Public Health
England

# An analysis of the role of price promotions on the household purchases of food and drinks high in sugar, and purchases of food and drinks for out of home consumption 

A research project for Public Health England conducted by Kantar Worldpanel UK

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## Executive summary

Public Health England commissioned Kantar Worldpanel to explore the role that price promotions might play in stimulating changes in purchasing levels of high sugar take home food and drinks amongst shoppers, repeating analysis undertaken in 2015. Sugar in the context of this report is taken to be the total sugars contained within food and drink items. Kantar Worldpanel were also asked to explore the use of price promotions in the eating out of home sector.

## Price promotions on take home food and drink

Kantar Worldpanel is a global market research company, which runs and analyses a continuously reporting panel of 30,000 British shoppers. These panellists are asked to record the details of all take home food and drink purchases made, including the volumes bought and prices paid. The collected information is further enhanced by Kantar Worldpanel through processes that flag price promotions and assign nutrition information to all products. The nutrition information available for these products is collected from product packaging.

The resulting dataset allows for extensive and objective analysis of shopper behaviour. This analysis repeats work done in 2015, which also calculated the impact of promotions on take home food and drink on shopper behaviour. The promotional landscape has changed during this time, but the analysis shows that promotions influence shopper behaviour and the volume of products purchased. Specific differences between the two reports are highlighted where relevant.

Public Health England asked Kantar Worldpanel to analyse their datasets to provide answers to the following research questions:

1. What is the scale and nature of promoting in the UK for take home food and drink and how has this changed in recent years?
2. Who responds to promotions and how do promotions generally work?
3. How incremental are promotions to food and drink categories? Do promotions on one category simply come at the expense of competitor foods in other categories?
4. Are promotions on high sugar products more extensive and do shoppers react differently to these compared to non-high sugar products?

All work was restricted to Great Britain and covered the purchasing of take-home food and drink only. Analysis is based on 104 weeks of data ending 30 December 2018.

The headline findings of the work were as follows:

- promotions in Britain have declined in the period from 2015 to 2018, as a \% of household expenditure. Promotions in 2017 and 2018 accounted for 34\% of food \& drink take home expenditure. A similar analysis completed in 2015 showed that promotions accounted for $40 \%$ of a household's expenditure at that time. This analysis reflects the fact that the grocery market in the UK has changed between 2015 and 2018; Aldi and Lidl, referred to as 'discounters', and who tend not to promote extensively increased market share during this period, and other retailers have adopted more Every Day Low Price Strategies. Despite this decline in the amounts bought on promotion, Britain still has the largest amount of promotions in major markets which are evaluated by Kantar Worldpanel
- whilst promotions make products cheaper, they also tend to encourage people to buy more. Promotions in food and drink categories drive various shortterm behavioural changes, such as getting shoppers to choose a different brand to normal. These promotions frequently lead people to buy more of the promoted category than expected (based on modelling the purchasing behaviour of Kantar Worldpanel's panel to understand what would be bought without promotions). On average, about $18 \%$ of promoted food and drink volumes bought is calculated as additional to expected category purchasing levels
- promotions not only get people to buy more of a specific category, the evidence shows that people will buy more overall. When people buy promoted products from higher sugar categories, there is little evidence that increased purchasing of one category leads buyers to make a significant compensatory reduction in other higher sugar categories. This means promotions increase the overall level of take-home food and drink being purchased
- in 2017-2018, promotions delivered a $£ 72$ saving for the average household per year. Although a typical household would have to spend 11\% more (or an extra $£ 372$ in a year) if they wanted to buy their annual selection of promoted items at full price, some of that selection is extra because of the promotion and so this figure does not represent a true saving. When the extra purchasing is accounted for, that true saving figure is $£ 72$
- price promotions are a common feature of grocery shopping and therefore all shoppers are regularly exposed to promotions on products they want to buy. Although differences are small, shoppers from lower socio-economic groups, on lower incomes, and in the youngest and oldest age groups are slightly less likely to buy into promotions
- higher sugar food and drink items are more likely to be promoted. The depth of discount is also slightly higher on these items. Several of the higher sugar food and drink categories represent more discretionary products and promotions in these areas will more easily get shoppers to buy more than normal. This means promotions in some higher sugar categories can more readily drive
up take-home food and drink volume. This also explains why the high sugar categories account for a bigger proportion of the extra sugar purchased
- promotions are more common on products where sugar is added (particularly discretionary products such as carbonated drinks, biscuits and cakes), than on table sugar and products where sugar is naturally present such as milk and fruit and vegetables, with the exception of fruit juice
- it is calculated that $5.5 \%$ of all take home sugar is an incremental consequence of promotions with $4.0 \%$ coming from the higher sugar categories. In other words, a $4.0 \%$ saving in sugar volumes might be achieved if the level of promotions in higher sugar categories was reduced to zero


## Price promotions on out of home food and drink

Public Health England also commissioned Kantar Worldpanel to explore the use of price promotions in the eating out of home sector. Kantar Worldpanel have an additional panel which records consumers' out of home food and non-alcoholic drink purchases (including takeaways which are brought back into the home), behaviour which the main panel does not capture. This panel is a subset of the main panel and is made up of 7500 individuals. The panel has been collecting data since June 2015; the analysis in this report focuses on year on year trends for the 52 week ending periods 30 December 2018 and 31 December 2017.

Public Health England asked Kantar Worldpanel to analyse their datasets to provide answers to the following research questions:

1. What is the scale of promotions in the out of home sector?
2. Who responds to promotions out of home?
3. Which food and drink categories do consumers buy on promotion out of home?
4. What are the promotional dynamics for grocery supermarkets in the out of home sector?

The headline findings of the work were as follows:

- promotions are growing in the out of home sector. In 2018, 6.7\% of out of home trips featured a promotion ( 52 weeks ending 30 December 2018) compared to $6.1 \%$ of trips the previous year ( 52 weeks ending 31 December 2017)
- over two thirds ( $69 \%$ ) of consumers bought food or drink out of home on promotion in 2018. There are differences in which demographics are engaged with promotions, and these also vary by the type of outlet, food and drink items bought, and who else is present
- there are differences in the channels where promotions are offered and utilised by consumers. Supermarkets have the highest proportion of trips on promotions - their meal deal offering will account for a high proportion of these trips
- in supermarkets, more affluent and working aged consumers are more engaged with promotions and more likely to buy quick meals, suggesting they are purchasing meal deals. Socio-economic group E consumers' trips also include a higher proportion of trips featuring a promotion; they are more likely to buy sweet snacks on promotion
- full service restaurants, especially chain restaurants, are seeing a higher proportion of trips featuring a promotion. Consumers in socio-economic groups C2, D and E are more likely than other groups to use promotions when they are in full service restaurants


## Abbreviations and glossary

Category - a group of food and drink products that have common features and are grouped together to form a food and drink market
Discount - the reduction from full price offered by a promotion usually expressed as a percentage
Every Day Low Price - a pricing strategy adopted by retailers in which goods are priced continuously at a lower price point, rather than frequent price promotions from a higher base price
FMCG - fast moving consumer goods
Higher sugar category - a selected list of food and drink categories containing >8\% average sugar by volume. Some categories with $>8 \%$ average sugar such as ingredient (home baking) sugar and some fruit are excluded. See the appendices for a full list of included categories.
Multibuy - a promotion requiring the purchase of more than one pack eg "2 for £2" or "Buy One Get One Free"
Out of home - analysis of promotions based on purchases on the Kantar 'Out of home' panel. This includes all purchases of food and drink to be consumed out of the home, as well as takeaways which are brought back into the home
PHE - Public Health England
PL - private label (also known as retailer own brand)
Socio-economic group - the groups considered are (A) higher managerial, administrative and professional workers; (B) intermediate managerial, administrative and professional workers; (C1) supervisory, clerical and junior managerial, administrative and professional workers; (C2) skilled manual workers; (D) semi-skilled and unskilled manual workers; (E) people on long term state benefits, casual and lowest grade workers, unemployed with state benefits only.
Sugar - in this report, this refers to the total sugars contained in food or drink items. Packets of sugar (ie the product used for sweetening hot drinks or as a home baking ingredient) are referred to as table sugar.
Take Home - analysis of promotions based on purchases on the Kantar 'Take Home' panel. This includes all scanned purchases which are brought into the home. It does not include food or drink which is consumed out of home.
TPR - temporary price reduction (eg a product with a full price of $£ 1.50$ being promoted at $£ 1$ )
Uplift - the increase in purchasing a promotion generates above full price sales levels.

## Introduction

Reducing childhood obesity is a government priority. The Childhood Obesity Plan $(1,2)$ and the prevention green paper (3) set out an ambitious programme of work, including continued action on the food environment to make the healthier choice the easier choice.

Proposed actions include restricting the promotions of foods high in fat, sugar, and salt (HFSS) by location and by price in the retail and out of home sectors. This report focusses on the role of price promotions on household purchasing of take home food and drink (Part 1), with some additional analysis on the role of price promotions on purchasing of food and drink to be consumed out of home (Part 2).

## Part 1: take home food and drink

Price promotions are a significant feature of the British grocery landscape and are employed to encourage shoppers to make certain buying choices. In understanding the role of promotions, the analysis required evidence to better understand how these influence shoppers, and specifically whether such events can lead to increased purchasing of high sugar foods and drinks. These questions have been addressed by the analysis of large datasets of shopper transactions.

To this end, Kantar Worldpanel were commissioned to undertake analysis of their proprietary data to bring a better understanding of the role that price promotions play in the purchasing of food and drink and, therefore, in the purchasing of sugar as an integral component.

Kantar Worldpanel is an international company dealing in consumer knowledge and insights based on consumer panel research. In the UK, Kantar Worldpanel runs and analyses purchasing data collected by a continuously reporting panel of 30,000 demographically representative British households. These panellists are asked to record the details of all take home food and drink purchases made, including the volumes bought and prices paid. The collected information is further enhanced by Kantar Worldpanel through processes that flag price promotions and assign nutritional values to all products.

