



Foods and drinks  
purchased into the home  
in Scotland using data  
from Kantar WorldPanel

January 2016

# Monitoring of foods and drinks purchased into the home in Scotland

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Term	Definition
<b>Take home purchase (food and drink)</b>	All food and drink purchased for use <i>within</i> the home, i.e. all grocery shopping. This definition excludes take-away and home delivered foods such as pizzas and any foods that were purchased for immediate consumption outside the home such as a sandwich purchased at a supermarket.
<b>Nutritional volume</b>	Calculation of nutrients requires a measure of quantity. In most cases the measure is kilograms or litres. For some categories (cakes & pastries, morning goods and eggs) volume is expressed as number of servings as pack weights not available.
<b>Price promotions:</b> <b>Temporary price reduction</b>	This includes: <i>A temporary reduction in the cost of a product, e.g. 10% off</i>
<b>Y for £X</b>	<i>An offer of buying a set number of products for a set price, e.g. two for £2</i>
<b>Multi-buy</b>	<i>e.g. buy one get one free (BOGOF), three for two</i>
<b>Other promotions</b>	<i>e.g. extra free, meal deal, gifts, samples</i>
<b>Scottish Index of Multiple Deprivation</b>	The Scottish Index of Multiple Deprivation identifies the level of multiple deprivation in small areas across all of Scotland in a consistent way. These areas can then be grouped into quintiles. Quintile 1 refers to the fifth most deprived areas, and quintile 5 refers to the fifth least deprived areas.
<b>Discretionary foods</b>	Food and drink which are high in calories and/or salt, low in nutritional value and which are not required for our health, including confectionery, cakes, biscuits, pastries, savoury snacks and sugary drinks.
<b>Total sugars</b>	Includes both endogenous (sugars naturally present in foods such as fruit, vegetables, cereals and lactose in milk products) and added sugars.
<b>Free sugars</b>	This comprises all monosaccharides and disaccharides added to foods by the manufacturer, cook or consumer, plus sugars naturally present in honey, syrups and unsweetened fruit juices. Under this definition lactose when naturally present in milk and milk products is excluded.



# 1. Executive Summary

## Background

The FSS dietary surveillance programme includes a component of tracking retail food and drink purchases into the home in Scotland using market research data from Kantar Worldpanel (KWP). The aims of this report are to provide trends in the purchase of nutrients relevant to dietary health (calories, fat, saturated fat, total sugars and sodium) and of particular food and drink categories (including 'healthier' and 'less healthy' items), and an analysis of purchasing patterns in relation to area deprivation Scottish Index of Multiple Deprivation (SIMD), price promotions and season.

## Methods

The analysis of trends in the purchase of food and drink categories was carried out using the data collected from KWP panelists in Scotland, who continuously scan the barcodes of all retail purchases brought back into the home. Data on volume purchased were combined with the labelling information to estimate the take home calorie and nutrient purchase.

## Results

### *Purchasing trends*

- There was little change in the total volumes of food and drink, calories and nutrients purchased between 2010 and September 2015.
- Total salt purchased decreased up to 2013, but has remained fairly static since then.
- Discretionary foods such as biscuits, cakes and pastries, and confectionery were all present within the top 10 food and drink categories contributing to calories, sugars and fats purchased into the home. Excluding fruit and table sugar, regular soft drinks were the top contributor to total sugar purchase.
- There were decreases in the volume purchased for regular soft drinks (-21%), savoury pies and pastries (-17%), bread (-12%) and potatoes (-28%). However, despite reductions in fats from savoury pies and pastries and sausages, and a considerable reduction in sugars from regular soft drinks, overall, the total purchase of sugars and fats in Scotland has not decreased. These results suggest that fats and sugars are being recycled into different products within the retail offering and an overall reduction in purchase of fats and sugars will require consistent reductions across all food and drink categories.

### *Purchase by Scottish Index of Multiple Deprivation*

- Households in the most deprived areas purchased a higher proportion of their total calories from confectionery, regular soft drinks and bread compared to the least deprived areas. Those from the least deprived areas purchased a higher proportion of their total calories from cakes and pastries, plain starchy carbohydrates, oil-rich fish and fruit and vegetables compared to those from the most deprived areas.
- In relation to deprivation, the food and drink purchasing patterns presented here are very similar to patterns of food and drink intake from the FSS dietary monitoring programme.



## Price promotion

- Around 40% of all take home food and drink is purchased on price promotion in Scotland.
- Discretionary, less healthy food and drink categories were more frequently purchased on promotion (around 50% of purchase) compared to the staple, healthier categories (around 30% of purchase).

## Seasonal purchase

- There were considerable fluctuations in purchase of some discretionary categories particularly around Christmas and Easter. Average confectionery purchase varied by as much as 100% between four-week periods.
- Compared with the rest of the year purchase of savoury snacks, cakes and pastries and confectionery increased by 20%, 32% and 54% respectively in the 12 weeks leading up to Christmas, while the average food and drink increase was 10%.
- Additional purchase of confectionery, crisps, savoury snacks, biscuits, cakes, pastries and regular soft drinks over a sustained 12-week period including Christmas equates to about 9000 kcals which, if consumed, is equivalent to an average weight gain of around 1 kg for everyone in Scotland.<sup>a</sup>

## Seasonal price promotion

- Overall, there was little increase in the proportion of discretionary foods purchased on promotion over the festive period (with the exception of confectionery and savoury snacks). The seasonal uplift in the purchase of some discretionary foods may be influenced more by other types of marketing strategy, such as product placement and other advertising and promotional activities.

## Conclusion

- There was little evidence in this report to suggest that purchasing patterns have changed much since 2010, particularly in terms of calories and nutrients, with the exception of a reduction in sodium purchase.
- This report highlights issues around the balance in the promotion of less healthy foods and drinks and the uplift in seasonal purchase which could have major implications for population weight gain and risk of diet-related diseases.
- In conclusion, this report provides up-to-date data on trends and patterns in the purchase and promotion of foods and drinks which can usefully inform future action in Scotland to improve the diet.

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<sup>a</sup> Calculations for the amount of weight gained were obtained from the US Department of Agriculture's body weight planner tool, for a woman aged 50 yrs, with height and weight of 165 cm and 65 kg and a PAL of 1.6: <https://www.supertracker.usda.gov/bwp/index.html>. This tool was developed based upon: Hall et al. (2011). Quantification of the effect of energy imbalance on bodyweight. *The Lancet*, 378(9793), pp. 826–837: [http://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736\(11\)60812-X.pdf](http://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736(11)60812-X.pdf).

If the older, more commonly used '3500 kcal per pound' rule was used, which doesn't account for the dynamic physiological adaptations to altered body weight that lead to changes of both the resting metabolic rate as well as the energy cost of physical activity, this would result in an increase in body weight of around 1.2 kg (Hall KD (2008). What is the required energy deficit per unit weight loss?: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2376744/>)



## 2. Background

Food Standards Scotland (FSS) has a surveillance programme in place to monitor the diet of the Scottish population and the progress towards the Scottish Dietary Goals. The FSS dietary surveillance programme monitors population **dietary intakes** primarily using secondary analysis of the Living Costs and Food Survey (LCF)<sup>1</sup> with additional de novo surveys of children's intakes<sup>2,3</sup> and urinary surveys of population salt intakes.<sup>4,5</sup>

The FSS dietary surveillance programme has expanded to track **retail** food and drink **purchase** in Scotland **into the home** using market research data from Kantar Worldpanel (KWP).<sup>6</sup> Data from KWP has also been used to monitor progress on salt reduction of manufactured products in Scotland for products purchased into the home.<sup>7</sup>

KWP collects data on purchases into the home in Scotland for all food and drink from a large household consumer panel on an ongoing basis. Nutritional composition data from food labels is also regularly collated. This allows assessment of changes over time in the purchase volume and related nutritional composition of individual food and drink categories including those on promotion, and assessment of the total purchase of calories, fats, sugar and salt into the home in Scotland.

Data from KWP on purchasing and promotions in Scotland was previously used to inform the development of *Supporting Healthy Choices: A Framework for Voluntary Action* (SHC) published by the Scottish Government in June 2014, which includes a background evidence paper containing KWP data on purchases and promotions.<sup>8</sup> The KWP data also provided evidence on the main contributors to energy, fats and sugars which was based on intake data. The aim of *Supporting Healthy Choices* was to improve Scotland's dietary health by reducing levels of energy, fats and sugars in the food chain. Within the *Supporting Healthy Choices* background paper there was a commitment by FSS to monitor trends in purchase and promotions using KWP data.<sup>9</sup>

This report provides the main findings on purchasing and promotions in Scotland of relevance to dietary health in Scotland, including the relative contribution that particular food and drink categories highlighted within *Supporting Healthy Choices* make to the purchase of calories, fat, saturated fat, total sugars and sodium. The aim is to regularly publish updates of these data so that changes can be tracked over time.

Health inequalities exist in terms of dietary intake, prevalence of obesity and diet-related disease. Purchasing and promotions data by area deprivation (Scottish Index of Multiple Deprivation, SIMD) are also provided by KWP, and the main findings of interest are included in this report.



# 3. Aims

The aims of this report were to present:

- trends (2010-15) in the purchase of total calories and nutrients (total sugar, total fat, saturated fat, fibre and salt);
- the top 20 categories contributing to total calories, total fat, saturated fat and total sugar purchase;
- trends (2010-15) in the purchase of the main food and drink categories identified within *Supporting Healthy Choices*; and
- purchase patterns in relation to:
  - area deprivation (Scottish Index of Multiple Deprivation, SIMD)
  - price promotions
  - season.



# 4. Methodology

KWP collects data on purchases into the home in Scotland for all food and drink from a large GB household consumer panel of around 30,000 panellists on an ongoing basis. Nutritional composition data from food labels is also collected and regularly updated. This allows assessment of changes over time in the purchase volume and related nutritional composition of individual food and drink categories including those on promotion, and assessment of the total purchase of calories, fats, sugar and salt into the home in Scotland.

The data from KWP presented in this report includes purchase data only and the data cannot be used to estimate food and drink intakes because what is purchased does not equate to consumption as the amount of waste cannot be accurately quantified. For example, losses during preparation and cooking and edible food which is thrown away, is not captured.

Data used within this analysis was collected between January 2010 and September 2015,<sup>b</sup> from around 2,780 Scottish household panellists each year. All food and drink products (around 100,000) purchased are categorised into around 340 sub-categories which form the basis of the 73 categories used in this analysis (see Annexe 1). Discussions took place between FSS and KWP to agree the placing of some sub-categories to ensure the final agreed main 73 categories were defined so as to be as relevant as possible for monitoring purchase in relation to dietary health.

Data on calories, protein, total carbohydrate, total sugar, total fat, saturated fat, dietary fibre and salt is collected from package labels and updated every six months. Data on content from the label (defined as sourced from fieldwork, product samples and product packaging images and those copied across from similar products), were available for over 75% of products with 25% imputed from similar products. In some cases for non-bar-coded products where package label data was not found (around 5% of products) published values from generic data derived from national food composition tables was used. For around 95% of products the data were either collected in the field within the previous year or imputed from these field values. For some product categories (bread, rolls, morning goods, cakes, and pastries) calorie and nutrient content values were provided per serving rather than per 100 g. The strength of using the nutritional information from product packaging is that it is frequently updated by KWP and is likely to reflect any recent changes in the household product mix and in the nutritional composition of the products. It should be noted that there may be some inaccuracies in label information which can differ by up to 20% compared to analysed values.<sup>c</sup> Nutritional information from discounter supermarkets such as Lidl and Aldi is included, although nutrition information data is collected less frequently from these stores.

<sup>b</sup> Data collection periods are January – January each year, with the exception of the 2014/15 data which covers data from September – September, and includes data from the previous data collection period.

<sup>c</sup> [http://ec.europa.eu/food/safety/docs/labelling\\_nutrition-vitamins\\_minerals-guidance\\_tolerances\\_1212\\_en.pdf](http://ec.europa.eu/food/safety/docs/labelling_nutrition-vitamins_minerals-guidance_tolerances_1212_en.pdf)



Purchase volume data based on the consumer panel records, combined with the labelling information, was used to estimate the calorie, total fat, saturated fat and sugar contribution for all categories and in relation to total purchase. Annual data on purchases in Scotland per year was also converted to daily *per capita* purchases, taking account of changes in the size of the Scotland population. No weighting was done for changes to the profile of the population in terms of age and sex. The *per capita* data is not meant to be a measure of individual purchase, but provides a way of describing the data using a more understandable scale.

Trends in the purchase of the main food and drink categories identified within SHC were calculated including soft drinks, cakes and pastries, biscuits and confectionery, puddings and desserts, processed meat (savory pies, pastries and sausages), crisps and savory snacks, milk and cheese, fruit and vegetables, oil-rich fish, plain starchy carbohydrates (excluding bread and potatoes), plain bread and potatoes. Annual data on purchases by households was also converted to daily *per capita* purchases, to take account of changes in the size of the Scotland population.

Price promotion data was also collected by panellists and has also been assessed. Types of promotional data collected by KWP include 'Temporary Price Reduction' (TPR) (e.g. 10% off), 'Y for X', e.g. Buy two for £2, 'MultiBuy', e.g. Buy One Get One Free (BOGOF), three for two, and 'Other Promotion' which includes Extra Free, Meal Deal, Gifts, Samples etc. As food and drink purchase is driven by promotional activity. This data has been used to assess and monitor price promotion activity, in relation to high-fat, high-sugar food in particular.

Additional data on purchase and promotions for some key categories of interest provided in four week blocks over two years between week ending 13 October 2013 and week ending 13 September 2015 were used to assess the seasonal effects on purchase into the home. Four-weekly data on calories purchased has been presented to show trends in purchase and promotion of total food and drinks, plain bread, plain vegetables, plain fruit, plain oily and white fish, plain starchy carbohydrates, total take home confectionery, total biscuits, regular soft drinks, total cakes and pastries and take home savouries.



The purchase data from Kantar Worldpanel selected to be presented in this report includes:

- Annual calories, total sugar, total fat, saturated fat, fibre and salt purchased into the home in Scotland between 2010 and September 2015.
- The top 20 foods and drinks categories which contribute to calories and the nutrients of public health concern in Scotland for the full year ending September 2015.
- Annual purchase into the home in Scotland between 2010 and September 2015 of total food and drink and for individual categories including:
  - a) Soft drinks
  - b) Cakes and pastries
  - c) Biscuits and confectionery
  - d) Puddings and desserts
  - e) Processed meat (savory pies, pastries and sausages)
  - f) Crisps and savory snacks
  - g) Milk and cheese
  - h) Fruit and vegetables
  - i) Oil-rich fish
  - j) Plain starchy carbohydrates (excluding bread and potatoes)
  - k) Plain bread
  - l) Potatoes
- Purchase by the Social Index of Multiple Deprivation (SIMD) for the full year ending September 2015.
- Purchase in relation to price promotions only, not including other marketing strategies such as product placement, for the full year ending September 2015.
- Seasonal purchase and seasonal price promotions including data from 13 October 2013 to 13 September 2015.



