and drink groupings in

Step 7

Outside of the store, alternate between the online data collection tool (hosted on search app, such as Google or Safari) and photographic/video evidence to complete the required data fields for each grouping in the store.

Approach the next store and repeat Steps 2-6 (and 7 if required)

10.8 Appendix 8: Risk assessment

A risk assessment was developed to acknowledge the potential risks involved in the data collection and prepare a contingency plan. We present this below:

Detection: In the unlikely event of shop or security staff approaching the fieldworker, we will ensure that they make no mention of the purpose of their visit nor mention the wider project involving the HEG, the UK Health Forum and Public Health England.

Connection: Internet and signal connection may be an issue for sub-level stores or suburban area locations in the data collection. If this occurs during the fieldwork, extensive photographic and video evidence of the appropriate data fields should be taken as a substitute for completing the data fields in store. Immediately after exiting the store, the researcher should attempt to reconnect to the internet and complete the necessary data fields.

However, if a certain location appears to have overall poor internet connection and fieldworkers experience persistent intermittence in data coverage, making the data collection very difficult and time costly, then the fieldwork may be abandoned, and a new location must be located.

Battery usage: From the pilot work, the data collection tool uses a significant amount of battery on mobile phone devices. Fieldworkers will be equipped with a portable charger to ensure the battery does not diminish and delay the data collection during the fieldwork.

10.9 Appendix 9: Types and proportion of traditional non-food retailers by region

BASE	n = sample 330	North 99	Midlands 109	South 122
Clothing, textile and footwear stores	74	28	20	26
	22.42%	28.28%	18.34%	21.31%
Newsagents, stationary and gift store	35	8	12	15
	10.60%	8.08%	11.00%	12.29%
Pharmaceutical, medical and cosmetic stores	30	10	10	10
	9.09%	10.10%	9.17%	8.19%
Department Stores	27	5	9	13
	8.18%	5.05%	9.25%	10.62%
Homeware stores	23	6	10	7
	6.96%	6.06%	9.17%	5.73%
Watches and jewellery	22	7	7	9
	6.66%	7.07%	6.42%	7.37%
Sport and outdoor retailer	20	6	6	8
	6.06%	6.06%	5.50%	6.55%
Games and toys	18	5	6	7
	5.45%	5.05%	5.50%	5.73%
Audio and visual entertainment stores	17	5	5	7
	5.15%	5.05%	4.58%	5.73%
Electric household appliances	14	3	3	8
	4.24%	3.03%	2.75%	6.55%
Telecommunications stores	13	7	4	2
	3.93%	7.07%	3.66%	1.63%
Bookshops	11	4	5	2
	3.33%	4.04%	4.58%	1.63%
DIY stores	7	2	3	2
	2.12%	2.02%	2.45%	1.63%

Photo equipment and supplies	6	0	2	4
	1.81%	0	3.66%	1.63%
Travel termini and ticket offices	6	2	2	1
	1.81%	2.02%	1.83%	0.81%
Florists, garden centres and pet stores	4	0	4	0
	1.21%	0	3.66%	0
Musical instruments	2	0	1	1
	0.60%	0	0.91%	0.81%
Other	1	1	0	0
	0.30%	1.01%	0	0

10.10 Appendix 10: Food and drink incidences by retail category and food and drink type

Total number of food and drink incidences by category and retail type	Total food and drink categories recorded	Biscuits	Cakes	Sweets and chocolate	Ice cream and lollies	Sweet pastries	Savoury pastries	Ready to eat foods	Savoury snacks	Healthier food options	Sugary drinks (inc. sports drinks)	Energy drinks	Milkshakes	Diet/zero drinks	Healthier drink options
BASE	477	46	18	195	4	1	4	7	30	37	48	14	7	25	40
Department stores	113	16	10	54	0	0	0	1	9	6	7	2	0	4	4
	23.60%														
Electrical household appliances	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0
	0.41%														
Clothing, textile and footwear stores	53	5	0	24	0	0	0	0	1	10	7	0	0	0	6
	11.10%														
Watches and jewellery	5	0	0	5	0	0	0	0	0	0	0	0	0	0	0
	1.04%														
Newsagents, stationery and gift stores	95	9	0	48	3	1	0	0	5	8	7	1	1	6	6
	19.91%														
Pharmaceutical, medical and cosmetic stores	145	10	7	37	0	0	4	6	13	12	14	9	6	12	15
	30.39%														
Games and toys	17	2	1	6	1	0	0	0	1	0	4	0	0	1	1
	3.56%														
DIY stores	3	1	0	1	0	0	0	0	0	0	0	0	0	0	1
	0.62%														

Homeware stores	5	0	0	2	0	0	0	0	1	1	1	0	0	0	0
	1.04%														
Telecommunications stores	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	–														
Florists, garden centres and pet stores	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0
	0.41%														
Sport and outdoor retailer	20	2	0	4	0	0	0	0	0	0	6	2	0	0	6
	4.19%														
Audio and visual entertainment stores	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	–														
Musical instruments	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	–														
Photo equipment and supplies	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	–														
Bookshops	8	0	0	8	1	0	0	0	0	0	0	0	0	0	0
	1.60%														
Travel termini and ticket offices	8	1	0	2	0	0	0	0	0	0	2	0	0	2	1
	1.60%														

10.11 Appendix 11: Case studies

10.11.1 Department stores

Below are three examples of how department stores are marketing less healthy foods in store.