The resulting dataset allows for extensive and objective analysis of shopper behaviour. Specifically, for this project, the dataset provided a means of understanding the extent to which established shopping behaviour can be affected by promotional participation.
Four study areas were addressed:

1. What is the scale and nature of promoting in the UK and how has this changed in recent years?
2. Who responds to promotions and how do promotions generally work?
3. How incremental are promotions to food and drink categories? Do promotions on one category simply come at the expense of competitor foods in other categories?
4. Are promotions on high sugar products more extensive and do shoppers react differently to these compared to non-high sugar products?

All work was restricted to Great Britain and covered purchasing of take-home food and drink groceries only, ie excluding food and drink purchased and consumed out of the home. The data period was 104 weeks of data up to 30 December 2018.

This analysis repeats similar work undertaken in 2015 (4).

## An introduction to price promotions

The work detailed in this report is intended to analyse how shoppers react to promotions and specifically how these reactions might change when people are faced with promotions on items with high sugar content. To do this, the first element of the analytical work was to identify and classify a large dataset of promotional events which could then be examined in more detail.

Promotions in the context of this study basically mean special offers available in supermarkets which are specifically characterised by there being a discount on the usual selling price. These promotions are typically planned and agreed through negotiations between individual supermarket chains and the manufacturers of the products involved.

Typically, a promotional event will be restricted to one brand and often to a pack format or sub-brand (ie cola "brand X" 6 pack cans). It is also common to see - within the same supermarket chain - similar promotions being run at the same time on different brands or even for different brands owned by the same or different manufacturers to be bundled up and promoted together.

For the purposes of this study, promotional "events" were identified at a level that was based on combinations of sub-brand (ie diet cola "brand X") and pack size (ie 6 x 330 ml ). Hence a deal offering a 50 p reduction on any $6 \times 330 \mathrm{ml}$ packs diet and regular cola would be itemised as two events.

There are three major forms (or "mechanics") of promotion that are commonly seen in British supermarkets and these are referred to at various points in the study. Each of these types of promotion was captured by the study dataset.

Temporary price reductions (TPR): these are short term reductions in the price of food and drink products. Most retailers will run such offers on specific items for a typical duration of 2-5 weeks before reverting to the full price.

Multibuy: these types of promotion require the shopper to buy one or more items to benefit from the discounted price. These include well known mechanics such as "buy one get one free" as well as types that state a fixed price or saving (ie "3 for £10" or "Buy 6 and save $25 \%$ "). Whilst many multibuy mechanics are short term, lasting only 2-4 weeks, there are also notable instances where promotions are longer term. Many chilled or fresh food items for example, such as fruit juice, yoghurt drinks, ready meals and meat, have seen ongoing multibuy offers which can continue for many months (eg an ongoing multibuy on stickered meat items which allows shoppers to buy 3 for £10). These types of promotion tend to become an established feature in certain categories for extended periods of time.

Extra free: These promotions occur when an enlarged pack size is created by the manufacturer and where the pack label states that a proportion of the product is free. For example, an extra-large packet stating 50\% extra free. These types of promotions are far less common than TPR and multibuy (they account for less than $1 \%$ of total grocery spend), and therefore are not separated out as individual promotional mechanics in this study.

Other forms of in store promotions do exist, for example deals that offer extra loyalty card points or free gifts and coupons in the pack. These tend to either be infrequent or difficult to measure accurately through a consumer panel approach and so are not included in the consideration of this study. The analysis excludes 'end of day' discounts for products which are due to go out of date.

## Methodology

Data for the study is entirely derived from Kantar Worldpanel's representative sample of 30,000 British households. Purchases recorded by the panel are classified into category (ie market) definitions and price promotions are identified through various methodologies. Total sugar content (along with other nutrition information) is collected by examining product packaging. The underlying data collection methodologies are provided in the appendices at the end of this report; Appendix 1 describes the purchase data collection method and Appendix 2 describes the process by which nutrition attributes are assigned to grocery products. Appendix 3 details the list of take home food and drink categories analysed in the study.

Following the production of the underlying data, a variety of analytical techniques can be used to interrogate the data. Two of the main approaches used in this study are outlined below.

Source of volume analysis
A key methodological component underpinning this report is the use of Kantar Worldpanel's "source of volume" methodology. This technique breaks down the volume that forms a promotional uplift (the increase in sales generated), into a series of classifications. The classifications seek to explain and quantify how the promotion generated volume and consider various scenarios that could be responsible. This approach has a key application for this analysis because it reveals the degree to which promotions drive greater food and drink category volumes versus the extent to which volumes are shifted between competing products within a food and drink category.

A source of volume dataset was produced that covered a period of 2 years to 30 December 2018, from which 64,000 food and drink promotions were identified and analysed. The source of volume technique was used to break down each individual promotional event, but these results were averaged to enable broad comparisons to be made between categories and between various types of promotion. The 64,000 promotions did not include every promotion but represented those that could be robustly analysed over the two-year period. Promotions were excluded if the exact type of mechanic could not be determined. To help ensure robust sample sizes, the promotions were restricted to those running in the four main food and drink retailers - Tesco, Asda, Sainsbury's and Morrisons. A limitation of the analysis is that people switching to Aldi/Lidl where prices are generally cheaper will not be captured. The top 4 retailers still account for over 60\% of total food and drink bought in the UK, and for more than $70 \%$ of the sales made on promotion. Nearly all shoppers (99\%) buy at least one promotion from one or more of the big 4 each year. Though the discounters consistently offer low price items, these are not technically promotions and therefore are not part of our analysis of promotion.

To produce the source of volume analysis, the transaction history of individual households was monitored over two years to observe how shoppers reacted to the promotions they participated in. The model uses actual transaction data and is based around who households are, what they buy, in what quantities and when. Figure 1 and figure 2 show how the consumer panel data is used to create a data set which we can profile to understand how promotions drive additional volume.

Firstly, levels of food and drink category participation over time were examined to see how the presence of promotions changed the trend. A regression model was employed to calculate the impact that removing a promotion would have on the total number of category shopping trips being made. This indicated the degree to which promotions in a category might drive extra trips as a form of increased purchasing volume. Then for each household, the interval between purchases was measured to see how this rate changed when a product was bought on promotion. This provided a perspective on whether deals increased purchase rates from category trips that were expected to occur. The intention was to understand the net impact of instances when households bought more than usual amounts prompted by the promotion.

Figure 1: How the data is constructed

Four elements that drive the model output- households, purchases, volume and time


Households


Purchases


Volume


For each household within each category, a two-year purchase history was isolated.
When a shopper buys additional volume on promotion, we calculate whether that volume is additional or whether this is merely deferred purchasing.

We can calculate if that is extra- If it is not extra, we calculate whether a purchase was brought forward or whether it was substituted from another product

Figure 2: Household purchasing data to feed into a promotions model


Figure 2 shows four examples. In the first two there is additional volume purchased due to a promotion - the model must then calculate how to attribute this volume. In the third example there is additional volume but a longer return time, meaning that only some of that volume (a small proportion because the return time is almost the average) will be calculated as extra. In the fourth example volume is subsidized as the cheaper price does not mean additional volume.

Our analysis calculates all combinations for our 30,000-household panel. By observing the history of store and brand purchase choices that each panellist had made over time, the expected levels of buying for different products and retailers were set for each household. From this, remaining non-incremental volumes could be assigned to the appropriate mix of products sold in the category. This process allowed shopper behaviours to be quantified that are referred to as displaced, cannibalised, stolen and subsidised (Figure 3). Each of these describes different types of switching between products sold in the same food and drink category. The full explanation and interpretation of these is provided in the results and discussion section of this document.

Volume profiles (Figure 4) were converted to expenditure profiles by applying the relevant mix of prices paid for the promoted products and competitor products and by comparing observed spend levels to levels that would have been expected if the promotion hadn't occurred. The contributions from individual promotions were then aggregated into overall category profiles - eg sugar sweetened soft drinks.

Figure 3: From household data to source of volume output


Figure 4: Average of source of volume for a promotion

## The Average Food \& Drink Event Profile

Is incremental volume at the category level really incremental Food \& Drink volume?


The "Average" Food \& Drink Deal
64,000+ Food \& Drink events - volume weighted contributions with each market contribution spend weighted

Cross-category correlation analysis
The other key analytical method used in this study was a correlational analysis to work out if an increase in purchasing in one category led to a reduction in the purchasing of
another, suggesting a substitution effect. To achieve this, the following method was used:

- for each household within each category, a two-year purchase history was isolated
- a sequence of 24 rolling (ie overlapping),12-week volumes purchased were recorded across the 2-year time frame and were expressed as an index against the average 12-week purchase volume to give a volume index, the average being calculated for that household in that category
- to account for market seasonality, every household's volume index was compared to overall levels of category buying amongst the whole population. A new, corrected volume index was created to reveal whether each household was buying quantities which were greater than normal irrespective of wider seasonal explanations such as Christmas. A further adjustment was then made to account for each household's level of total purchasing. This was to prevent situations where unusually low purchasing of a food type could just be explained by a panellist being on holiday and so be buying very little of anything at that time. This adjustment was achieved by weighting each 12-week index by the number of unique products the household purchased in that period
- the outcome was that every household had a series of final indices calculated for each category they bought for each of the rolling periods (these indices are referred to in the next paragraphs as 'household $x$ period' indices)
- for each category in turn, the final 'household $x$ period' indices were grouped into integer percentage bands. For example, all indices in chilled juice that represented a $1 \%$ increase beyond normal purchasing levels (ie 101) were grouped together and all indices representing a $2 \%$ increase (102) were grouped and so forth. In turn these bands were employed to determine the average final index for all other categories. So, for 'household $x$ period' indices in the 101 chilled juice group, the average index scores for corresponding 'household $x$ period' data points in ambient juice were compared
- to remove extreme behaviour, only indices in the 50-200 range were included. This was verified to ensure that most of the data was captured in this range
- finally, Pearson's correlation coefficient was calculated for each combination of categories to understand the relationship, and scatter plots were generated to verify that a straight-line fit was appropriate to describe these relationships. Any relationship with an absolute Pearson's correlation value of above 0.6 was reported as being significant enough to investigate further.