# 5. Volumes of nutrients purchased into the home

Table 1a presents household purchase data from KWP from 2010 to the end of September 2015 and shows little change since 2010 in total calories, total sugar, total fat, saturated fat, and fibre purchased into the home (see Table 1a). Total purchase of sodium<sup>d</sup> decreased considerably, particularly between 2010 and up to January 2013, but has remained relatively stable since.

**Table 1a:**

Annual take home purchases of energy, sugars, fats, sodium and fibre in Scotland (2010-14/15)

Expressed in thousands	2010 (52 w/e 9 Jan 2011)	2011 (52 w/e 8 Jan 2012)	2012 (52 w/e 6 Jan 2013)	2013 (52 w/e 5 Jan 2014)	2014 (52 w/e 4 Jan 2015)	2014/15 (52 w/e 13 Sept 2015)
<b>Total kilocalories [kcal]</b>	4,124,169,731	4,044,755,308	4,079,449,120	4,035,283,779	4,072,534,308	4,068,704,995
<b>Total sugar [kg]<sup>e</sup></b>	224,182	225,435	225,345	225,400	227,386	226,053
<b>Total fat [kg]</b>	163,882	160,324	161,584	160,372	161,367	161,910
<b>Saturated fat [kg]</b>	61,331	61,727	62,393	62,570	62,298	62,359
<b>Sodium [kg],<sup>f</sup> incl. from table salt</b>	7,209	5,923	5,587	5,408	5,321	5,377
<b>Salt (kg)</b>	18,023	14,808	13,968	13,520	13,303	13,443
<b>Sodium [kg],<sup>b</sup> excl. from table salt</b>	5,823	5,100	4,915	4,795	4,707	4,719
<b>Salt (kg)</b>	14,558	12,750	12,288	11,988	11,768	11,798
<b>Fibre (kg)</b>	33,255	33,550	33,419	32,837	33,332	34,196

<sup>d</sup> Grams of sodium can be converted to salt by multiplying by 2.5.

<sup>e</sup> Total sugars; includes sugars within whole fruit and vegetables and milk sugars.

<sup>f</sup> Note: table salt can be used for purposes other than consumption, for example adding salt to icy paths.



Table 1b uses the same data above and converts it into the more accessible format of *per capita* per day for Scotland. This includes what is purchased for household consumption including children and takes into account the increasing population, but does not include any population weighting, for example, by age group and gender.

**Table 1b:**

Annual take home purchases of energy, sugars, fats, sodium and fibre *per capita*, per day in Scotland (2010-14/15)

	2010 (52 w/e 9 Jan 2011)	2011 (52 w/e 8 Jan 2012)	2012 (52 w/e 6 Jan 2013)	2013 (52 w/e 5 Jan 2014)	2014 (52 w/e 4 Jan 2015)	2014/15 (52 w/e 13 Sept 2015)
<b>Total kilocalories [kcal]</b>	2,147	2,091	2,103	2,075	2,087	2,078
<b>Total sugar [g]<sup>g</sup></b>	117	117	116	116	117	115
<b>Total fat [g]</b>	85	83	83	82	83	83
<b>Saturated fat [g]</b>	32	32	32	32	32	32
<b>Sodium [g]<sup>h</sup>, incl. from table salt</b>	3.8	3.1	2.9	2.8	2.7	2.7
<b>Salt (g)</b>	9.5	7.8	7.3	7.0	6.8	6.8
<b>Sodium [g]<sup>h</sup>, excl. from table salt</b>	3.0	2.7	2.6	2.5	2.4	2.4
<b>Salt (g)</b>	7.5	6.8	6.5	6.3	6.0	6.0
<b>Fibre (g)</b>	17	17	17	17	17	17

<sup>g</sup> Total sugar; includes sugar within whole fruit and vegetables and milk sugars.

<sup>h</sup> Note: table salt can be used for purposes other than consumption, for example adding salt to icy paths.



# 6. Top 20 foods and drinks categories contributing to total calories, total fat, saturated fat and total sugars

Tables 2, 3 and 4 show the relative contribution that the categories of food and drink make to total purchase of calories, total fat, saturated fat and total sugars. A list of all of the food and drink categories used in the analysis is provided in Annexe 1. The definitions of the top 20 contributors to purchase of energy, fats and sugars are provided in Annexe 2.

Biscuits, cakes and pastries, confectionery, crisps and savoury snacks and regular soft drinks are all within the top 20 food and drink categories contributing to total calorie purchase into the home, together contributing over 20% to overall calorie purchase (21.6%). Other top contributors are milk and cheese (8.8%), red meat and products (5.8%), yellow fats (5.4%) and savoury home cooking (4.4%) (see Table 2).

**Table 2:**

Top 20 foods and drinks categories contributing to calorie purchase (2014/15)

Category	Percentage of total energy purchase
Total bread and morning goods	9.9%
Total biscuits	6.5%
Total red meat and products	5.8%
Total milk	5.8%
Yellow fats	5.4%
Total take home confectionery	5.0%
Savoury home cooking (excl. salt) <sup>i</sup>	4.4%
Total alcohol	4.2%
Total cakes and pastries	3.9%
Total breakfast cereals (incl. rolled oats and oatmeal)	3.7%
Crisps and savoury snacks	3.4%
Total fruit	3.3%
Total cheese	3.0%
Regular soft drinks	2.8%
Table sugar	2.6%
Total plain and sweet potatoes	2.4%
Total poultry and products	2.4%
Plain starchy carbohydrates	2.1%
Ready meals	2.0%
Total vegetables and salad leaves	2.0%

<sup>i</sup> Savoury home cooking includes cooking oils.



The biggest contributors to total fat purchase (with the exception of yellow fats<sup>j</sup>) include biscuits, cakes, pastries, confectionery, and crisps and savoury snacks (20.8%), milk and cheese (12.3%), red meat and products (9.5%), savoury home cooking<sup>b</sup> (8.2%) and bread and morning goods (3.4%). Similarly, most of these categories are also top contributors to saturated fat purchase.

### Table 3:

Top 20 foods and drinks categories contributing to total fat purchase (2014/15)

Category	Percentage of total fat purchase
Yellow fats	15.0%
Total red meat and products	9.5%
Savoury home cooking (excl. salt) <sup>k</sup>	8.2%
Total biscuits	7.0%
Total milk	6.2%
Total cheese	6.1%
Crisps and savoury snacks	5.1%
Total take home confectionery	5.0%
Total cheddar cheese	4.1%
Total cakes and pastries	3.7%
Total bread and morning goods	3.4%
Total poultry and products	2.7%
Savoury pies and pasties	2.5%
Ready meals	2.1%
Total pickle, table sauce and condiment <sup>l</sup>	1.8%
Total cream	1.6%
Frozen processed potatoes (incl. chips)	1.5%
Total fish	1.3%
Total puddings and desserts	1.3%
Ice cream	1.2%

<sup>j</sup> Yellow fats include butter, spreads, lard and dripping.

<sup>k</sup> Savoury home cooking includes cooking oils.

<sup>l</sup> Includes mayonnaise and other dressings.



**Table 4:**

Top 20 foods and drinks categories contributing to saturated fat purchase (2014/15)

Category	Percentage of saturated fat purchase
Yellow fats	14.8%
Total red meat and products	10.0%
Total cheese	9.9%
Total milk	9.3%
Total biscuits	8.8%
Total take home confectionery	7.3%
Total cakes and pastries	3.7%
Savoury home cooking (excl. salt)	3.0%
Total sausages	2.9%
Savoury pies and pasties	2.8%
Total cream	2.6%
Total bread and morning goods	2.4%
Ready meals	2.2%
Total puddings and desserts	1.9%
Ice cream	1.9%
Total poultry and products	1.8%
Crisps and savoury snacks	1.8%
Sweet home cooking (excl. sugar)	1.3%
Total yoghurt	1.3%
Edible ices/Frozen dairy desserts excl. ice cream	1%



The biggest contributors to total sugars purchased in Scotland, excluding fruit and vegetables, and milk, include confectionery, regular soft drinks, biscuits, cakes and pastries and table sugar; combined, these products contribute around 45% to sugar purchase in Scotland.

**Table 5:**

Top 20 foods and drinks categories contributing to total sugar purchase (2014/15)

Category	Percentage of total sugar purchase
Total fruit	12.3%
Table sugar	11.5%
Regular soft drinks	11.2%
Total take home confectionery	10.7%
Total milk	9.2%
Total biscuits	6.8%
Sweet home cooking (excl. sugar)	4.7%
Total cakes and pastries	4.9%
Total breakfast cereals (incl. rolled oats and oatmeal)	3.3%
Total vegetables and salad leaves	3.0%
Pure fruit juice	2.9%
Total yoghurt	2.4%
Total puddings and desserts	2.2%
Breakfast spreads	2.0%
Ice cream	1.8%
Total bread and morning goods	1.7%
Total alcohol	1.7%
Total pickle, table sauce and condiment	1.5%
Savoury home cooking (excl. salt)	1.2%
Edible ices/Frozen dairy desserts excl. ice cream	0.8%

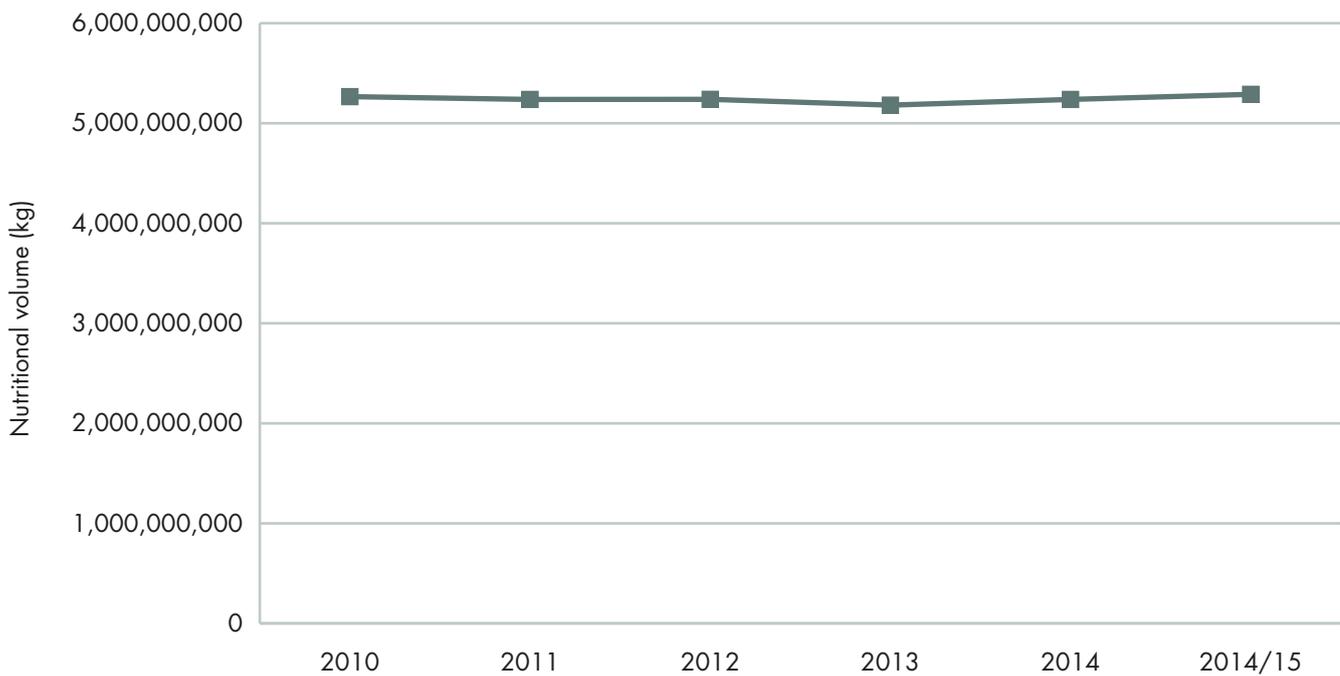


# 7. Annual purchase into the home in Scotland of food and drink categories

Since 2010, total food and drink purchase has remained above 5 million tonnes annually. Overall, purchase has changed very little (Figure 1).

**Figure 1:**

Annual purchase of total food and drink into the home in Scotland



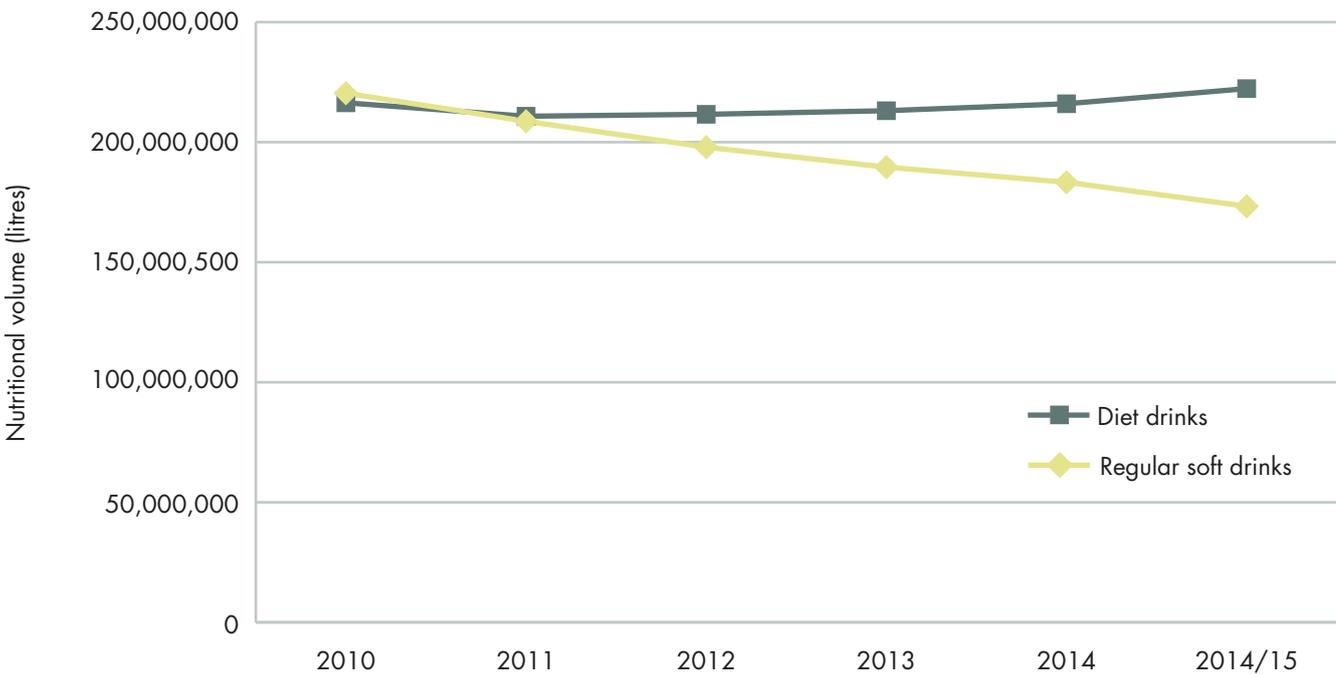
## Food categories of interest

Sugar-containing soft drinks are among the top 20 contributors to calories (2.8%) and total sugar purchase in the Scottish take home shopping basket contributing 11.2%. Take home confectionery, biscuits, cakes and pastries together were significant contributors to calories (15.4%), fat (15.7%), saturated fat (19.8%) and total sugars (22.4%) (see Tables 2-5).