Case Study A

Type of retailer: Department store

Food and drink item: Sweets and chocolate confectionery

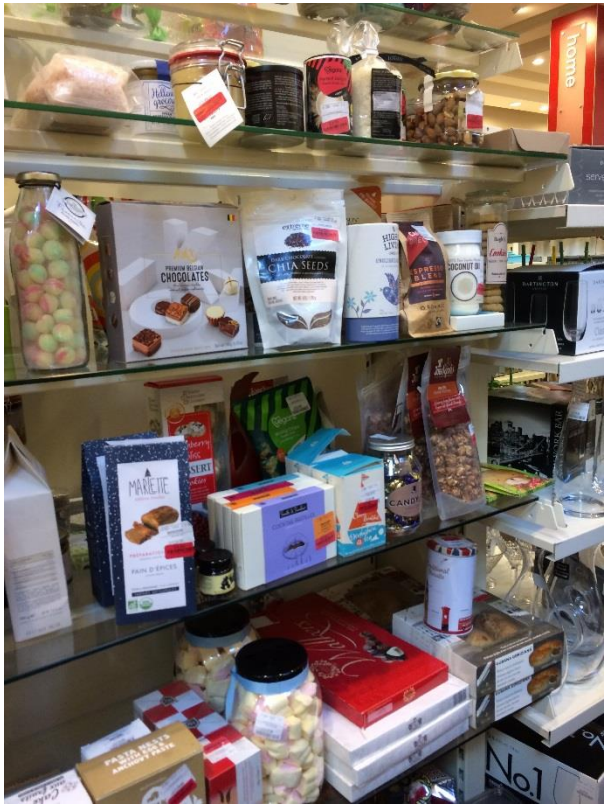
Merchandising location: Checkout area

Promotions: N/A

Stock unit: Standing shelving unit

Fieldworker commentary:

The 'The Sweet Co' product line was noted in all of the Next stores visited across the fieldwork locations, of which all were located in the checkout area. The products available were mainly sweets, including jars of boiled sweets and 'sweet shop classics' such as rhubarb and custards.



Case Study B

Type of retailer: Department stores

Food and drink item: Sweets and chocolate confectionery

Merchandising location: Specialist food and drink department

Promotions: Discounted price (reduced to clear), point of purchase and 2 for the price of 1.

Stock unit: Gondola shelving

Fieldworker commentary:

This photo is taken from an aisle in the food and drink department in TK Maxx. Alongside some other miscellaneous products, sweet and chocolate products were present including a large jar of marshmallows, jar of boiled sweets, sweetened popcorn and selection boxes of chocolates.

10.11.2 Newsagents, stationery and gift stores

Below are two examples of less healthy foods and drinks marketed to consumers in newsagents, stationery and gift stores.

Case Study C:

Type of retailer: Newsagents, Stationary and Gift Store

Food and drink item: Sweets and chocolate confectionery

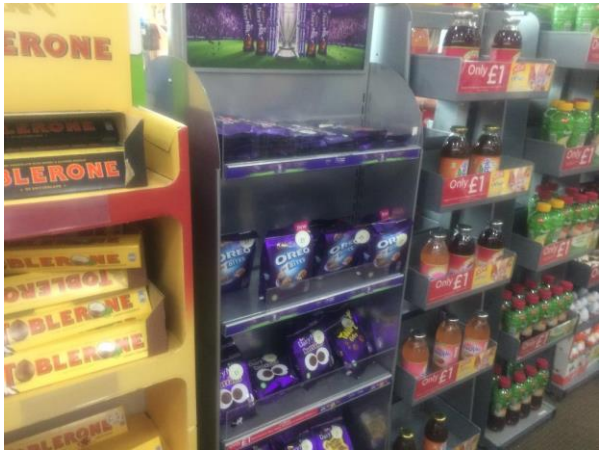
Merchandising location: Seasonal aisle

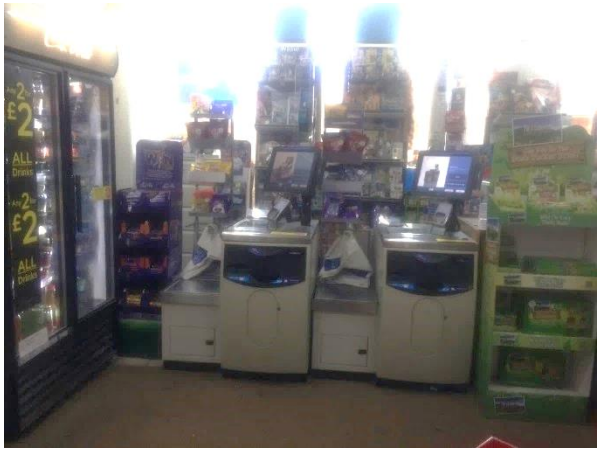
Promotions: N/A

Stock unit: Standing shelving unit

Fieldworker commentary:

This Clintons store was visited in the pre-Easter fieldwork and demonstrates a high volume of chocolate products in a seasonal display. Available are chocolate bunnies, chocolate eggs and sharing boxes of chocolate.