## Results and discussion

This section will consider in turn each of the four major research areas framed by the questions from PHE.

1. What is the scale and nature of promoting in the UK and how has this changed in recent years?
Levels of price promotions on take home food and drink have declined since 2015. In 2015 the annual proportion of food and drink products bought on promotion was 40\% over the year, compared with 33\% for the year ending December 2018 (as shown in figure 5). In 2018 spend on price promotion (TPR) contributed $24 \%$ to overall spend, and spoend on multibuys contributed $9 \%$ to spend. Over the two years of this analysis (20172018) the proportion bought on promotion was $34 \%$. The decline has largely been driven by shoppers' move to discounters (Aldi and Lidl), and other retailers adopting more Every Day Low Price Strategies. The discounters grew in market share from 8\% to 12\% between 2015 and 2018, and as they tend not to promote extensively, the move to discounters means the proportion of products bought on promotion has reduced.

Figure 5: Levels of promotional spend in the UK 2015 to 2018


Though the percentage bought on promotion has decreased in the UK since 2015, it was still higher in 2018 than in other major economies where comparable data is available. Promotional levels for groceries in countries such as Germany, France and Spain are in the order of $20 \%$ of shopper expenditure. Czechia and Italy are the markets which have similar levels of promotion to the UK (data sourced from Europanel \& IRI). For the purpose of like-for-like comparison, countries where Kantar Worldpanel data
exists are shown in Figure 6 - France, Spain, Mexico, Brazil and China all have lower levels of promotion compared with the UK.

Figure 6: Levels of promotion in major Kantar Worldpanel markets


Promotions at this level do play a role in helping shoppers reduce the cost of the items that they choose to buy. All promoted items are sold at a cheaper price than the standard non-promoted price for that item. If all households bought the same basket of goods at the full price, the 'equivalized saving' due to promotions would be $£ 372$ per household per year.

However, there is clear evidence that promotions do encourage shoppers to increase the quantity they might otherwise purchase, which means that true savings for shoppers may be lower than expected. Any full analysis must consider that some spend is extra and would not have occurred without promotion - analysis presented later in this report suggests that the true saving is $£ 72$. This issue will form a significant part of the discussion in subsequent sections of this report.

Some categories' prices have increased since 2015. As some food and drink becomes relatively more expensive in some categories, behavioural data shows that many shoppers increasingly selected items offered on promotion to help them save money.

The main four retailers all promote to some extent; however, the promotional landscape has changed since 2015. Sainsbury's abandoned any multibuy deals in 2016; this meant that overall promotional levels fell, and that more promotions moved to straight 'price
cut'. Levels of multibuy declined in other retailers too in this period, though it is still a mechanic used by Asda, Tesco and Morrisons. The discounters (Aldi and Lidl) tend not to promote extensively.

Multibuys now account for less than 10\% of shoppers' overall grocery market spend. Price cuts have been increasingly favoured by retailers as they are seen to help reduce overall basket spend and hence increase the perception of price competitiveness. Such deals are also more accessible to all shoppers as there tends to be a lower price and quantity threshold to participation compared with multibuys (ie if shoppers choose to buy one item, they can still take advantage of an offer). This in turn increases the potential reach of these events, maximising the numbers of people that a retailer can reward to attempt to help maintain their continued loyalty. In 2018 price cuts accounted for $24 \%$ of annual food and drink spend and multibuys for $8 \%$, compared with $25 \%$ for price cuts and $14 \%$ for multibuys in 2015.

There is significant variation in levels of promotion. Some categories such as canned colas have very high promotional levels ( $62 \%$ of total volume bought) whilst many basic staples such as table salt are barely promoted at all ( $6 \%$ of volume bought).
Levels of average discounts also fluctuate significantly, ranging from $40 \%$ for cereal and fruit bars to much more modest levels for other categories eg cucumbers and grapefruit promote at an average discount of $17 \%$ off (figure 7 ). In the later stages of this document we consider the extent to which this variation has tended to favour higher sugar containing categories with higher depth and breadth of promoting.

Figure 7: A distribution of promotional levels and discounts by category

2. Who responds to promotions and how do promotions generally work?

Price promotions are a common feature of grocery shopping and are available in all major retailers and all major categories. This widespread promotional activity means that all shoppers, whatever their circumstance, are regularly exposed to promotions on
products they want to buy. Consequently, the affluence and life-stage bias of shoppers participating in food and drink promotions is very slight. In other words, everyone takes advantage of price promotions, not just low-income consumers.

Kantar Worldpanel has analysed the demographic profile of promotional buyers to understand how lifestage, socio-economic group, income and age affect whether shoppers were more likely to buy into promotions. A demographic index was created where an index of 104 means that spend on promotions is $4 \%$ higher than expected, taking account of the categories being purchased.

## Socio-economic group and lifestage

Figure 8 shows that shoppers in higher socio-economic groups (ABC1) are more likely to buy into promotions than those in lower socio-economic groups (C2DE) at all lifestages, but the differences are small.

Figure 8: Demographic socio-economic group and lifestage biases towards promotional purchasing for total food \& drink


This interlaced demographic analysis was compared with previous work in 2015 which had shown a stronger relationship with families buying into promotions (Figure 9). It is noteworthy that there have been several changes in the UK grocery market over this period, including an increased market share for the discounter stores (Aldi and Lidl), especially among families.

An analysis of the role of price promotions on the household purchases of food and drinks high in sugar, and purchases of food and drinks for out of home consumption

Figure 9: Demographic promotional buying index


Income

Less affluent shoppers are less likely to buy on promotion (Figure 10). Those in the $£ 30,001$ to $£ 60,000$ income ranges are the highest promotional buyers.

Figure 10: Promotional buyers by income, for all promotions and for multibuys only


Age

In terms of age of promo buyer, those aged 35-64 buy more on promotion than younger and older groups. Those aged 45-54 are the largest promotional buyers within this demographic, though overall behavioural differences by age are small (Figure 11).

Figure 11: Promotional buyers by age, for all promotions and for multibuys only


Source of volume analysis
In the detailed analysis of 64,000 promotions (based on data from the top 4 retailers), Kantar Worldpanel has decomposed every promotion to understand the true source of volume of each promotion.

The underlying analysis considers the shifts in buying choices that shoppers make within sets of closely competing products that are relevant for each individual promotion event. The proportions and numbers quoted in Figure 12 represent the overall average profile of 64,000 food and drink promotion events. The constituent classifications are explained as follows:

- Subsidised volume ( $23 \%$ ) represents volume of the promoted product that shoppers would have been expected to buy at the time of the promotion, in the same store, irrespective of whether there was a promotion or not
- Displaced (1\%) is the volume of the promoted product that would have been expected to have been bought in subsequent weeks in the same store. This can be alternatively described as brought forward, full price purchasing
- Cannibalised volume (29\%) is that which would have come from sister products within the promoting manufacturers' portfolio eg swapping between different flavours within the same brand
- Stolen (29\%) represents volume that is taken from competitor products eg cola brand $x$ stealing volume from cola brand $y$
- Extra trips (3\% of volume) are those unexpected purchases that appear to have been motivated by the promotion alone
- Expansion (15\%) represents growth from faster than expected return times to the category after a shopper participates in a promotion. This expansion effect is caused by shoppers purchasing above average quantities of the category which is then not fully offset by delayed repurchase. For example, consider a shopper who normally buys one pack of a certain product every week with seven days between each purchase. One week they see a buy one gets one free deal which causes them to take two packs (double their normal quantity). We might expect that shopper to take twice as long as usual and to return to the category two weeks later to buy again. Instead shoppers often return to the category more quickly than expected (say after twelve days). This means they have delayed their return time slightly, but not by quite enough to account for all the extra volume purchased. As discussed later in this report, some types of product categories seem to have inherently higher potential for expansion, and these will be referred to as more expandable categories
"Expansion" and "extra trips" represent real growth in the overall category volume as a direct result of the promotion.

Figure 12: The volume decomposition of deals
The Average Food \& Drink Event Profile


The resulting volume breakdown shows that a majority of the volume under the sales spike is a result of shoppers shifting purchasing from competing products whether owned by the promoting manufacturer or otherwise. More than half (58\%) of the volume is accounted for by these switches in product selection. A further $24 \%$ of volume is accounted for by subsidised or brought forward (ie 'displaced') purchasing of the promoting product.

In the context of understanding the role that promotions might play in encouraging consumers to purchase more food and drink (and potentially sugar), the key result is that we typically see $18 \%$ of the average promotional volume being net growth ('extra trips" and 'expansion') in the purchase volumes of the parent category. By this we mean volume that would not have been purchased if not for the promotion- and this takes into account the fact that some shoppers might delay their repurchase of the category to use up extra volume bought on a promotion. The volume growing effect occurs through a combination of expansion and extra trips and reveals that promotions add to the overall category volumes being purchased. As new promotions are continuously replacing old ones, these volume building impacts will be occurring over time in nearly all categories. These impacts don't lead to endless accelerated performance for categories but instead are more likely to be producing an additional layer of category volume that is continually being generated and renewed as promotions come and go from one brand to the next. In 2015, this net growth was estimated to be $22 \%$.