### a) Soft drinks

While the purchase of diet soft drinks in Scotland has remained relatively stable, purchase of regular soft drinks has declined by 21% since 2010 to 173 million litres for the full year ending September 2015 (Figure 2).

**Figure 2:**  
Annual purchase of soft drinks into the home in Scotland

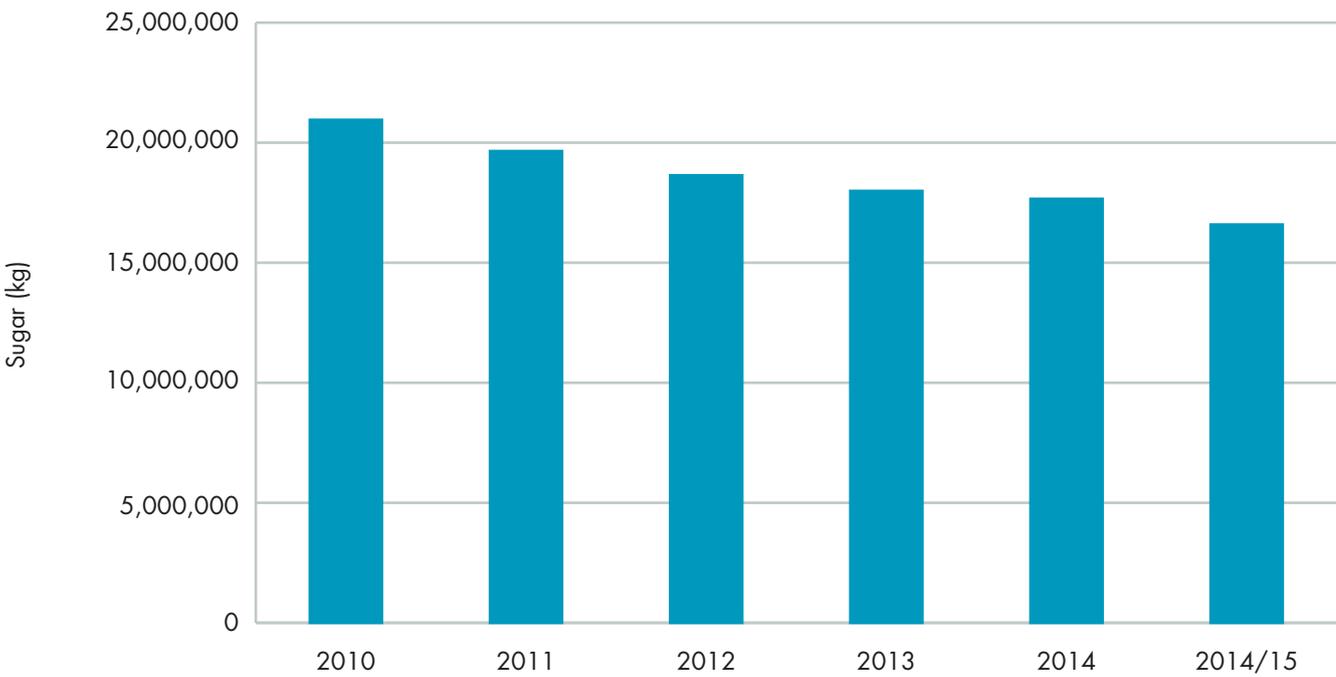


This decrease in purchase contributes to a decline in take home sugar obtained from the purchase of regular soft drinks (Figure 3). This appears to mirror the reduction in volumes purchased, rather than being related to reformulation.



**Figure 3:**

Annual purchase of total sugar (kg) into the home from regular soft drinks

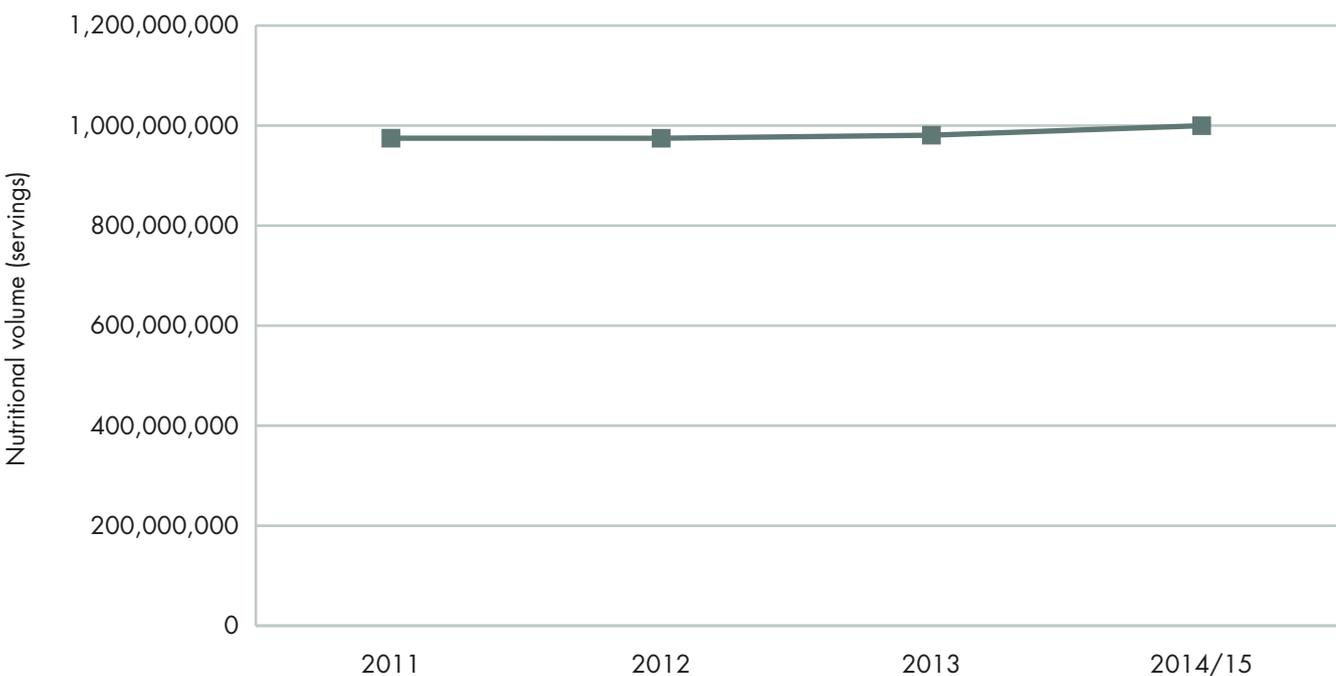


## b) Cakes and pastries

Figure 4 shows that there has been little change in the total volume of ambient cakes and pastries purchased between 2011 and the end of September 2015.<sup>m</sup> However, the amount of sugar purchased from cakes and pastries has risen steadily since 2011. The amount of total and saturated fat purchased from cakes and pastries followed a similar pattern (Figure 5), which could suggest a change in the product mix purchased towards higher sugar and/or fat products.

**Figure 4:**

Annual purchase of cakes and pastries into the home in Scotland



<sup>m</sup> KWP has undertaken a major review of the per servings markets, where nutrient data is collected per serving, not per 100 g which affected data prior to 2011 for cakes and pastries. For this reason, data from 2011 onwards has been included in this analysis.



**Figure 5:**

Annual purchase of total fat, saturated fat and sugar (kg) into the home from cakes and pastries

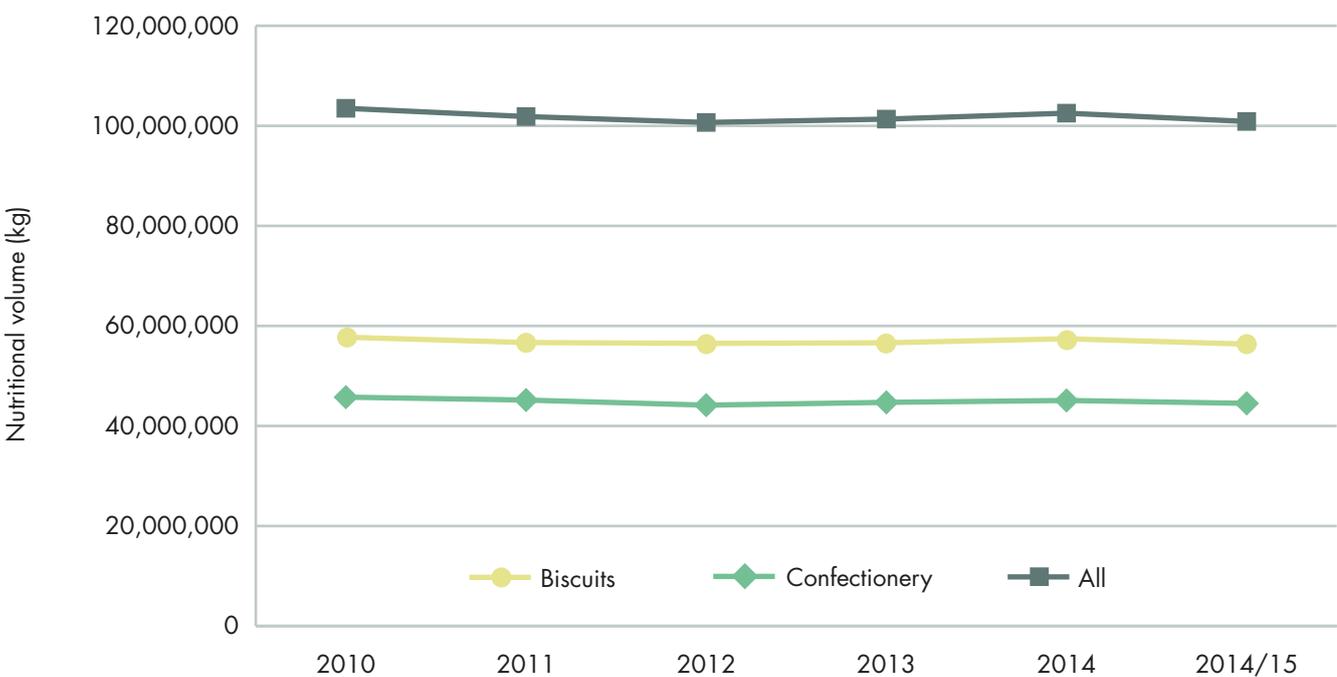


## c) Biscuits and confectionery

Figure 6 shows that there has been little change in the total volume purchased of biscuits and confectionery between 2010 and 2014/15.

**Figure 6:**

Annual purchase of biscuits and confectionery into the home in Scotland



There has been little change in the amounts of total sugar, total fat and saturated fat purchased from biscuits (Figure 7). This is also the case for confectionery, with the exception of sugar which appears to have risen to a high point in 2014 (Figure 8). Similarly to cakes and pastries, this trend could suggest that the product mix of these products is shifting towards higher sugar or fat products.

**Figure 7:**

Annual purchase of total fat, saturated fat and sugar (kg) into the home from total biscuits



**Figure 8:**

Annual purchase of total fat, saturated fat and sugar (kg) into the home from total confectionery

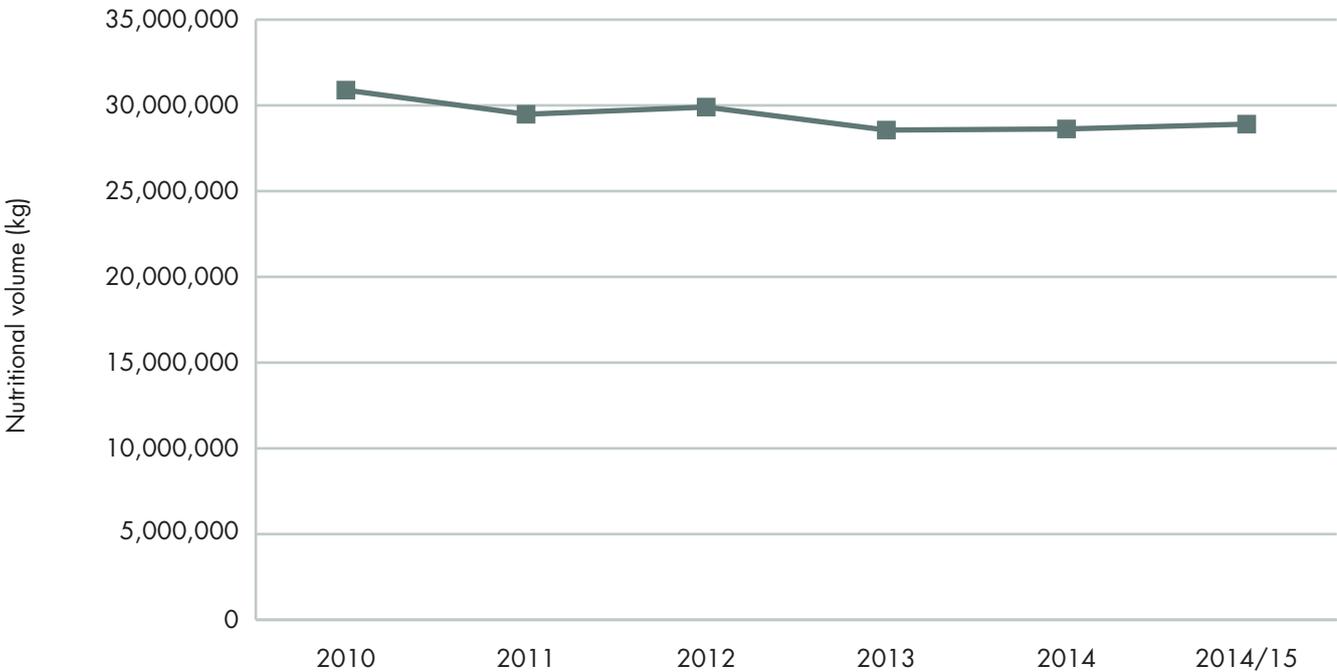


# d) Puddings and desserts

There has been a 7% drop in purchase of puddings and desserts into the home in Scotland, since 2010 (Figure 9). However, while purchase of total and saturated fat from puddings and desserts has remained static during this time period, purchase of total sugar appears to have increased, which could suggest a change in the product mix purchased towards higher sugar and/or fat products.