Case Study D:

Type of retailer: Newsagents, Stationary and Gift Store

Food and drink item: Sweets and chocolate confectionery, sugary drinks.

Merchandising location: Checkout area

Promotions: Reduced price, point of purchase, meal deal

Stock unit: Freestanding branded shelving units, shelving units, double door refrigerator

Fieldworker commentary:

These photos were taken whilst waiting at the checkout, which demonstrates the high volume of less healthy products on promotion at the checkout. WH Smith was a notable retailer that sold these types of products in this area of the store.

10.11.3 Clothing, textile and footwear stores

Below are two examples of less healthy food products marketed in clothing, textile and footwear stores

Case Study E:

Type of retailer: Clothing, Textile and Footwear stores

Food and drink item: Sweets and chocolate confectionery

Merchandising location: Checkout area

Promotions: N/A

Stock unit: Standing shelving unit

Fieldworker commentary:

This product was displayed on a hanging unit, located at the checkout area in the ladies' clothes chain New Look. Not all of the New Look's visited sold food and drinks, therefore the availability of these products in store were relatively random.

Case Study F:

Type of retailer: Clothing, Textile and Footwear Store

Food and drink item: Sweets and chocolate confectionery

Merchandising location: General floor space and checkout area

Promotions: Discounted price (reduced to clear – top photo)

Stock unit: Wall shelving and standing shelving unit

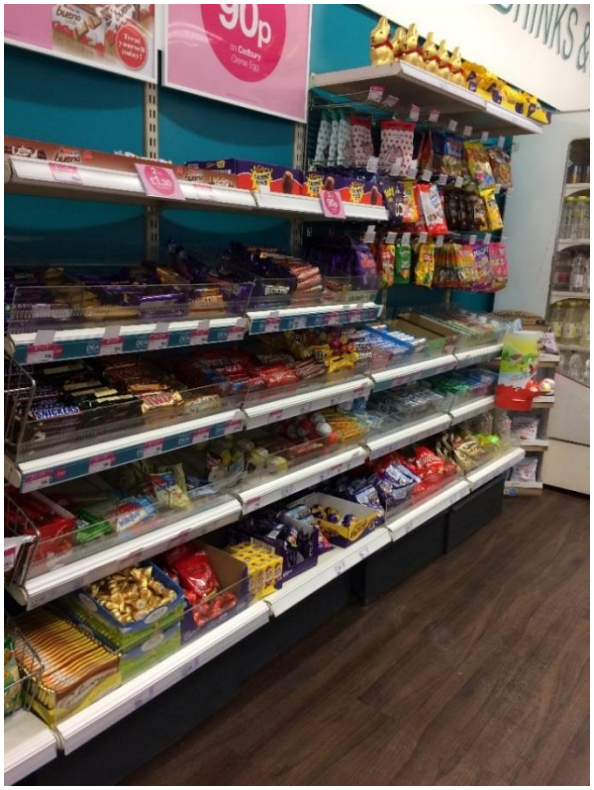
Fieldworker commentary:

This Topshop store sold a large variety pack of chocolate bars and sweets, located in the general floor space. It is not clearly visible, but this area was for reduced price items. The selection box was included within this and was discounted in price.

Elsewhere in the store, sweet products were located in the checkout area.

10.11.4 Pharmaceutical, medical and cosmetic stores

Below are two examples of both less healthy and healthier options marketed to consumers in pharmaceutical, medical and cosmetic stores.



Case Study G:

Type of retailer: Pharmaceutical, Medical and Cosmetic Stores

Food and drink item: Sweets and chocolate confectionery, biscuits, healthier food options

Merchandising location: Specialist food and drink department

Promotions: Discounted price (reduced to clear), point of purchase and 2 for the price of 1.

Stock unit: Wall shelving, freestanding branded shelving unit

Fieldworker commentary:

This photo illustrates a small section in the specialist food and drink department located in Superdrug. This is similar to the other Superdrug's visited across the fieldwork locations. Beyond this picture include two drinks cabinets, and further wall shelving of foods similar to those displayed in this photograph.

Case Study H:

Type of retailer: Pharmaceutical, Medical and Cosmetic stores

Food and drink item: Healthier food options, sugary drinks and diet/zero drinks

Merchandising location: General floor space and specialist food and drink department

Promotions: 2 for the price of 1 and meal deals

Stock unit: Wall shelving, freestanding branded shelving unit

Fieldworker commentary:

This photo illustrates some of the healthier options recorded in the fieldwork. The image of the sugary drinks chiller represents a small fraction of the specialist food and drink department in store, which accompanied by an aisle of dry goods (crisps, chocolate bars, snack bars) and a multi-deck refrigerator of ready to eat foods. This was a concrete feature of all of the Boots stores visited in the fieldwork.

Supplementary documents that contributed to the final draft of this report can be found below:

- Methodology for Data Capture
- Retail Outlet Category Development
- Raw Data

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