It is important to point out that the "source of volume" technique is unable to directly establish if this incremental volume is actually being consumed but in the case of food and drink we assume that a significant proportion of this will be. Increased amounts of product kept in stock in the home and higher food wastage (especially on short shelf life items) are also further explanations to consider.
3. How incremental are promotions to food and drink categories? Do promotions on one category simply come at the expense of competitor foods in other categories?
Following the finding that on average just under a fifth (18\%) of promoted volume bought by shoppers is incremental to a food and drink category, the next stage of the work was to test whether this increment inflates food or drink volumes at an overall level. It might be expected that following increased purchasing in one food and drink category that shoppers would reduce their purchasing in competitive categories to compensate.

To test this, two years' worth of household level purchasing data was examined amongst continuously reporting panellists (2 years to 30th December 2018). The volumes bought by each household across blocks of 12 weeks were isolated for each food and drink category. Each block was then compared to the average for that household in that category to establish whether purchasing was high or low. Then the purchasing levels in competing categories were examined for matching time periods to establish whether above average purchasing in one category correlated with adjusted
purchasing in another. The data was represented as a scatter plot of deviation from average purchase volumes.

The results confirmed some expected relationships as demonstrated by Figure 13. Periods where households double their usual purchase quantities of Fresh Pizza are represented as an index of 200 (meaning a 100\% increase above normal levels). In the chart we see these periods are associated with a corresponding decline in Frozen Pizza volume of approximately $13 \%$ (index $=87$ ). These two categories can be considered as directly substitutable, so this negative relationship is unsurprising.

Figure 13: Relationship between fresh and frozen pizza volumes due to promotions

Purchasing more Fresh Pizza has a negative impact on a household's purchasing of Frozen Pizza


Fresh Pizza Volume Index
Data to: 104 w/e 30th Dec 2018

Positive relationships were also observed as shown in Figure 14. Pasta and rice are widely considered to be complementary to ambient cooking sauces and as such it was seen that a doubling of average cooking sauce volumes (index = 200) was linked to a $15 \%$ increase in pasta and rice volumes (index = 115).

Figure 14: Relationship between ambient cooking sauce and rice/pasta volumes due to promotions


It was observed that between pairs of higher sugar categories there were few negative relationships. Instead, higher than average volumes for one category were often associated with higher than average volumes in other higher sugar categories. Figure 15 shows one such example, to illustrate the positive relationship between everyday chocolate (ie chocolate that excludes seasonal and gift-oriented items) with sugar confectionery (sweets). The relationship is positive, with a doubling of chocolate volumes (index $=200$ ) being associated with a $14 \%$ increase in sugar confectionery (index = 114).

Figure 15: Relationship between everyday chocolate and sugar confectionery volumes due to promotions

For higher sugar categories slight positive correlation is common This reflects households going through spells of buying more unhealthy products rather than a causal relationship

A household purchasing twice as much Everyday Chocolate will buy 14\% more Sugar Confectionery


Further analysis of these higher sugar categories revealed relatively small relationships between increased purchasing and reduced purchasing of other categories. The only two notable instances where increased purchasing of a higher sugar category did result in some degree of competition with another higher sugar category were chilled juices (competing with ambient juice) and yoghurt (competing with chilled desserts, everyday chocolate, frozen desserts, cakes and sugar confectionery). Table 1 below shows the significant relationships (based on a Pearson's correlation coefficient of $-0.6 \%$ or stronger) for the higher sugar categories. In all cases where a negative volume relationship exists, the adjustment is small. The gradient reveals that a doubling of the parent category volume leads to only a minor reduction in the competitor category in the range of 4-10\%.

## Table 1: A summary of negative volume relationships for higher sugar categories

| Statistically significant negative relationships for higher sugar categories |  |
| :---: | :---: |
| High Sugar Market | Negative Relationships |
| Cakes | Salad (7\%, r=-0.7) |
| Chilled Juice | Ambient Juice (7\%, r=-0.4) |
| Everyday Chocolate | Salad \& Veg (7\%, r=-0.8) |
| Sugar Confectionery | Salad (5\%, r=-0.5) |
| Sweet Biscuits | Fish ( $7 \%, r=-0.6$ ), <br> Eggs (4\%, r=-0.6), <br> Salad \& Veg (7\%, r=-0.7) |
| Yoghurts | Chilled Desserts ( $8 \%, r=-0.6$ ), Frozen <br> Desserts (12\%, r=-0.6), <br> Ready Meals ( $6 \%, r=-0.7$ ), <br> Sugar Confectionery ( $9 \%, r=-0.7$ ), <br> Crisps, Snacks \& Nuts ( $5 \%, r=-0.8$ ), <br> Everyday Chocolate ( $7 \%, r=-0.8$ ), <br> Cakes (7\%, r=-0.8), <br> Cream ( $13 \%, \mathrm{r}=-0.8$ ) |
| \% figure = gradient (i.e. what reduction do I see if I double volume on the competitor market) $r=$ Pearson's Correlation Coefficient |  |

These correlations should not be confused with causality; however, they do show that over purchasing in one higher sugar category does not typically lead shoppers to reduce purchasing of direct higher sugar alternatives. Instead, the research has shown that higher than average purchasing of a higher sugar category is more commonly associated with a decline in items with a healthy perception. These findings might suggest that households are inclined to go through healthy or unhealthy phases, when either a range of foods with a less healthy, treat oriented, perception are being purchased compared to phases when people are striving for a healthier diet.

The key finding from this element of the research is that it appears highly unlikely that the extra purchasing being generated by promotions in one higher sugar category will be compensated by reductions in alternative higher sugar competitive products. For the most part, any such relationships are not significantly detectable in the purchasing histories of households. In the rare cases where negative relationships are observed to a degree of significance, the proportion of offset volume is small.

The work on the competitive relationships between food and drink categories has shown that a large proportion of the incremental purchase volumes generated by promotions on any one category are likely to be additive to the total food and drink volumes being bought. This is particularly so when considered from a higher sugar category perspective because there are very few negative relationships between the core categories contained in this group. In other words, additional purchase volumes driven by promotions on higher sugar categories are very unlikely to be offset by reductions in
similar high sugar foods. This means it is of importance in higher sugar categories to understand the circumstances under which promotions generate the highest incremental purchase volumes (category growth) as we would expect almost all of this to be representing net increases to household sugar intake.

Within food and drink, promotions run as multibuys or promotions with higher discounts tend to be the events that generate the greatest incremental category volumes (through a mix of extra trips and expanded volumes). This is illustrated by the "source of volume" profiles shown in Figure 16.

Figure 16: Promotional volume \% decomposition by mechanic and discount bands


64,000+Food \& Drink events - volume weighted contributions with each market contribution spend weighted

The mix of promotions being run (type of mechanic and depth of discount) and the nature of the product type being promoted will also mean that profiles of promotions in different categories or food and drink categories will exhibit variation. Figure 17 shows how incremental volumes (extra trips and expansion) amongst higher sugar categories tend to be proportionally greater where products are more discretionary or more treat and special occasion oriented. Notable instances are confectionery, soft drinks and bakery.

Figure 17: Category incremental proportions for promotions


Such categories tend to have run promotions that have been more incremental as drivers of extra volume. There are several exceptions, but overall more impulsive and discretionary categories appear to hold more potential for shoppers to increase typical take home volumes and use up this volume faster.

Whilst the focus during this research has been on effects of promoting on volume sales it is also worth noting that promotions have significant financial impacts on manufacturers, retailers and the category. From the shopper expenditure perspective, promotions tend to generate additional sales value for manufacturers and retailers in the clear majority of cases. The category incremental volume (driven by extra trips or expansion) is a pure win for manufacturers and retailers in that category. Similarly, stolen volume is also a clear win as it generates expenditure at the expense of competitors. On the whole (but not always), these impacts outweigh the potential expenditure reductions associated with cannibalised trading down and the instances when expected full price purchases are discounted.

However, if we look at this equation from a broader category perspective (encompassing all retailers and manufacturers operating in that food or drink market), the benefit that any one manufacturer enjoys by stealing from competitor brands is unlikely to hold much benefit. Movements from one brand to another (ie from full priced to discounted alternatives) will tend to generate reductions in total category expenditure unless these gains are offset by increased volume sales. Therefore, not all promotions will grow their particular food or drink category in cash terms. High discounts on cheaper products and in categories that show less potential for expansion, are far more likely to cause a contraction in spend overall.

Promoting retailers tend to fall somewhere between the two extremes of manufacturer and category. Whilst they will rarely see much benefit from switching between brands (especially if this trades shoppers down to cheaper priced items), retailers do benefit from some transferred spending from their retail competitors. Most shoppers now shop in a rangeof different stores, so being tempted to spend on a promotion tends to preclude a degree of purchasing in competitor outlets. Promotions hardly ever cause a loss in sales value for manufacturers, but in a quarter of cases the promotion causes a loss for the retailer.

Figure 18 reveals that as discounts increase to deep levels (particularly above 45\%), the typical expenditure return from promotions actually dips into a reduction for the wider category. These are average results and don't mean that all deep discount promotions are value negative. Neither are all lower discount deals value additive to their categories. From the analysis of the 64,000 promotional events in the study dataset we find that $44 \%$ of promotions reduce total category value with the remainder helping to grow value.

Figure 18: Average impacts on shopper expenditure by discount


Averages from 64,000+ Food \& Drink promotions

One question which has been investigated in this research is whether promotions genuinely save money for shoppers. Existing analyses tend to focus primarily on whether the purchases give money off to shoppers but can overstate the true saving impact for shoppers. This is because it assumes that everything in the shopper's basket would have been bought anyway. Kantar Worldpanel's research uses modelled data to address the question more fully. Two factors are important in evaluating this - what would have been bought anyway, and what is truly extra volume due to promotion. We know that some products bought on promotion are products we would have bought
anyway. In these cases, any form of deal to the shopper represents a saving. To calculate a real saving to the shopper for those promotional sales, we use the value of discounts to assess how much value has been saved as a result of buying on promotion.