**Figure 9:**

Annual purchase of puddings and desserts into the home in Scotland



**Figure 10:**

Annual purchase of total fat, saturated fat and sugar (kg) into the home from puddings and desserts



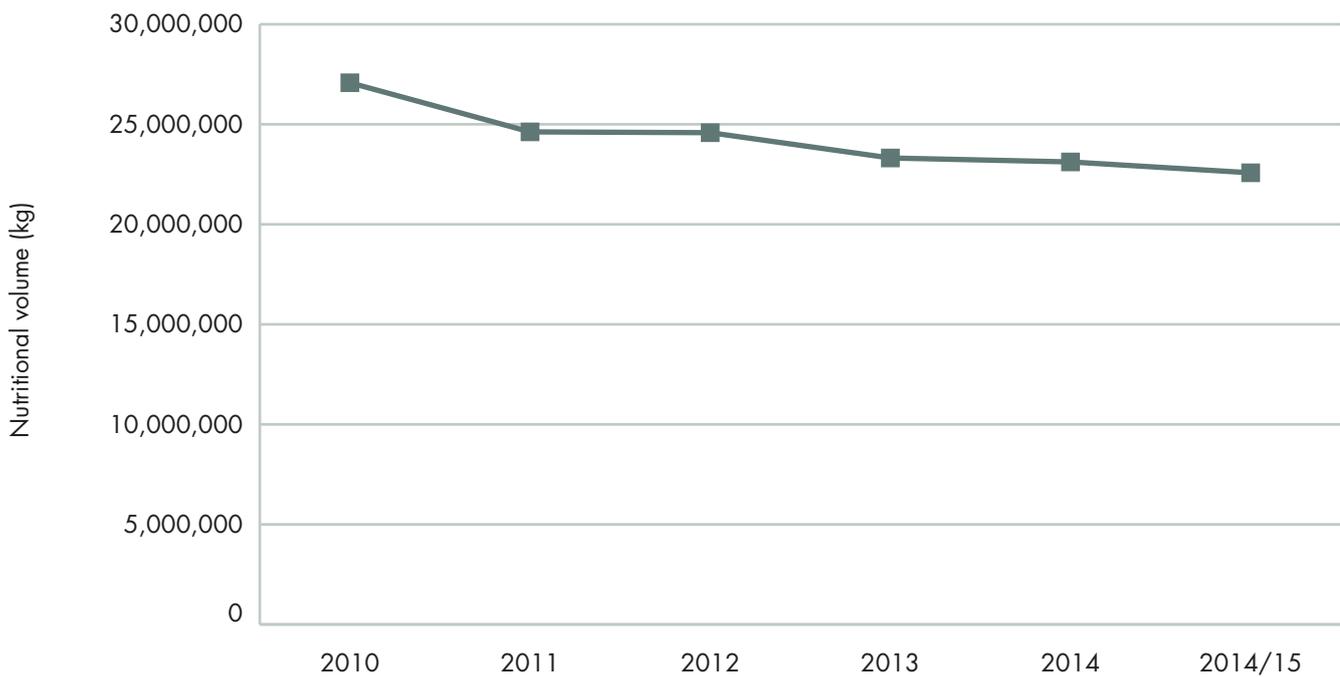
# e) Processed meat (savoury pies, pastries and sausages)

Data above indicates the contribution of processed meat products (including savoury pies and pastries, and sausages) to purchase of fat and saturated fat.

The volume of savoury pies and pastries purchased since 2010 has dropped by almost 17% (Figure 11), in conjunction with apparent reductions in sodium, and saturated fat purchased from these products (Figures 12 and 13).

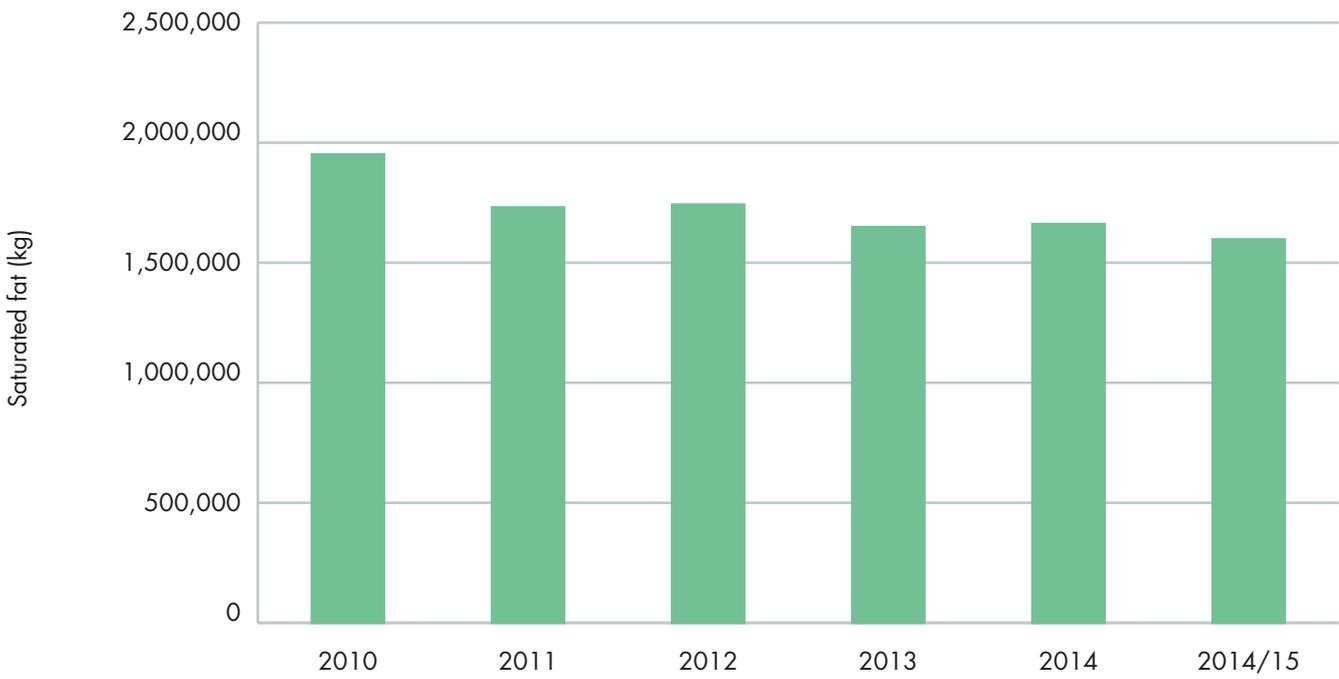
## Figure 11:

Annual purchase of savoury pies and pastries into the home in Scotland



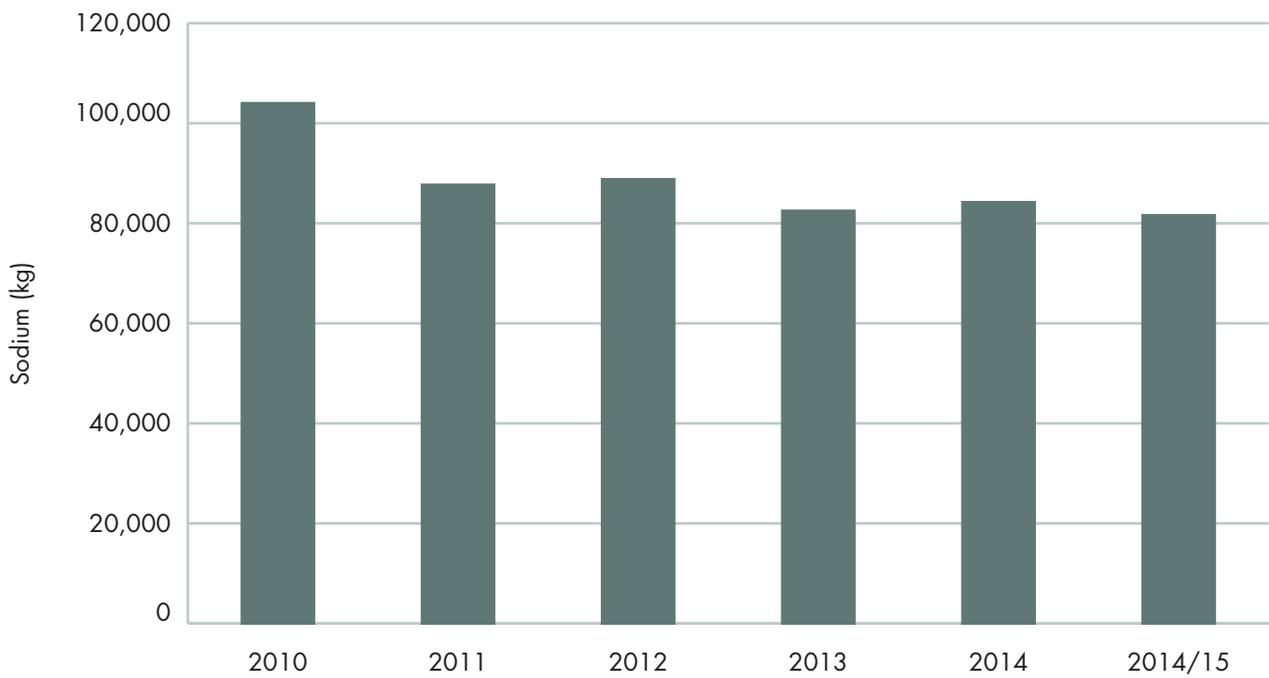
**Figure 12:**

Annual purchase of saturated fat (kg) into the home from savoury pies and pastries



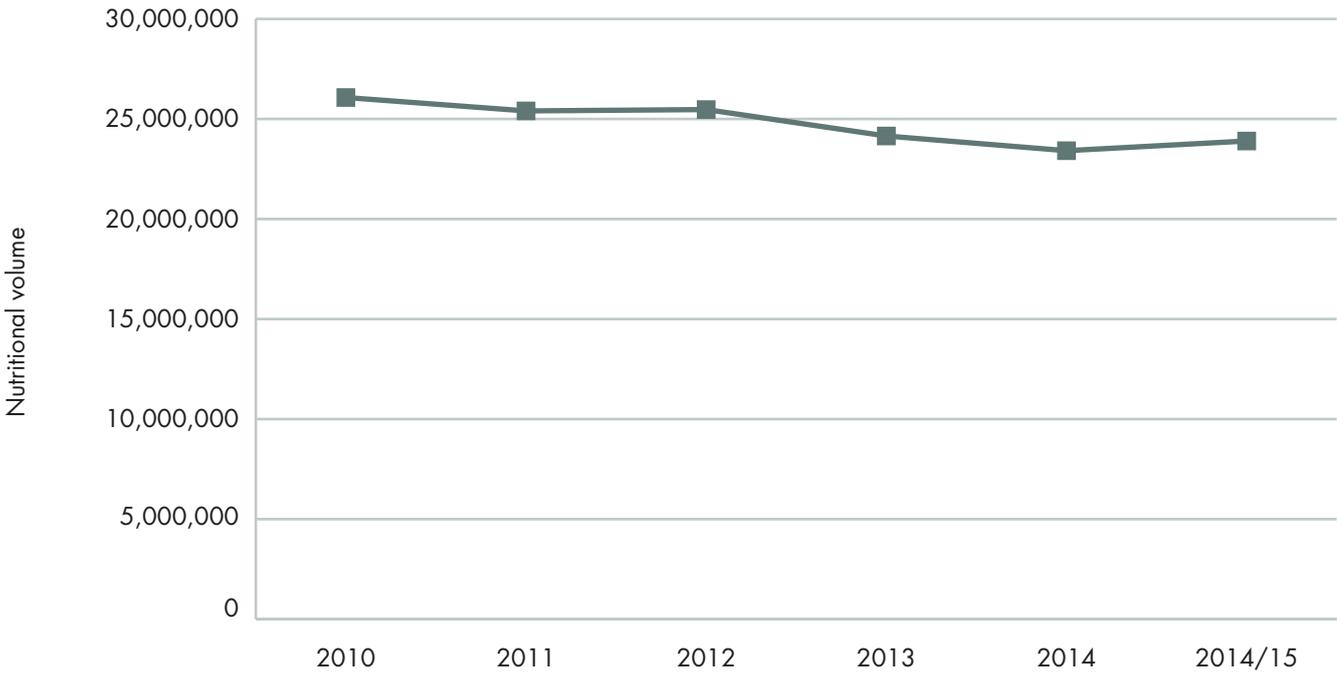
**Figure 13:**

Annual purchase of sodium (kg) into the home from savoury pies and pastries

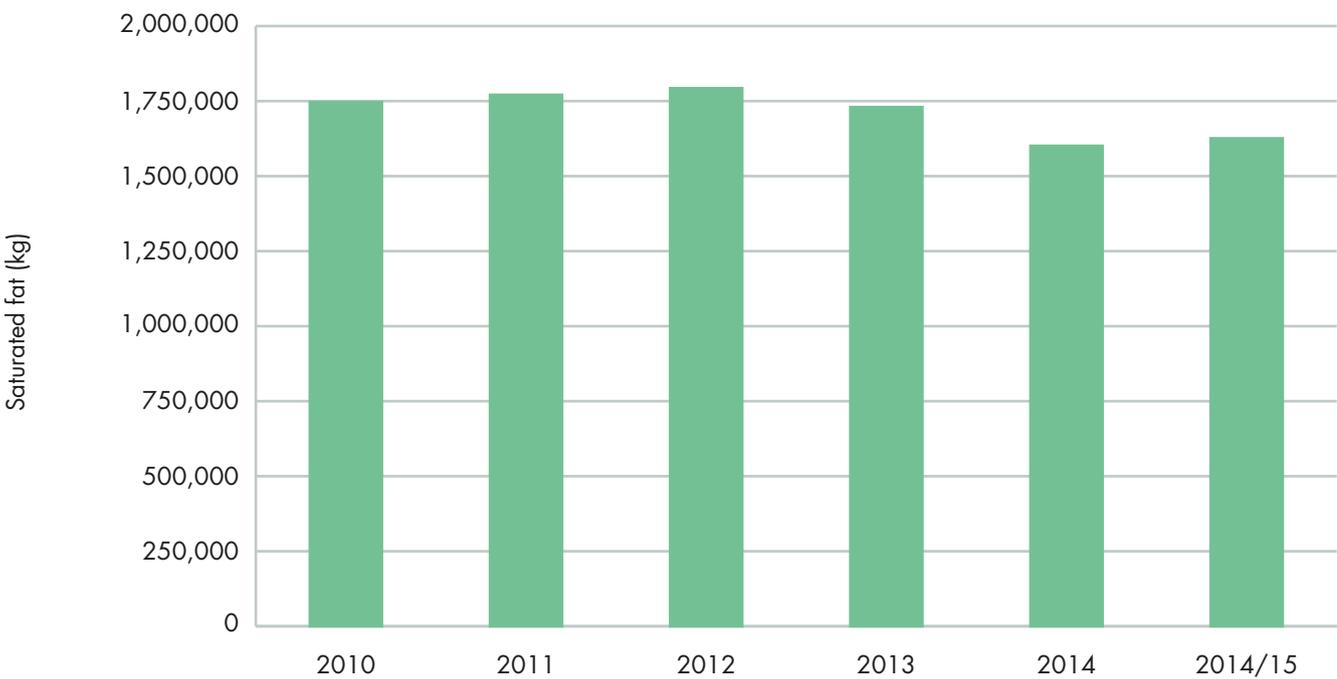


In the full year ending September 2015, there were 8% less sausages being purchased (Figure 14) and an observed fall in sodium and saturated fat being purchased from sausages (Figures 15 and 16).

**Figure 14:**  
Annual purchase of sausages into the home in Scotland

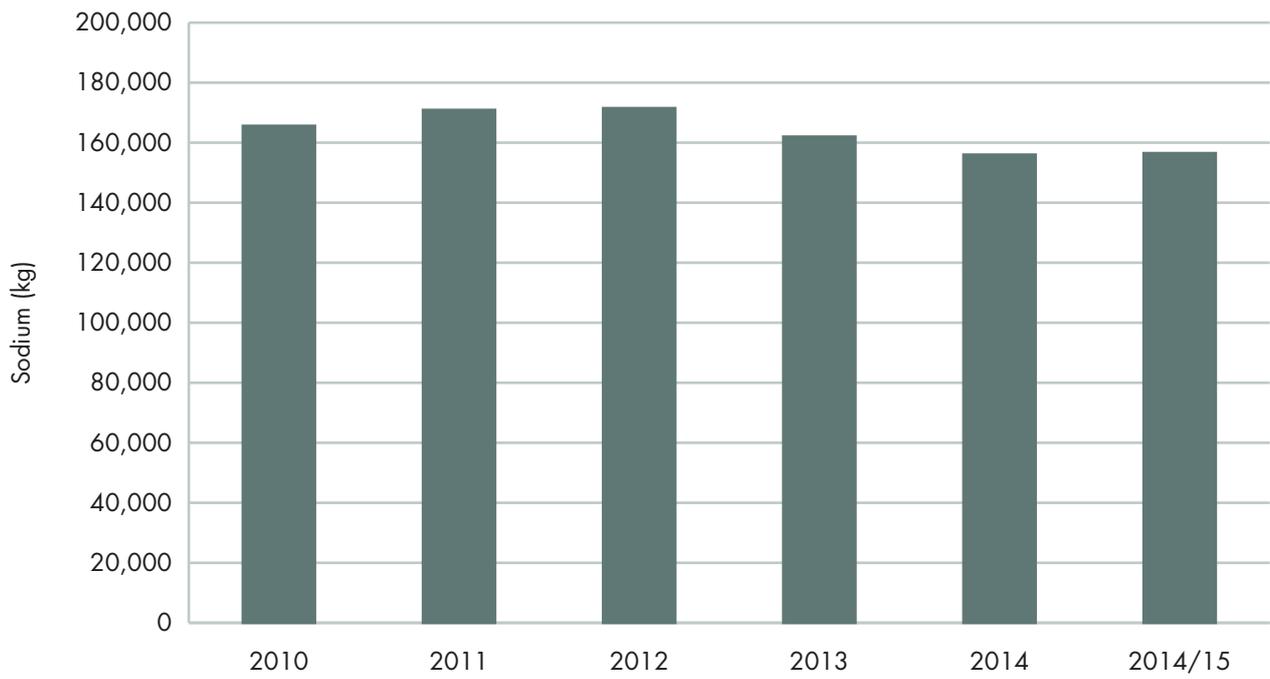


**Figure 15:**  
Annual purchase of saturated fat (kg) into the home from sausages



**Figure 16:**

Annual purchase of sodium (kg) into the home from sausages



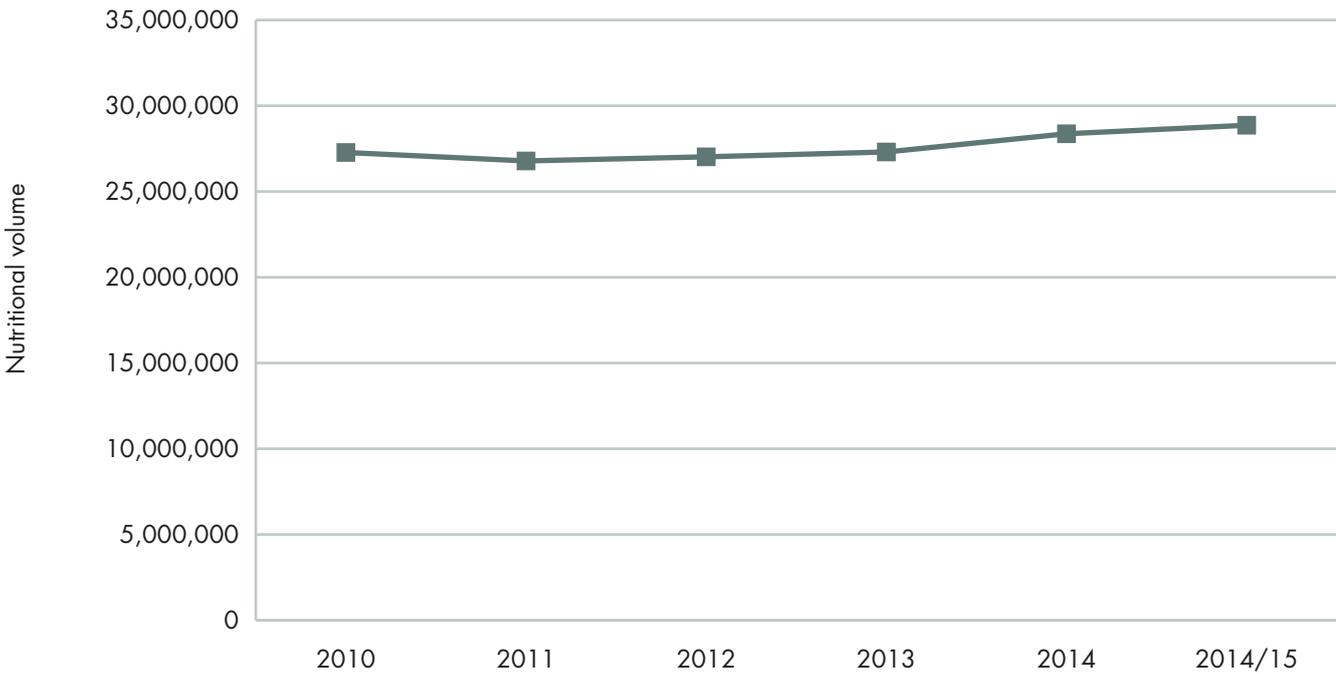
## f) Crisps and savoury snacks

Data above indicates the contribution of crisps and savoury snacks to total fat and calorie purchase. Savoury snacks are also important contributors to salt purchase in Scotland.<sup>18</sup>

The volume of crisps and savoury snacks bought since 2010 has increased slightly (Figure 17). At the same time, there has been a marked reduction in the amount of saturated fat purchased from these products (Figure 18) and a small reduction in salt (Figure 19), potentially due to reformulation within this category.

**Figure 17:**

Annual purchase of crisps and savoury snacks into the home in Scotland



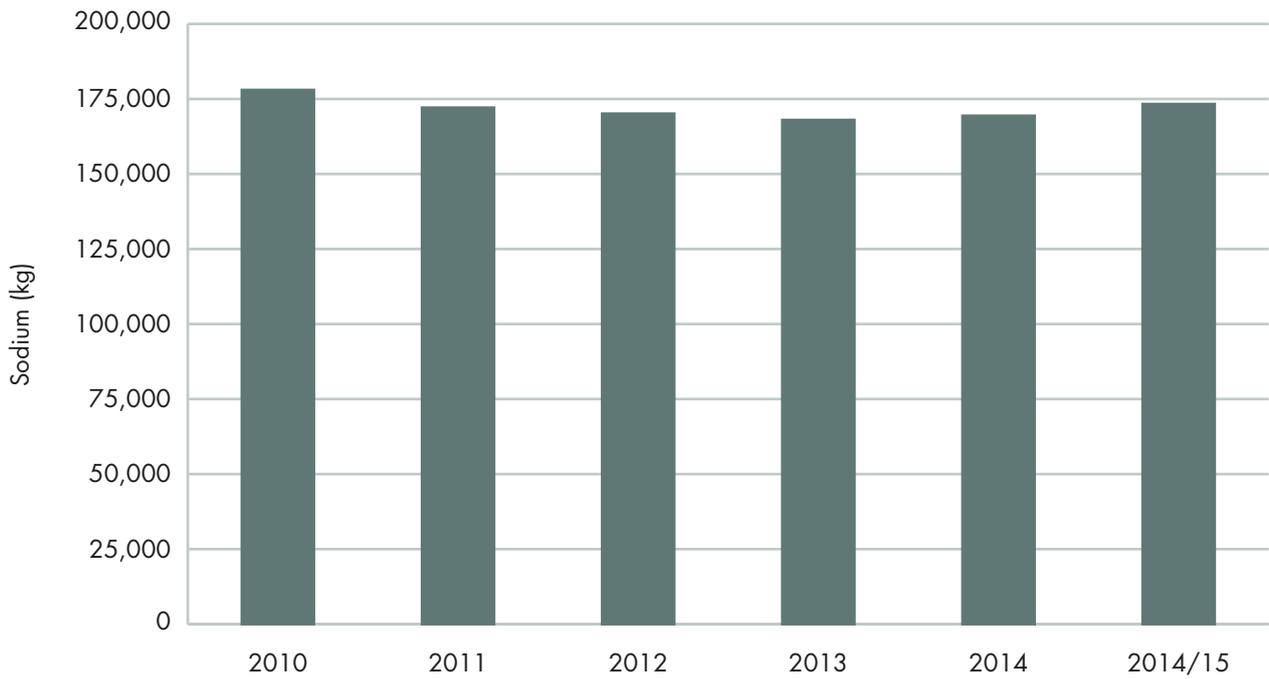
**Figure 18:**

Annual purchase of fat and saturated fat (kg) purchased into the home from crisps and savoury snacks



**Figure 19:**

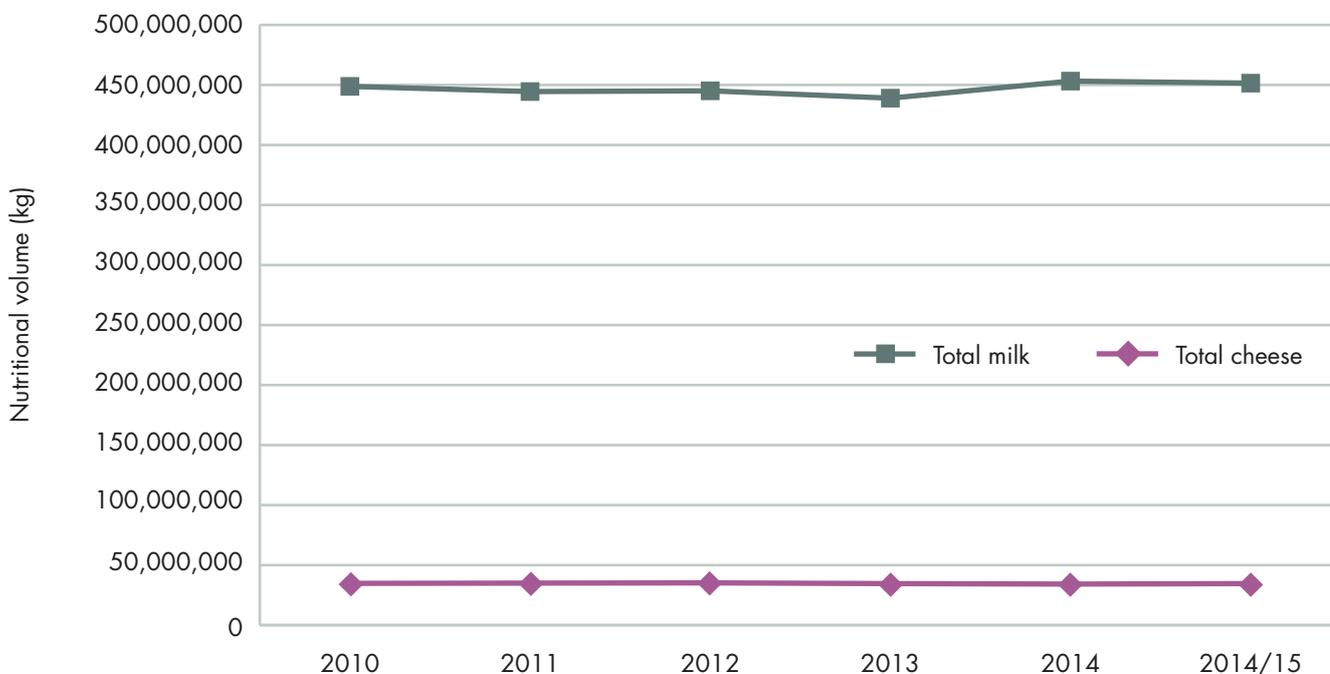
Annual purchase of sodium (kg) purchased into the home from crisps and savoury snacks



# g) Milk and cheese

There has been very little change in the volume purchase of milk and cheese since 2010 (Figure 20). Similarly, purchase of total fat, saturated fat and sodium from cheese has remained unchanged (Figures 21 and 22).<sup>n</sup>

**Figure 20:**  
Annual purchase of milk and cheese into the home in Scotland



**Figure 21:**  
Annual purchase of total fat and saturated fat (kg) purchased into the home from cheese

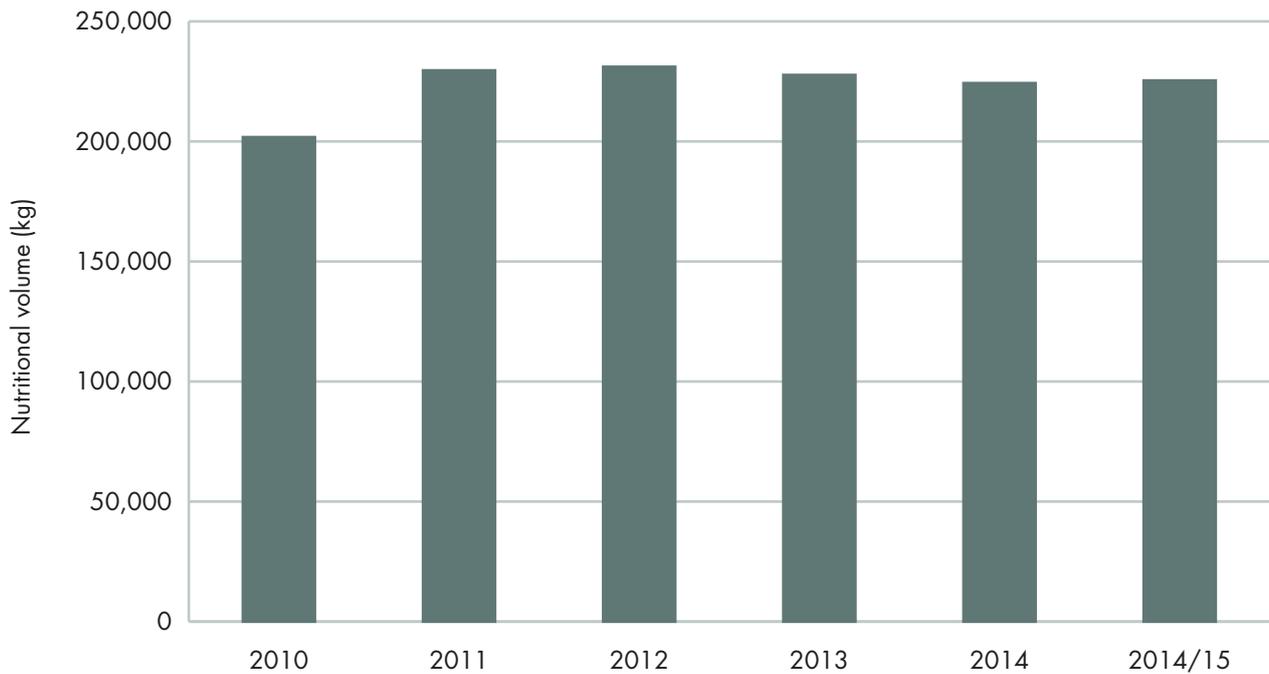


<sup>n</sup> Data for purchase of fats from milk is not shown, due to recent a change in the methodology used to calculate nutrients from milk.