Kantar Worldpanel also knows from our models that some purchases are extra as shoppers would not have bought them without the promotions. Therefore, any accurate calculation of whether shoppers save money due to promotions has to account for both the extra spend due to promotions, which drive incremental value and the money saved by products that shoppers would have bought anyway. The true saving takes account of both of these factors.

To do this accurately, we need to apply a value to the savings on the items that would have been bought anyway, as well as the spend on goods which are extra as a result of the promotions. In the case of what would have been bought anyway, the amount of saving is relevant eg if a shopper intended to buy goods to the value of $£ 50$, and they were all sold at $30 \%$ discount, the saving would be $£ 15$. As we see a significant difference in the effectiveness and the discount levels for TPRs and Multibuys, we have separated those types of deal. The average TPR discount is $33 \%$ whereas the average discount for a Multibuy is $26 \%$. These values are applied to the non-incremental purchasing (ie what would have been bought anyway) for both Multibuy and Price Cuts. These represent a saving in the form of discount and will always reduce shopper spend.

The full value of extra spending must be also considered, as we calculate those purchases that would not have been made without promotions, and therefore all spend is additional. To calculate this fully Kantar Worldpanel has used the incremental purchase measures that enables us to understand how much volume is incremental for both MultiBuy and Price Cut. Effectively the 'extra spend' is offset by discounts on items which would have been bought anyway.

Using these measures Kantar Worldpanel calculate that Multibuys encourage $£ 75$ of additional spend for the average household. This is offset by a calculated saving of $£ 61$ on the non-incremental purchasing, due to the discounts on purchases that would have been made anyway. Therefore, for Multibuys the total impact is an overall additional cost of $£ 14$.

For Price Cuts the total impact is different. It is worth noting that the incremental volume on a deal-by-deal basis is lower than for Multibuys, but there are considerably more price cuts in the market. Using these measures Kantar Worldpanel calculate that Temporary Price Reductions encourage $£ 141$ of extra spending through incremental purchasing, but this is more than offset by $£ 227$ of savings from the price cuts on what shoppers would have bought anyway.

Overall, taking all of the factors of how Multibuys and Price Cuts work into consideration we calculate the shopper saving to be $£ 72$ per year for an average shopper. This number does not enable us to deduce how much up-trading takes place between individual brands on specific deals, but accounts for the trading between brands at a more aggregated level so the average figure is as accurate as it can reasonably be.
4. Are promotions on high sugar products more extensive and do shoppers react differently to these compared to non-high sugar products?
As was reported earlier, the degree of promoting that occurs by food and drink category is highly variable. To analyse whether differences can be discerned for higher sugar products we look at higher and lower sugar categories. It is possible to be a high sugar product in a lower sugar category (ie the category overall is one of the lower sugar categories, but the product within that is one of the higher sugar products). Even in lower sugar categories, there are individual products which may be higher in sugar content. A full analysis accounts for both elements.

Figure 19 shows how the contribution to overall take home sugar relates to the distribution of promotional prevalence by category and by the type of product in that category. High sugar products are more likely to be promoted in high sugar categories than medium and low sugar products.

Figure 19: Level of promotion for high, medium and low sugar products


Overall, we see that the spend on deal will be slightly higher for higher sugar products. There are several clusters of categories that make a high contribution to sugar purchasing. These include Canned Colas, Seasonal Biscuits and Yoghurt Drinks.

When considered as an aggregate statistic over the 2 years to 30 December 2018, the defined group of higher sugar categories exhibit a greater proportion of spend going through on promotion; $40 \%$ vs. $34 \%$ for food and drink as a whole (total products). Furthermore, the average promotional discount is $30 \%$ for total food and drink, but a marginally more generous $32 \%$ for higher sugar categories. Higher sugar categories are therefore more broadly promoted and with very slightly deeper discounts.

When it is the dual effect of the high sugar products in the higher sugar categories, we see that these are more likely to be bought on deal - a high sugar product in a high sugar market is the most promoted combination ( $43 \%$ compared with $37 \%$ and $39 \%$ for medium and low sugar products respectively), indicating clearly that there is greater promotion on higher sugar products.

Figure 20 shows that high sugar categories are highly promoted (for example carbonated soft drinks and chocolate at 50\%), although the level of promotion fell across all categories compared with the previous year.

Figure 20: Levels of promotion shown for higher sugar categories with year on year change in the level of promotion.

High Sugar Categories are more highly promoted than grocery as a whole - though in common with the trends, the level of promo is falling across all categories
These high sugar categories are, on the whole, promoting less year on year


One explanation for this promotional preference for the highest sugar categories is that they contain more expensive items. Off promotion, higher sugar products are on average $25 \%$ more expensive than a low sugar product. Promotions bring the price premium down, and the discounts on these items are higher, though the net effect is still that higher sugar items are more expensive even when on promotion. For this reason, they may be more attractive for a retailer to promote as even a promoted high sugar item contributes to a higher value shopping basket for the retailer.

Effect on sugar sales
Promotions account for a significant proportion of all food and drink purchases. This means they also account for a significant quantity of all constituent sugar volume purchased in Britain.

It has been shown that promotions generate incremental sales volume to their categories. Furthermore, for many higher sugar categories this extra volume is also seen to be largely incremental to wider food and drink volumes. This in turn means that promotions will generate incremental take home sugar volume as a consequence of driving unexpected trips and accelerating purchasing rates. Based on the observed shopping behaviour in response to price promotions over the two years of analysis, data from the panel (Figure 21) reveals that $29.5 \%$ of all take home sugar volumes are from promoted purchases, with $5.5 \%$ of all take home sugar volumes being an incremental consequence of promoted purchases. The large majority of this $5.5 \%$ is accounted for by the higher sugar categories ( $4.0 \%$ of total take home sugar), almost three quarters of the total incremental amount.

Four percent can be considered the notional saving in overall sugar volume if promotions in these higher sugar categories had not occurred. This number also represents an estimate of the maximum opportunity if future promotions were to cease.

Amongst the higher sugar categories, different individual categories will contribute differing amounts to this total incremental $4.0 \%$ and hence will provide different degrees of opportunity for any policies aimed at curtailing sugar purchased because of promotion. The degree to which promotions in these categories generate incremental behaviour, the sizes of the categories and the levels of sugar found in the products in these categories will all play a role.

Figure 21: Proportions of take-home sugar accounted for by promotions


To summarise these impacts, Figure 22 shows the category contributions of how a notional $4.0 \%$ saving in sugar volumes might be achieved through cessation of promotions.

There is a relationship between sugar reduction and financial impact to the category, though it is not a consistent relationship. For example, a cut in promotions on regular carbonated soft drinks would reduce the value of the category, though this is not the case in markets such as cakes. The expenditure impact is based not only on how much more a category consumes when on promotion, but also the levels of discount and the relative price differentials between the promoted prices paid. In a category where shoppers are more likely to trade up to more expensive brands, a reduction in volume would bring an even more significant reduction in expenditure. If, however, shoppers trade down more frequently. a reduction in promotions would add value to the category. The potential expenditure impacts of promoting are important to understand. Any policy seeking to reduce take home sugar by limiting the volumetric impacts of promotions would have a knock-on effect on industry sales values and by implication therefore business profitability. How profitable price promotions really are is a source of much industry discussion and is something that cannot be objectively examined without analysis of manufacturers and retailers' margin data. This lies outside the scope of this study.

Figure 22: Volume and expenditure implications of no promoting for higher sugar categories


## Summary of findings

The key findings from the four research areas can be summarised as follows:

- promotions in Britain have fallen since 2015 but are still higher than in other European markets. Promotions accounted for $34 \%$ of food \& drink take home expenditure in 2017-2018, compared with $40 \%$ in 2015
- whilst promotions make products cheaper, they also tend to encourage people to buy more. Promotions in food and drink categories drive various short-term behavioural changes, such as getting shoppers to choose a different brand to normal. Promotions frequently lead people to buy more of the promoted category than expected. On average, just under one fifth (18\%) of promoted food and drink volumes bought can be considered to be incremental to expected category purchasing levels
- promotions not only get people to buy more of a category than normal, the evidence shows this effect also increases overall take home food and drink volumes. When people buy higher sugar categories, there is little evidence that increased purchasing of one category leads buyers to make a compensatory reduction in other higher sugar categories. This means promotions increase the overall level of take-home food and drink being purchased
- in 2017-2018, promotions delivered a $£ 72$ saving for the average household per year. A typical household would have to spend an extra $£ 372$ in a year if they wanted to buy their annual selection of promoted items at full price. However, this figure does
not fully show how much they save or spend as a result of promotions. The true saving is calculated by taking into account the additional purchasing due to promotions, as well as the saving made where they would have bought the same products
- price promotions are a common feature of grocery shopping and therefore all shoppers are regularly exposed to promotions on products they want to buy. Although differences are small, shoppers from lower socio-economic groups (C2DE vs. ABC 1 ), on lower incomes ( $<£ 30,000$ vs $£ 30,001+$ ), and in the youngest (<34yrs) and oldest (65yrs+) age groups are slightly less likely to buy into promotions
- higher sugar food and drink items are both more likely to be promoted and promoted at a higher level of discount. For higher sugar products, $40 \%$ of spend on purchasing was on promoted products in 2017-2018, compared with $34 \%$ overall, and average promotional discount was $32 \%$ compared with $30 \%$ overall. Several of the higher sugar food and drink categories represent more discretionary products and promotions in these areas will more easily get shoppers to buy more than normal. This means promotions in some higher sugar categories can more readily drive up take-home food and drink volume. This also explains why the high sugar categories account for a bigger proportion of the extra sugar purchased
- it is calculated that $5.5 \%$ of all take home sugar volume is an incremental consequence of promotions with about $4.0 \%$ coming from the higher sugar categories. In other words, a $4.0 \%$ saving in sugar volumes might be achieved if the level of promotions in higher sugar categories was reduced to zero


## Part 2: out of home food and drink

## Methodology

Kantar Worldpanel have an additional panel which records consumers' out of home food and non-alcoholic drink purchases, behaviour which the main panel does not capture. This panel is a subset of the main panel and is made up of 7500 individuals who use a purpose-built app to input all of their food and drink purchased to be consumed out of the home (ie the products never make it into the home), as well as takeaways which are brought back into the home. The panel has been collecting data since June 2015, so includes 3 years of back data. This report focuses on year on year trends for the 52 week ending periods 30 December 2018 and 31 December 2017.