**Figure 22:**

Annual purchase of sodium (kg) purchased into the home from cheese

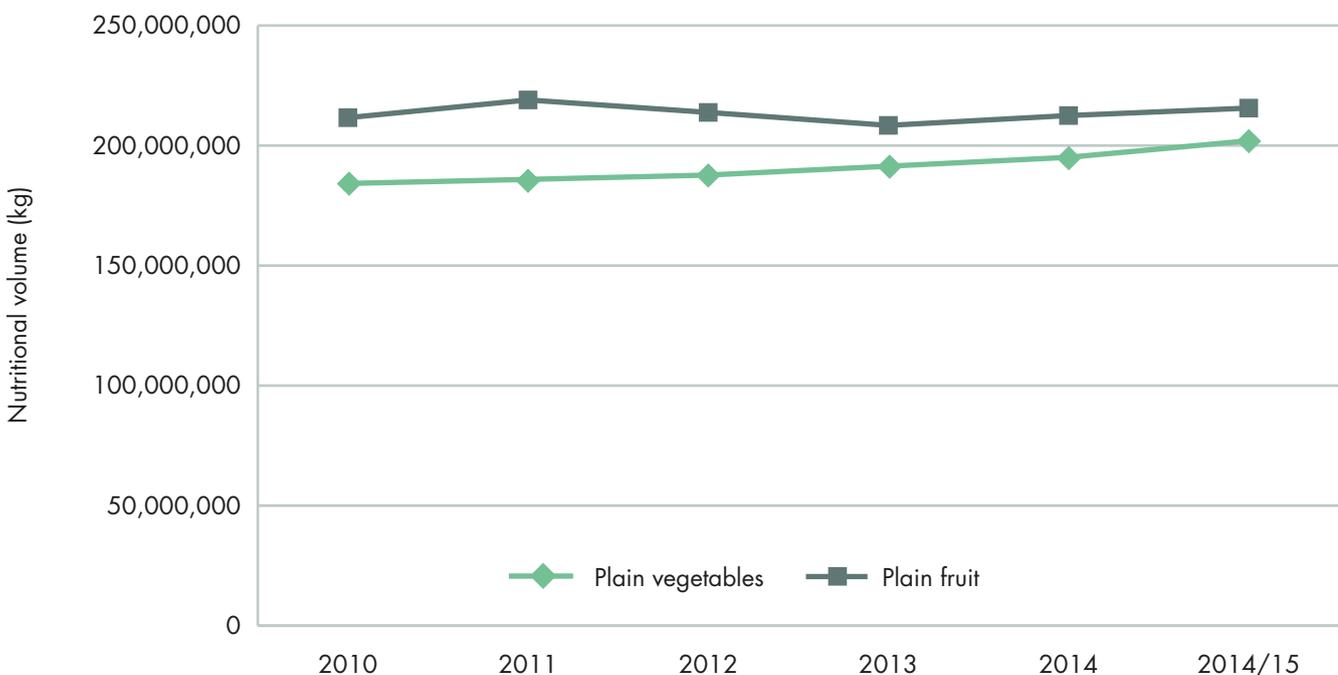


## h) Fruit and vegetables

There has been little change in the volume purchase of plain fruit, but a 10% increase for plain vegetables since 2010 (Figure 23).

**Figure 23:**

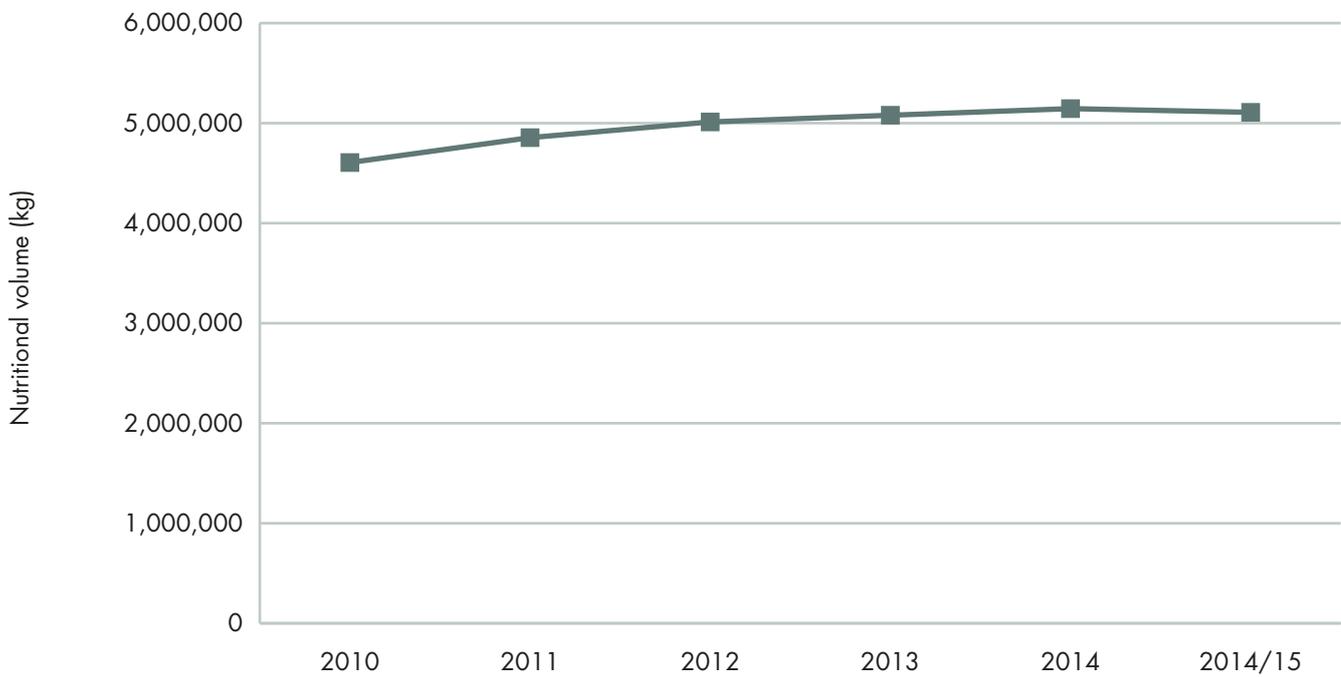
Annual purchase of fruit and vegetables into the home in Scotland



# i) Oil-rich fish

The volume of oil-rich fish purchased has risen by around 10% since 2010 (Figure 24).

**Figure 24:**  
Annual purchase of oil-rich fish into the home in Scotland

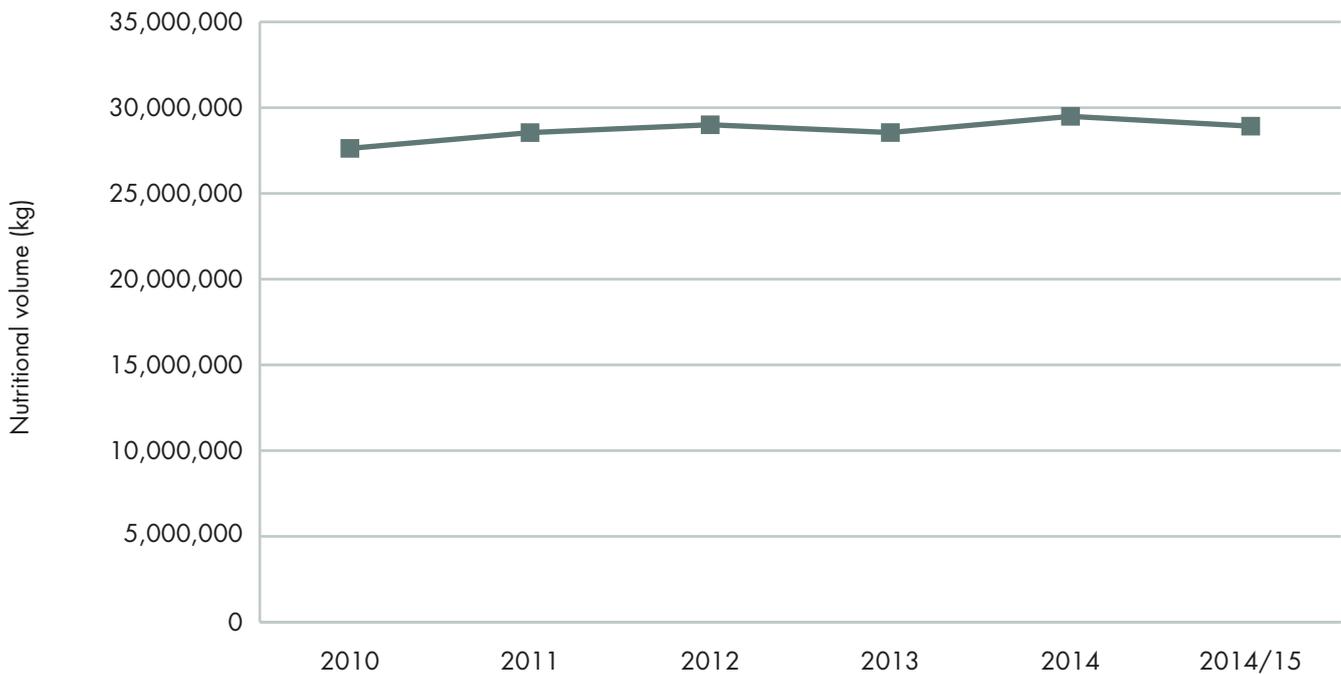


# j) Plain starchy carbohydrates (excluding bread, potatoes and sweet potatoes)<sup>o</sup>

There has been a small increase of around 5% in the volume of plain starchy carbohydrates (excluding bread and potatoes) purchased since 2010 (Figure 25).

**Figure 25:**

Annual purchase of plain starchy carbohydrates (excluding bread and potatoes) into the home in Scotland



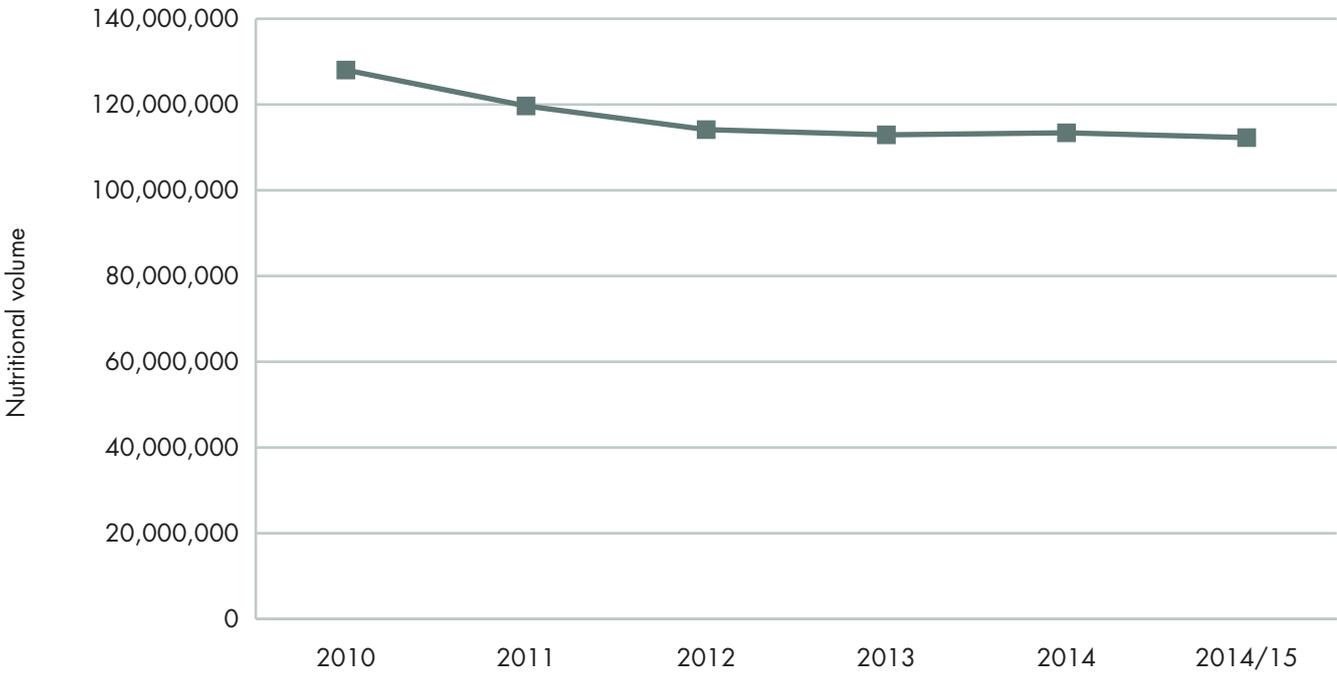
<sup>o</sup> Includes plain pasta, rice, couscous and noodles.



# k) Plain bread

The volume of plain bread purchased has declined by almost 12% (Figure 26).

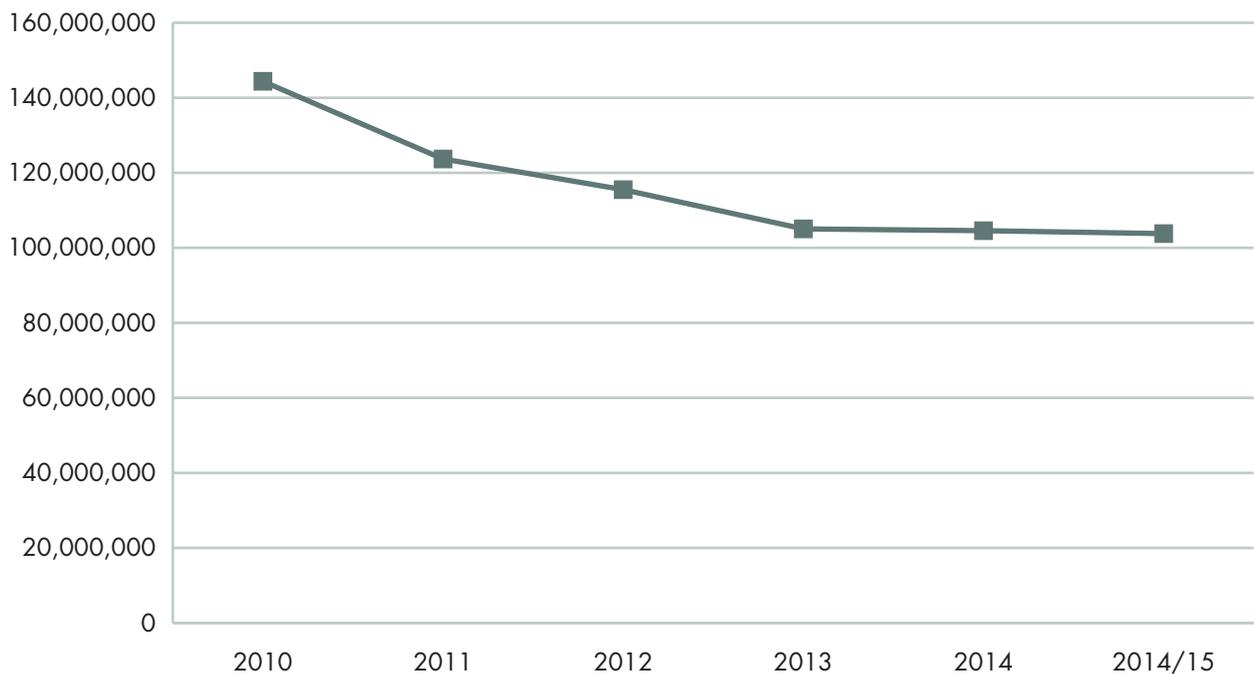
**Figure 26:**  
Annual purchase of plain bread into the home in Scotland



# l) Potatoes

There has been a decline of 28% in the volume of potatoes purchased since 2010 (Figure 27).

**Figure 27:**  
Annual purchase of potatoes into the home in Scotland



# 8. Purchase by the Social Index of Multiple Deprivation (SIMD)<sup>P</sup>

Differences in purchase by area deprivation suggested that the proportion of total take home calories for regular soft drinks and confectionery were higher for people from the most deprived areas (Figure 28). In contrast, the proportion of total take home calories from cakes and pastries plain fruit, vegetables, oil-rich fish, starchy carbohydrates and plain bread tended to be higher for people living in the least deprived areas of Scotland (Figure 29).

**Figure 28:**

Proportion of take home calories from food categories from less healthy categories by SIMD (2014/15)

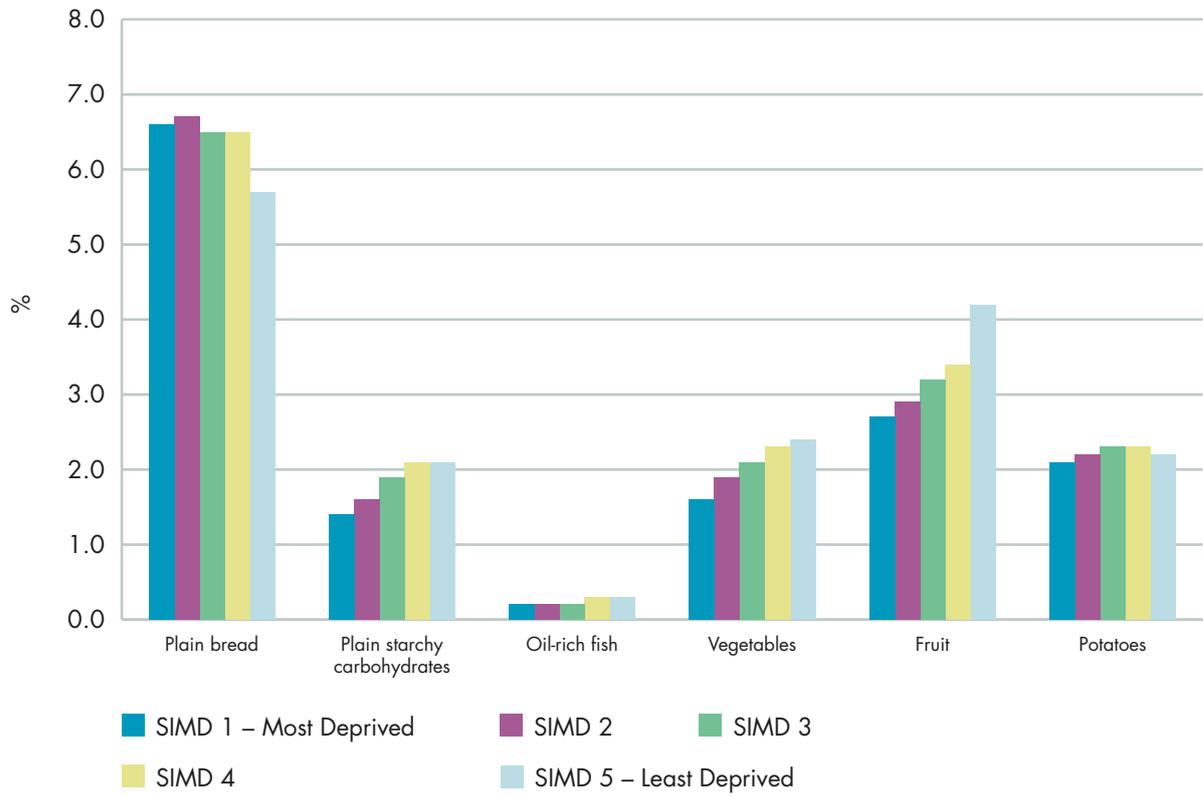


<sup>P</sup> The Scottish Index of Multiple Deprivation identifies the level of multiple deprivation in small areas across all of Scotland in a consistent way. These areas can then be grouped into deciles or quintiles. Quintile 1 refers to the fifth most deprived areas, and quintile 5 refers to fifth least deprived areas.



**Figure 29:**

Proportion of take home calories from food categories from healthier categories by SIMD (2014/15)



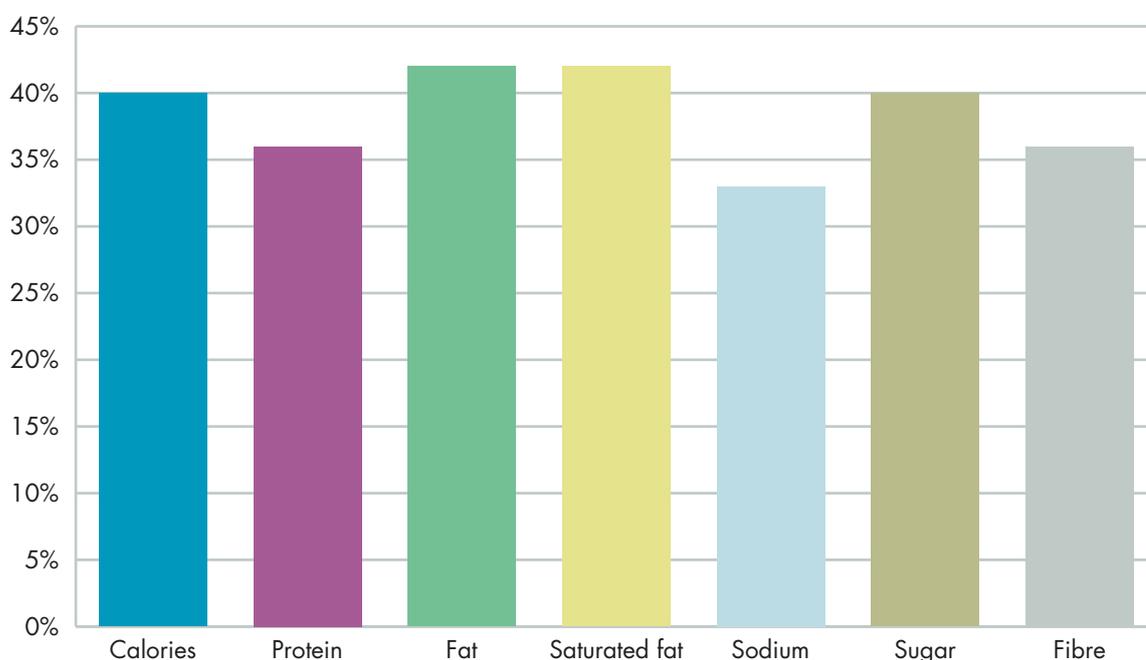
# 9. Purchase in relation to price promotions

Data presented here concerns purchases made on price-based promotions for food and drink categories, and does not include other marketing and promotional strategies such as product placement.

Data showed that price promotions account for around 40% of all food and drink take home expenditure in Scotland. Results also suggested that 40% of all calories and 42% of total fat and saturated fat are purchased on promotion in the full year ending September 2015. Similarly, over a third of total sodium and sugar are purchased on promotion (Figure 30).

**Figure 30:**

Proportion of total take home nutrients purchased (nutritional volume) on promotion in Scotland in 2014/15



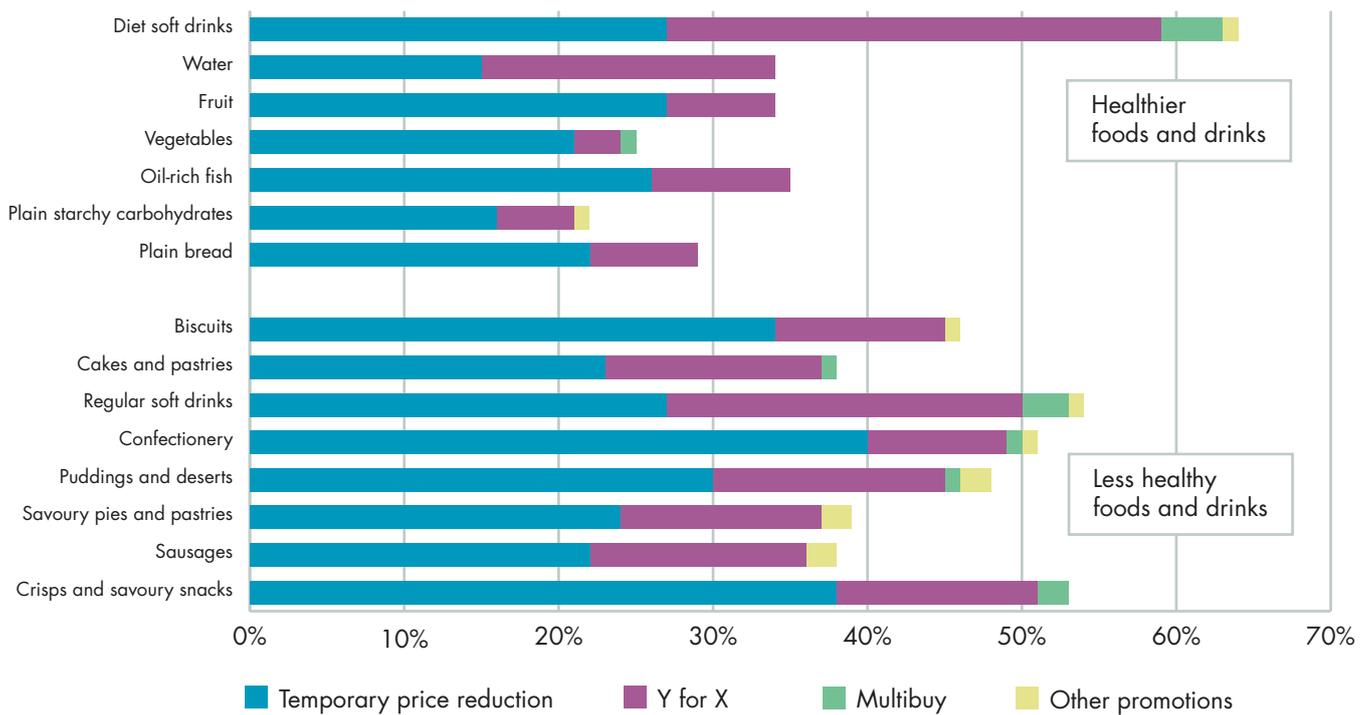
More than 50% of savoury snacks, confectionery and regular soft drinks, and more than 40% of puddings and desserts and biscuits were purchased on promotion in the full year ending September 2015 (Figure 31). For some healthier alternatives such as vegetables, plain bread and plain starchy carbohydrates, less than 30% were purchased on promotion. The results suggest that the discretionary, less healthy food and drink categories are more frequently purchased on promotion compared to the staple, healthier categories.

Figure 31 also shows that while temporary price reductions dominate across all groups, Y for X and multibuys tend to feature most in the less healthy group (with the exception of diet soft drinks and water). For example, 27% of regular soft drinks are purchased through these types of promotions compared with just 4% of vegetables.