Panellists are asked to specify the following about their out of home food and drink purchases:

- channel type (supermarket, restaurant etc.)
- specific outlet name
- number of people present at the occasion
- product purchased - the app collects barcoded items (using an in-app scanner) and non-barcoded items (pre-defined options to guide panellist through items purchased)
- who the item was bought for
- whether a promotion was used - panellists have the option to select 'meal deal or multi buy', 'other promotion or voucher' in retail channels or 'voucher or coupon used' in food service channels
- the out of home panel collects data from an exhaustive list of channels: grocery supermarkets and convenience stores, cafes, coffee shops, workplace and education, forecourts and garages, restaurants, fast food establishments, hotels, pubs and bars, leisure venues. Appendix 4 includes the channels and outlet examples within each channel

The panel collects information on food and non-alcoholic drinks consumed out of home. For this piece of research, different sub-categories were grouped together to analyse 6 food and drink categories: hot drinks, cold drinks, main meals, quick meals, sweet snacks and savoury snacks. Appendix 5 shows which sub-categories are included in each category.

To collect pricing information, panellists are required to fill a self-fill box with the price per unit of the product or meal purchase. If snacks or drinks are purchased the panellists use a tick box to indicate if a "meal deal or multi-buy" or "other promotion or voucher" was used. If a main meal is purchased the panellists use a tick box to indicate if a "voucher or coupon" was used. For this analysis all promotion types have been grouped together and will be referred to as "promotions".

The use of promotions is entirely consumer defined - panellists declare if they perceive that they have used a promotion. However, Kantar understand that consumers perceive promotions in different ways; where there is a regular discount for buying specific items as a group, or a food service outlet is constantly offering a promotion or discount and the discount is automatically applied, our understanding is that consumers are less likely to acknowledge a promotion has been used Therefore, they are less likely to record it as such and for this reason the total number of promotions in the out of home sector may be under reported. This is challenging to corroborate as information with which we can validate this is limited and fragmented. As such, the data and analysis in this report provide a useful indicator of promotional use in the Out of Home sector.

For the out of home sector, five study areas were addressed:

1. What is the scale of promotions in the out of home sector?
2. Who responds to promotions out of home?
3. Which food and drink categories do consumers buy on promotion out of home?
4. What are the promotional dynamics for grocery supermarkets in the out of home sector?
5. What are the promotional dynamics for full-service restaurants in the out of home sector?

## Results and discussion

1. What is the scale of promotions in the out of home sector?

The proportion of out of home trips featuring a promotion increased from 2017 to 2018. In the 52 weeks ending 30 December 2018, $6.7 \%$ of out of home trips used a promotion, increasing from $6.1 \%$ in the previous year. This equates to 829 million out of home trips using a promotion, 94.9 million more than in the 52 weeks ending 31 December 2017. Over two thirds of consumers (69.4\%) used a promotion out of home in 2018, up by 1.3 percentage points compared with 2017 . Overall, $98.5 \%$ of consumers bought into the total out of home sector.

Some channels are more reliant on promotional usage than others. Figure 23 shows the proportion of trips featuring a promotion for all out of home channels for 2017 and 2018. Unsurprisingly, levels of promotions are highest in grocery supermarkets (13.4\% of trips in 2018) as meal deals and other promotions are widely available in this channel. Workplace and education had the largest year-on-year increase in proportion of trips featuring a promotion, but promotions offered are relatively low in this channel ( $3.3 \%$ of trips in 2018). Food service led restaurants, particularly full and quick service restaurants have more trips featuring a promotion ( $9.3 \%$ and $6.9 \%$ respectively) than average and the proportion grew year-on-year by more than 1 percentage point for both channels.

Figure 23. The proportion of trips featuring a promotion by channel


2: Who responds to promotions out of home?
Promotions are widely available in the out of home sector. As a consequence, the differences in age and affluence of consumers who use promotions is slight. Figure 24 shows the proportion of out of home trips made by different age and affluence groups which feature a promotion. Those aged 35-54 are most likely to use a promotion, with $8.1 \%$ of their trips in 2018 featuring a promotion, compared to $6.7 \%$ of trips overall. Consumers in socio-economic groups AB ( $7.3 \%$ of trips) and E ( $7.6 \%$ of trips) are more likely to use promotions out of home compared to other groups. However, AB group shoppers tend to use promotions when in grocery supermarkets whilst group E shoppers use promotions in quick and full-service restaurants.

Promotions are more likely to feature when an adult and a child are present $-11.2 \%$ of these trips featured a promotion in 2018 compared to the average of $6.7 \%$ of trips. At these occasions, main meals are commonly bought, and consumers are likely to go to Full Service Restaurants. When a consumer is buying food or drink for themselves, they are slightly less likely to use a promotion than average (6.4\% of trips feature a promotion).

Figure 24: Demographics differences in trips featuring a promotion for total out of home trips


3: Which food and drink categories do consumers buy on promotion out of home? With meal deals representing a large proportion of the promotions that are available in the out of home sector it is unsurprising that consumers buy more individual items on promoted trips compared to non-promoted trips. On average, consumers buy 2.5 items per trip when using a promotion, 0.6 items more per trip than an average out of home trip. Certain food and drink categories are more likely to be bought on promotion out of home. Figure 25 shows the share of each of the out of home food and drink categories that are purchased on promotion.

Meal deals also drive the types of products that are likely to be included in trips where promotions are used out of home. A higher proportion of trips to buy savoury snacks (eg crisps, nuts, cheese), cold drinks, and quick meals (eg sandwiches and salads) feature a promotion compared to average. However, the standout category is savoury snacks, with one in every five trips (19.6\%) to buy savoury snacks featuring a promotion. Crisps and starch-based snacks contribute over $50 \%$ of this category's value and have the highest proportion of trips featuring a promotion, $26.6 \%$ and $22.6 \%$ respectively.

Additionally, a slightly higher proportion of trips to buy main meals feature a promotion (7.3\%) than average. Consumers are more likely to use promotions to purchase a main meal on trips to quick and full service restaurants, with $8.0 \%$ and $10.2 \%$ of trips to buy main meals in these channels featuring a promotion in 2018. Therefore, the types of main meal cuisine which are more likely to be purchased on promotion in the total out of
home sector are pizza, burgers and Italian non-pizza (13.7\%, 13.1\% and $12.9 \%$ of trips feature a promotion).

Figure 25: Promotional levels by food and drink categories out of home


4: What are the promotional dynamics for grocery supermarkets in the out of home sector? Grocery supermarkets (offering food on the go) are the channel in the out of home sector with the highest proportion of trips featuring a promotion. In the 52 weeks ending 30 December 2018, 13.4\% of all supermarket out of home trips featured some sort of promotion, compared to $6.7 \%$ of trips in the sector overall. In 2018, 9.2 million more supermarket trips featured a promotion compared to the previous year ( $52 \mathrm{w} / \mathrm{e} 31 \mathrm{Dec}$ 17) and these promotions helped drive the growth of this channel.

Figure 26 shows the proportion of trips featuring a promotion by retailer. Tesco have the highest proportion of trips featuring a promotion ( $21.6 \%$ of trips) while Aldi and Lidl ( $1.3 \%$ of trips), who have a limited food on the go offering, have the smallest proportion. Whilst total supermarkets grew out of home sales at a rate of $6.5 \%$ ( $52 \mathrm{w} / \mathrm{e} 30$ Dec 18 vs 52 w/e 31 Dec 17), promoted sales in this channel grew at $7.5 \%$. This accelerated growth came from promotions being effective in attracting new shoppers to buy promoted items in the supermarkets.

Figure 26: Proportion of trips featuring a promotion, by retailer


Meal deals are a feature in supermarket food-to-go, and this is emphasised by the products which are bought on (and growing) through promotions. Within cold drinks, juice, smoothies, and iced tea, dairy and dairy alternative drinks, and bottled water are all seeing faster growth through promoted trips than their average growth rates - and these products generally offer strong value when on promotion. For example, the average price of a smoothie not on promotion is $£ 1.51$; therefore, buying a $£ 3$ meal deal would make the price of the snack and sandwich only $£ 1.49$. Chilled prepared fruit is another food category where promoted trips are growing at a much faster rate than nonpromoted trips, offering both health and good value. Other notable categories where promoted trips are driving category growth in the supermarkets include crisps, salads, savoury pastries, and sandwiches. We are unable to determine whether this profile is due to the promotional strategy of the retailers or due to consumers specifically searching out promotions for these products.

One-third (33\%) of all out of home food and drink purchased from supermarkets (food-to-go) is for consumption at lunch. Figure 27 shows the out of home occasions when food and drink bought from supermarkets is consumed.

Figure 27: Consumption occasions of all food and drink purchased in supermarkets


There are differences in demographics of those using promotions in grocery supermarkets. Figure 28 shows the proportion of out of home supermarket trips made by different age and affluence groups that feature a promotion Both socio-economic group $A B$ and $E$ trips feature a higher proportion of promotions (17.8\% and $16.5 \%$ respectively) than average, however, what they are buying differs.

The key working age population (25-54 year olds) and socio-economic group $A B$ consumers are more likely to buy quick meals on promotion, suggesting they are taking advantage of supermarkets' meal deal offering for their lunch. Although meal deals are a cheaper option than other alternatives, they are more expensive than a carried-out lunch (average cost $£ 1.88,52 \mathrm{w} / \mathrm{e} 30$ Dec 18) (6) so it is maybe unsurprising that people of a higher affluence purchase these.

Socio-economic group E consumers are also more engaged with promotions in supermarkets, but they are more likely to buy sweet snacks on promotions with $19 \%$ of their sweet snack trips in supermarkets featuring a promotion compared to the average of $10.8 \%$ of trips. The type of sweet snacks which make up their sweet snack trips also differ from the average consumer - chocolate bars and cookies make up a higher share of their promoted trips and fruit wins a smaller share.

Figure 28: Proportion of supermarket trips using a promotion by demographic group


5: What are the promotional dynamics for full-service restaurants in the out of home sector? In 2018 ( 52 weeks ending 30 Dec 18), $9.3 \%$ of trips to full-service restaurants used a promotion, an increase of 1.1 percentage points since the previous year ( 52 weeks ending 31 Dec 17). This means that there were 3.7 million more promoted trips to fullservice restaurants in 2018 (+16.7\%). In this channel there is a distinct difference between promotional dynamics across chains and independents. Whilst chain restaurants accounted for $52 \%$ of total full-service restaurant trips in 2018, they accounted for $92 \%$ of full-service restaurant trips where a promotion was used. Promoted trips are also growing much faster in chain restaurants compared to independents ( $+17.7 \%$ vs. $+5.8 \%$ for independents) and are growing faster than nonpromoted trips.

Figure 29 shows the proportion of out of home full-service restaurant trips made by different age and affluence groups that feature a promotion compared to their average likelihood of using a promotion in the total out of home sector. Whilst high affluence consumers were most likely to engage with promotions in the supermarkets, consumers from socio-economic groups $C 2, D$, and $E$ used promotions on a higher share of their trips to full-service restaurants (11.0, 14.3 and $10.5 \%$ respectively). Consumers are also more likely to use a promotion when they are with other people, especially when they are eating with children, with $14.9 \%$ of adult and child trips to full-service restaurants using a promotion. This is a higher proportion than the average for full-service restaurants (9.3\%) and for adult and child occasions in the wider market (11.2\%).

Figure 29: Proportion of full-service restaurant trips using a promotion by demographic group


## Implications and summary of findings

Purchasing on promotion in the out of home sector increased between 2017 and 2018. Usage of promotions varies across channel type by consumer demographic and product category.

Supermarkets (food on the go) have the highest proportion of trips featuring a promotion, driven by meal deals. Promotions in this channel are engaging new customers, and socio-economic group $A B$ consumers are more likely to buy quick meals on promotion. Consumers from socio-economic group E are also more engaged in promotions in this channel than the average consumer but their purchases on promotion are more likely to be sweet snacks.

Full service restaurants, especially chain restaurants, are seeing a higher proportion of trips featuring a promotion, and these trips growing ahead of overall growth. Consumers from socio-economic groups C2, D and E are more likely to use promotions in these channels. Finally, consumers are using promotions in these channels when they are in groups, especially with children.

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## Appendices

## Appendix 1: Kantar Worldpanel GB purchasing data methodology

Sample structure and recruitment:

- 30,000 households chosen to reflect all GB Households by region and demographics.
- population targets are obtained from the results of the Broadcasters Audience Research Board (BARB) Establishment Survey and the Office for National Statistics (ONS).
- key sample controls include BARB region, household size, presence of children and age of housewife. Socio-economic group is not included in the sample targets but is part of the weightings applied to represent GB.
- recruitment to the panel occurs through postal and email communication.
- incentives are used to reward participation, typically as vouchers for high street retailers. However, many panellists additionally have a genuine interest in taking part.
- there is a high level of panel continuity; $70 \%$ of the panel have been involved for 3 or more years.


## Data coverage:

- the methodology is set up with the aim of collecting all food and drink purchases brought back into the home regardless of place of purchase eg corner shop, supermarket, or department store
- products purchased and consumed out of the home are not included.
- once shopping is brought into the home, barcodes are scanned, prices are collected and till receipts are sent by the panellist
- show cards with internal barcodes are used to collect data on non-barcoded products like loose fruit and vegetables and in store bakery items


## Panel monitoring and validation:

- household purchasing patterns are tracked over time and investigated if significant changes occur
- eligibility for household purchasing to be included in the final data is assessed every 4 weeks. Panellist data will not be used if there are reasons to suspect poor compliance. For example, there are minimal spend and volume limits with assessment across peer groups to understand typical purchasing levels
- approximately $10-15 \%$ of the 30,000 GB household panel will not meet the eligibility criteria in a typical 4 weekly period
- there is a mechanism to enable regular communication with panellists about their scanning if changes are seen
- trends are constantly validated by food and drink manufacturers and retailers. These organisations buy access to the aggregated data and will typically compare this to third party, retailer sourced data sets to monitor accuracy


## Weighting:

- data from the sample households will be weighted up to reflect all GB households with correct demographic representation
- further weighting corrections are made to the data to account for known issues such as panellists being more likely to forget to scan small baskets


## Identifying promotions:

- the study seeks to collect any promotional mechanic associated with any purchase instance on any specific item
- panellists are asked to scan whether there was a multi-buy or price promotion attached to the purchase as part of the scanning task as an initial flag for promotional activity
- detail of the multi-buy is then established from the till receipts sent in by panellists, with further verification by an in-house specialised coding team who engage in store visits, direct contact with retailers and manufacturers and website trawls
- temporary Price Reductions (TPRs) are identified by an automated process looking for changes in prices paid over time


## Appendix 2: Kantar Worldpanel nutrition service methodology

Kantar Worldpanel have been collecting and coding nutrition information from food and drink packaging since early 2005. The big eight nutrients are captured: calories, carbohydrates, total sugar, total fat, saturated fat, fibre, protein and sodium. All information is taken from product packaging and no laboratory analysis is undertaken. The nutrient values are combined with the purchasing information to provide nutrient volumes by product, food category and for the total take home food and drink marketplace.

## Data sources for nutrition content:

- nutrition information is taken directly from product packaging in all cases where available
- where applicable, known values are used for the same product sold in different pack sizes or formats (eg a fizzy drink brand sold in varying can and bottle sizes).
- for some fresh and non-barcoded products, nutrition information from McCance \& Widdowson's - The Composition of Foods (5) is used
- where none of the above sources can be found, average nutritional values corresponding to the appropriate market sector will be applied to any remaining products.


## Coding maintenance:

- the nutrition information ascribed to each product within the database is updated on a four-monthly basis by Kantar fieldworkers
- fieldworkers visit a sample of multiple stores (Asda, Tesco, Morrison's, Waitrose, Coop, Iceland, Farm Foods and M\&S) and capture the barcode and on pack nutrition
panel via a hand-held device. This will be done for all products on the shelf in the target category
- this data collection is supplemented by product image data, available to Kantar Worldpanel as part of a commercial agreement with Brandbank. Brandbank collect product images and data from retailers and manufacturers for use on retailer websites including Asda, Sainsbury, Waitrose and Tesco. This enables Kantar Worldpanel to update product information between field collection in the event new nutrient values lead to a new Brandbank image. Images of all new products are collected (either from Brandbank images or via Kantar Worldpanel's own fieldwork) once the panel have purchased the product at least twenty times. This means that nutrient data is collected on all new products as and when they are launched


## Appendix 3: List of food and drink categories analysed in the study

## Group Higher Sugar Categories

Ambient Condiments
Ambient Juice
Biscuits
Cakes
Canned Fruit
Carbonated Soft Drinks
Cereal+Fruit Bars
Cereals
Chilled Desserts
Chilled Juices
Chocolate Everyday \& Block
Chocolate Seasonal \& Gift
Desserts
Flavoured Milk
Food Drinks
Frozen Desserts
Frozen Fruit
Fruit Squash
Gum
Homebaking
Ice Cream
Morning Goods
Pickles Chutneys \& Relish
Popcorn
Preserves
Sugar Confectionery
Table Sauces

## Yoghurt Drinks and Juices

Yoghurts

## Higher raw or natural sugar categories

Ambient Milk + Cream
Apples \& Pears
Banana
Berries
Coconut
Coffee
Dates
Easy Peelers
Exotic Fruit
Grapefruit
Grapes
Lemon+Lime
Melons
Milk
Orange
Pineapples
Pumpkin
Rhubarb
Soft Fruit
Sugar

## Other Low Sugar Categories

Ambient Cooking Sauces
Ambient Dips
Ambient Gravy
Ambient Olives
Ambient Pizza Bases
Ambient vegetarian Products
Ambient Salad Accompaniment
Avocado
Bacon/Pork
Baked Bean
Beef
Beer \& Cider
Bread
Breakfast Drinks
Canned \& Packet Soup
Canned Fish \& Meat
Canned Pasta Products
Canned Vegetables
Carrots
Chapatis
Cheese
Chilled Cooking Sauces
Chilled Dips
Chilled Gravy+ Stock
Chilled Olives
Chilled Pate+ Paste +Spread
Chilled Prepared Salad
Chilled Rice
Chillies
Chilled Sandwich Fillers
Cold Pies
Cooked Poultry
Cooking Oils
Cream
Crisps \& Snacks
Cucumbers
Curry Powder
Deli Meat
Eggs
Ethnic Ingredients
Fabs
Fish
Flour
Fresh Bacon Rashers
Fresh Other Meat \& Offal
Fresh Pasta
Fresh Pastry
Fresh Pizza
Fresh Soup
Fresh Stuffing
Frozen Fish
Frozen Meat
Frozen Meat Products
Frozen Pastry
Frozen Pizzas
Frozen Potato Chips/Products
Frozen Poultry
Frozen Ready Meals
Frozen Savoury Bakery
Frozen Veg

```
Frozen Vegetarian
Garlic
Ginger
Green Vegetables
Herbs
Hot Pies
Instant Hot Snacks
Instant Mashed Potato
Lamb
Lettuce
Meal Kits
Meat Extract
Mixers
Mushrooms
Mustard
Onions
Other Vinegar
Packet Stuffing
Pasta & Rice
Pickled Veg
Poppodoms
Potatoes
Poultry
Premium Salt
Pre-Packed Delicatessen Meat
Prepared Salad
Quiches
Ready Meals
Root Vegetables + Squashes
Salad Vegetables
Salt
Sausages
Savoury Biscuits
Savoury Preserves
Snacking Nuts
Sparkling Wine
Spices
Spirits
Standard Vinegar
Stock Cubes
Tea
Tomatoes
Tortilla Wraps
```

An analysis of the role of price promotions on the household purchases of food and drinks high in sugar, and purchases of food and drinks for out of home consumption

> Vegetable in Jar Water
> Wine
> Yellow Fats

An analysis of the role of price promotions on the household purchases of food and drinks high in sugar, and purchases of food and drinks for out of home consumption

## Appendix 4: Out of home channels and outlet options

| Channel Types | Outlets |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Supermarkets (includes forecourts) | Tesco | Asda | Sainsburys | Morrisons | Co-op | M\&S | Aldi | Lidl | Other supermarkets |
| Symbols and independents | Nisa | Premium Stores | Costcutter | One Stop | Best One | Spar | RS McColls | Budgens | Other newsagents and independents |
| High Streets | Boots | B\&M bargains | Poundland | Home Bargains | Off licence | WHSmith | Wilkinson's | 99p Store | Other high street stores |
| Forecourts (Excluding multiples and travel) | Rail/station shops | Airport | BP Connect | Shell | Esso | Moto | AppleGreen | Jet | Other forecourts and garages |
| Workplace and education | Workplace Canteen | School Canteen | Hospital Shop/Canteen | Tuck Shop | University Canteen | Hospital Shop | Staff/work Shop/ College/ Canteen |  |  |
| Vending Machine |  |  |  |  |  |  |  |  |  |
| Cafes | Supermarket Café | Department store café | Garden Centres | Tourist attraction | Cinema | Concert/Sports venue | Ice cream Parlour Shop | Bowling Alley | Other Leisure and cafes |
| Sandwich and Bakery Shops | Greggs | Subway | Pret A Manger | Krispy Kreme | Eat | Patisserie Valerie | Delicatessen | Abokado | Other sandwich and bakery stores |
| Coffee shops | Costa Coffee | Caffe Nero | Starbucks | Coffee \#1 | AMT Coffee | Cafe2u | Caffe Uno | Caffe Ritazza | Other coffee shops |
| Quick Service Restaurant | McDonalds | KFC | Burger King | Chinese Takeaway | Fish and Chip Shop | Domino's | Indian Takeaway | Papa John's Pizza | Other Fast food/takeaway |
| Full Service Restaurants | Full Service independents | Pizza Hut | Frankie \& Benny's | Nando's | Pizza Express | Prezzo | Bella Italia | Wagamama | Zizzi <br> Ristorante |
|  | Café Rouge | T.G.I Friday's | Ask | Chiquito | Brasserie Gerard | Browns | Other Chain Restaurants |  |  |


| Channel Types | Outlets |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pubs and Bars | Independents Pubs | Wetherspoons | Toby Carvery | Brewers Fayre | Harvester | Beefeater Grill | Chef \& Brewer | Hungry Horse | Sizzling Pub Co. |
|  | Embers Inns | Marston's pubs | Miller \& Carter | All bar one | Table Table |  | Other Pubs Chains |  |  |
| Hotels | Premier Inn | Hilton Hotels | Holiday Inn | Best Western | Ibis Hotels | Marriott Hotels | Old English Inns | Ramada Hotels | Other hotels |

## Appendix 5: The out of home food and drink categories analysed

| Out of home categories | Subcategories |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total Drinks |  |  |  |  |  |  |  |  |  |
| Hot Drinks | Coffee | Tea | Hot Chocolate | Other hot drinks |  |  |  |  |  |
| Cold Drinks | Carbonates | Juice, Iced Tea and Smoothies | Yoghurt Drinks | Dairy Drinks and Cold Coffee | Water | Energy and Sports Drinks | Shandies and Mixers | Fruit Squash |  |
| Total Snack |  |  |  |  |  |  |  |  |  |
| Sweet Snacks |  |  |  |  |  |  |  |  |  |
| Toastie Pastries |  |  |  |  |  |  |  |  |  |
| Yoghurt |  |  |  |  |  |  |  |  |  |
| Sugar confectionery |  |  |  |  |  |  |  |  |  |
| Ice Cream |  |  |  |  |  |  |  |  |  |
| Ready to Serve Desserts |  |  |  |  |  |  |  |  |  |
| Cereal Bars |  |  |  |  |  |  |  |  |  |
| Morning Goods | Muffins | Croissants | Scones | Tea Cakes | Pain Au Chocolate | Fruit Iced Buns | Crumpets /Pikelets | Fruited Other Buns |  |
|  | Hot cross Buns | Pancakes /Griddle Scones | Unfruited Iced Buns | Unfruited other buns | Waffles |  |  |  |  |
| Cakes and Pastries | Cake Bars | Doughnuts | Cheesecake | Small Cakes | Small Pies | Flapjack | Large whole cakes | Slices |  |
|  | Mince Pies | Small Tarts | Small Swiss Rolls | Danish Pastries | Cake Portion | Malt/Fruit Loaves | Other dessert /Meringue | Potato cakes | Other cakes |
| Cookie |  |  |  |  |  |  |  |  |  |
| Chewing Gum |  |  |  |  |  |  |  |  |  |
| Chocolate confectionery | Everyday Chocolate | Seasonal Chocolate |  |  |  |  |  |  |  |
| Fruit and Vegetables | Produce | Chilled <br> Prepared Fruit |  |  |  |  |  |  |  |

An analysis of the role of price promotions on the household purchases of food and drinks high in sugar, and purchases of food and drinks for out of home consumption

| Savoury Snacks |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Veggie Snacking | Chilled Olives | Ambient Olives | Bhajis | Falafel | Meat Substitute Snacking | Pakoras | Vegetarian Snacking |  |  |
| Meat Snacking | NB Burger | NB Hot Dogs | Cooked Poultry | NB Hot Deli Meat | Scotch Eggs | Processed <br> Meat <br> Snacking | Cooked fish and meat snacking | Protein pot | Cured <br> Meat <br> snacking |
|  | Biltong + Jerky | Processed <br> Fish <br> Snacking | Sausage Wraps |  |  |  |  |  |  |
| Savoury Snacks | Savoury Snacks | Savoury Crackers and Biscuits |  |  |  |  |  |  |  |
| Nuts Fruit + Nut Mixtures |  |  |  |  |  |  |  |  |  |
| Popcorn |  |  |  |  |  |  |  |  |  |
| Crisps |  |  |  |  |  |  |  |  |  |
| Savoury Biscuit | Bread Substitutes | Savoury Biscuits |  |  |  |  |  |  |  |
| Bread |  |  |  |  |  |  |  |  |  |
| Dairy | Cheese | Milk | Cream |  |  |  |  |  |  |
| Quick meals |  |  |  |  |  |  |  |  |  |
| Breakfast cereal and porridge |  |  |  |  |  |  |  |  |  |
| Salads |  |  |  |  |  |  |  |  |  |
| Sushi |  |  |  |  |  |  |  |  |  |
| Savoury <br> Pastries | Hot and Pork Pies | Pastry | Sausage Roll | Cheese Twists | Samosa | Spring Rolls |  |  |  |
| Sandwiches |  |  |  |  |  |  |  |  |  |
| Hot meals and ready meals | Pizza slice | Pasta bowl | Fish Meal accomp | Meat and vegetarian meal accomp | Meat and vegetarian ready meals | Meat Sub Ready Meals | Noodle bowls | Rice bowls | Poultry Burgers |
| Eggs |  |  |  |  |  |  |  |  |  |
| Baked Potato and Chips |  |  |  |  |  |  |  |  |  |
| Soup and Instant hot snacks |  |  |  |  |  |  |  |  |  |

An analysis of the role of price promotions on the household purchases of food and drinks high in sugar, and purchases of food and drinks for out of home consumption

| Main Meals |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Breakfast | English breakfast | Continental breakfast | Breakfast wrap | Breakfast McMuffin | Breakfast Bagel | Breakfast Muffin | Breakfast Pancakes |  |  |
| Indian |  |  |  |  |  |  |  |  |  |
| Chinese |  |  |  |  |  |  |  |  |  |
| British |  |  |  |  |  |  |  |  |  |
| Sausages |  |  |  |  |  |  |  |  |  |
| Pizza |  |  |  |  |  |  |  |  |  |
| $\begin{aligned} & \text { Italian (non } \\ & \text { Pizza) } \\ & \hline \end{aligned}$ | Pasta <br> Lasagne | Spaghetti Bolognese | Risotto | Ravioli | Carbonara | Other pasta |  |  |  |
| Burger |  |  |  |  |  |  |  |  |  |
| Fish including fried |  |  |  |  |  |  |  |  |  |
| Chicken including fried | Chicken Meals | Fried chicken meals | Chicken Nuggets | Popcorn chicken | Chicken Wings |  |  |  |  |
| Kebab |  |  |  |  |  |  |  |  |  |
| Meat-based dish | Meat Steak | Beef Meal | Lamb Meal | Mixed Grill | Meat - Beef Ribs | Pork Ribs |  |  |  |
| Vegetarian based meals | Vegetarian based meal | Garlic Bread | Mozzarella Dippers |  |  |  |  |  |  |
| Other meals | Meal-Other | Meal-side | Buffet | Curry- not Indian | Rice Other | Mexican Other | Afternoon Tea | Chilli Con Carne | Nacho |
|  | Tapas | Macaroni Cheese |  |  |  |  |  |  |  |

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