**Figure 31:**

Proportion of retail purchase on promotion in Scotland (2014/15): Staple, healthier foods compared with largely discretionary, less healthier foods

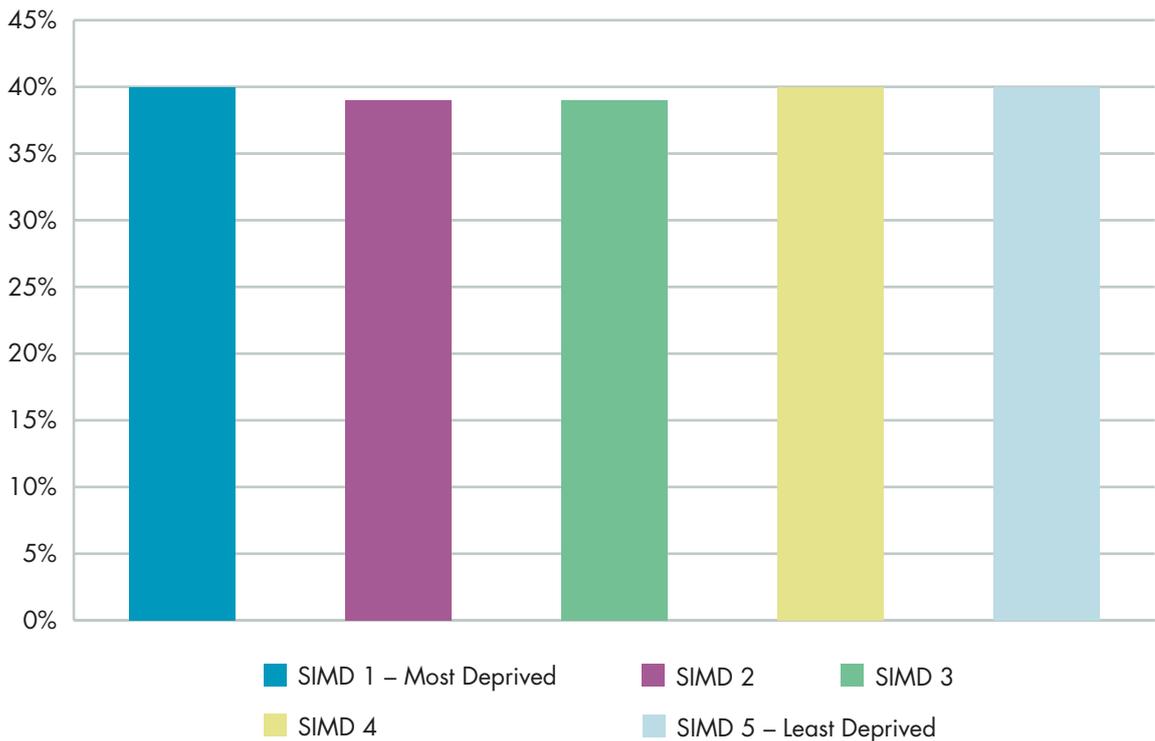


## Energy and nutrients purchased on promotion by Social Index of Multiple Deprivation

There was little or no difference in the proportion of energy purchased on promotion according to the household Social Index of Multiple Deprivation (SIMD) quintile, as shown in Figure 32.

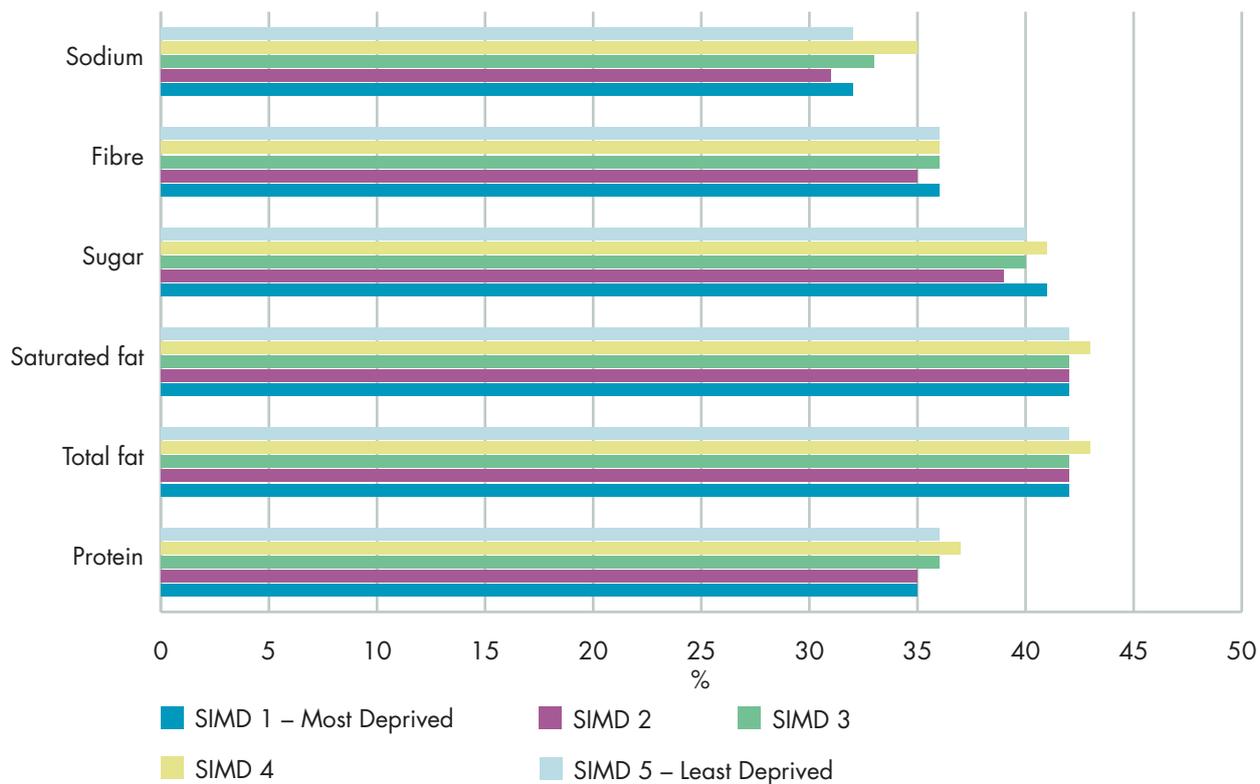
**Figure 32:**

Percentage of take home calories purchased on promotion by SIMD (2014/15)



There was also little variation in the percentage of nutrients purchased on promotion by quintile of SIMD (Figure 33).

**Figure 33:**  
Percentage of nutrients purchased on promotion by SIMD (2014/15)



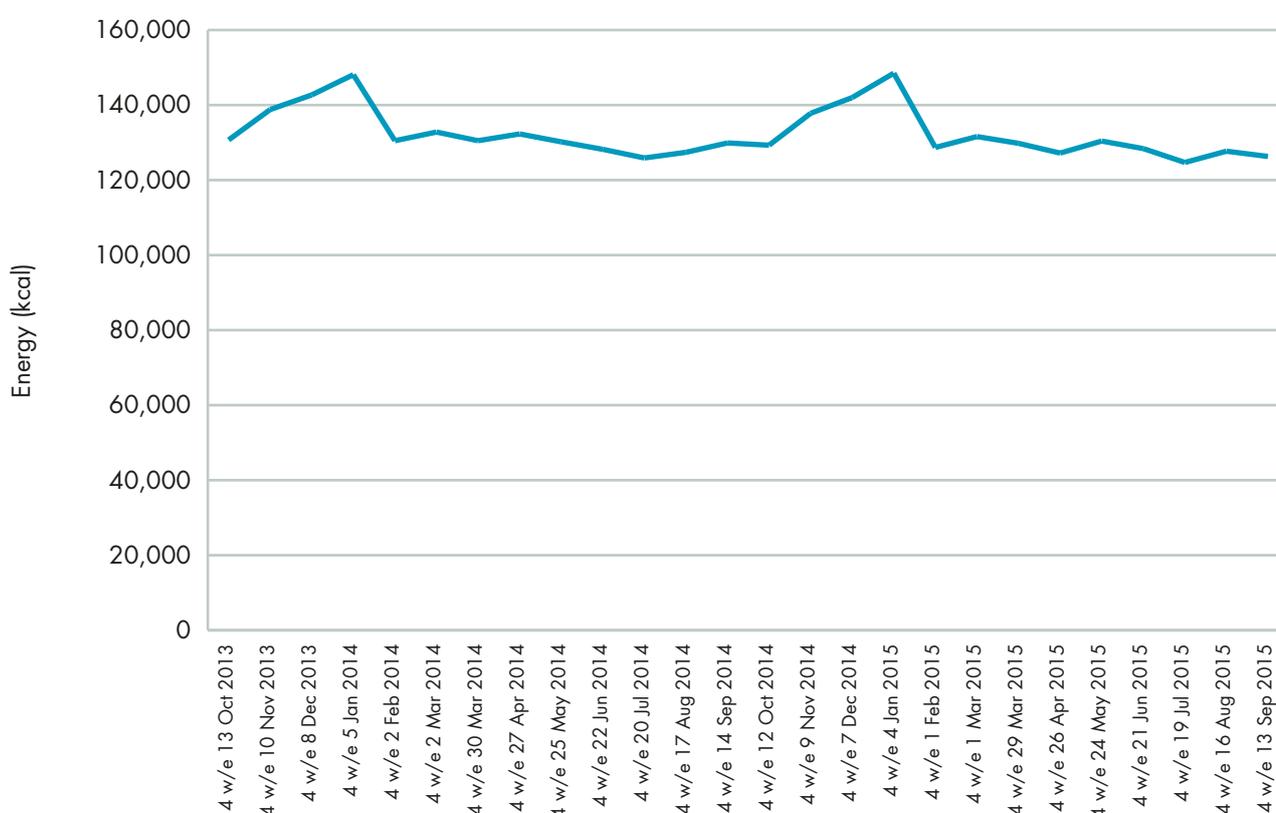
# 10. Seasonal purchase and seasonal price promotions

## 10.1 Variation in calories purchased across the year

The data below covers two years, presented in four-week blocks of total calories and shows that there are fluctuations in calories purchased from total food and drink. Between October and December, increases are apparent compared to the rest of the year (Figure 34). This is equivalent to an increase in calorie purchase of around 10% each day for the 12 weeks up to the end of the festive period<sup>q</sup> (Annexe 5).

**Figure 34:**

Average calories purchased from total food and drink (per household, per four weeks)



There is a large uplift in calories purchased from some of the discretionary food categories over the festive season (Figure 35). For savoury snacks, cakes and pastries and confectionery the increase is 20%, 32% and 54% respectively, which is well above the 10% average for all categories combined (see Annexe 5). The uplift for regular soft drinks and biscuits is similar to the average (10% and 12% respectively).

Figure 35 shows that the difference in calories purchased from discretionary foods between the peak four-week period in December and the lowest four-week period in January (average of two years' data), equates to 174 kcal *per capita*, per day.

<sup>q</sup> This includes the last 12 weeks of the year, from mid-October to the first week of January.



Figure 36 shows that calories purchased from plain bread, starchy carbohydrates, fish, fruit and vegetables shows little variation over the year, with variance between -10% and +2%, which is well below the average 10% uplift seen for all foods and drinks (see Annexe 5).

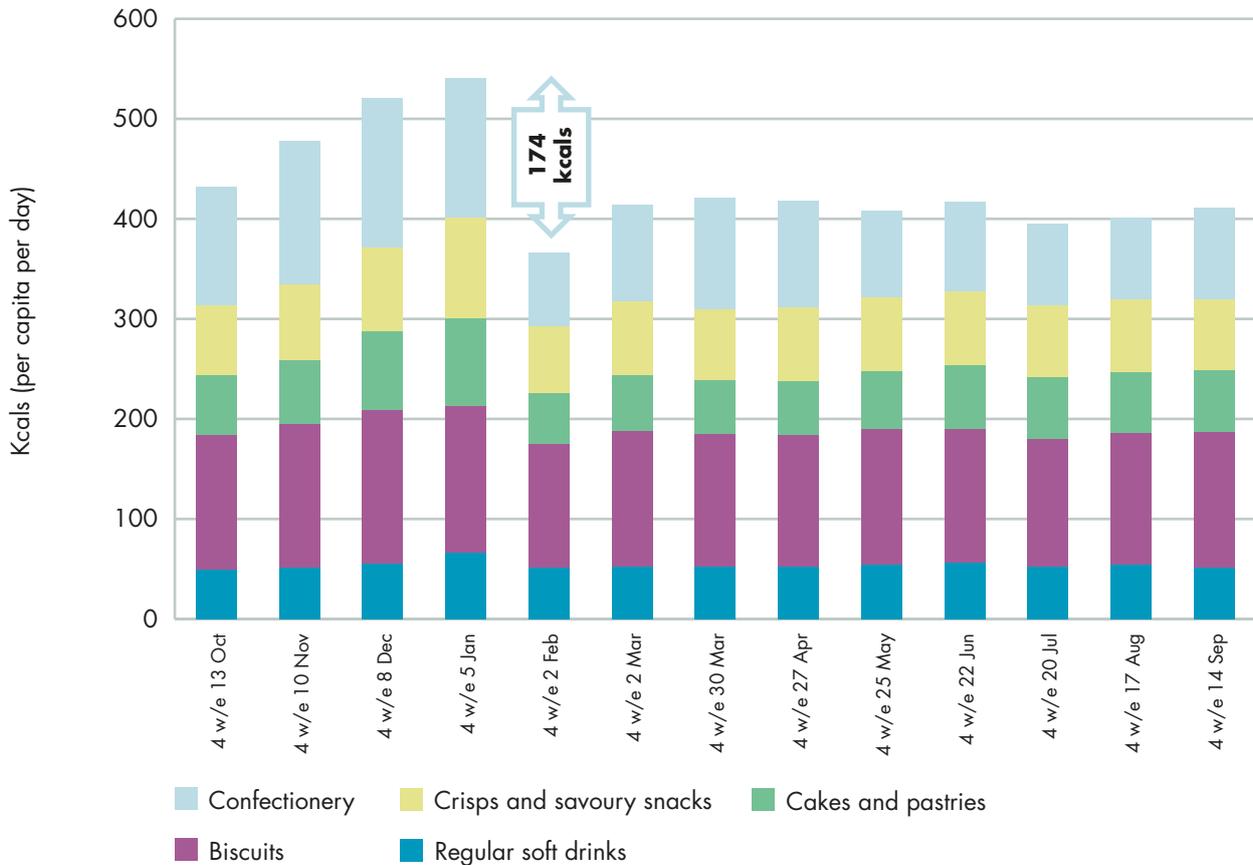
### 10.2 Seasonal promotion of discretionary and healthier food categories

There is a substantial uplift in the purchase of some discretionary food categories over the festive season particularly confectionery and cakes and pastries. In general, the pattern of total purchase tends to mirror the pattern of promotions, particularly for the discretionary foods considered. For example, Figure 37 provides the total purchase of confectionery (expressed as calories) and shows the fluctuations in calories purchased over the year including rises leading up to Easter and Christmas and purchase between four-week periods varied by as much as 100%. Figure 38 shows the volume of confectionery purchased on promotion. The pattern of promotions tends to mirror the pattern of total purchase shown in Figure 37.

However, as Annexe 6 shows, there is little to suggest a difference in the average percentage purchased on promotion during the festive season compared with the rest of the year for either the healthier or the discretionary categories. The difference is less than 5% with the exception of savoury snacks, confectionery and plain fish where an extra 6%, 9% and 7% was purchased on price promotion over the festive season.

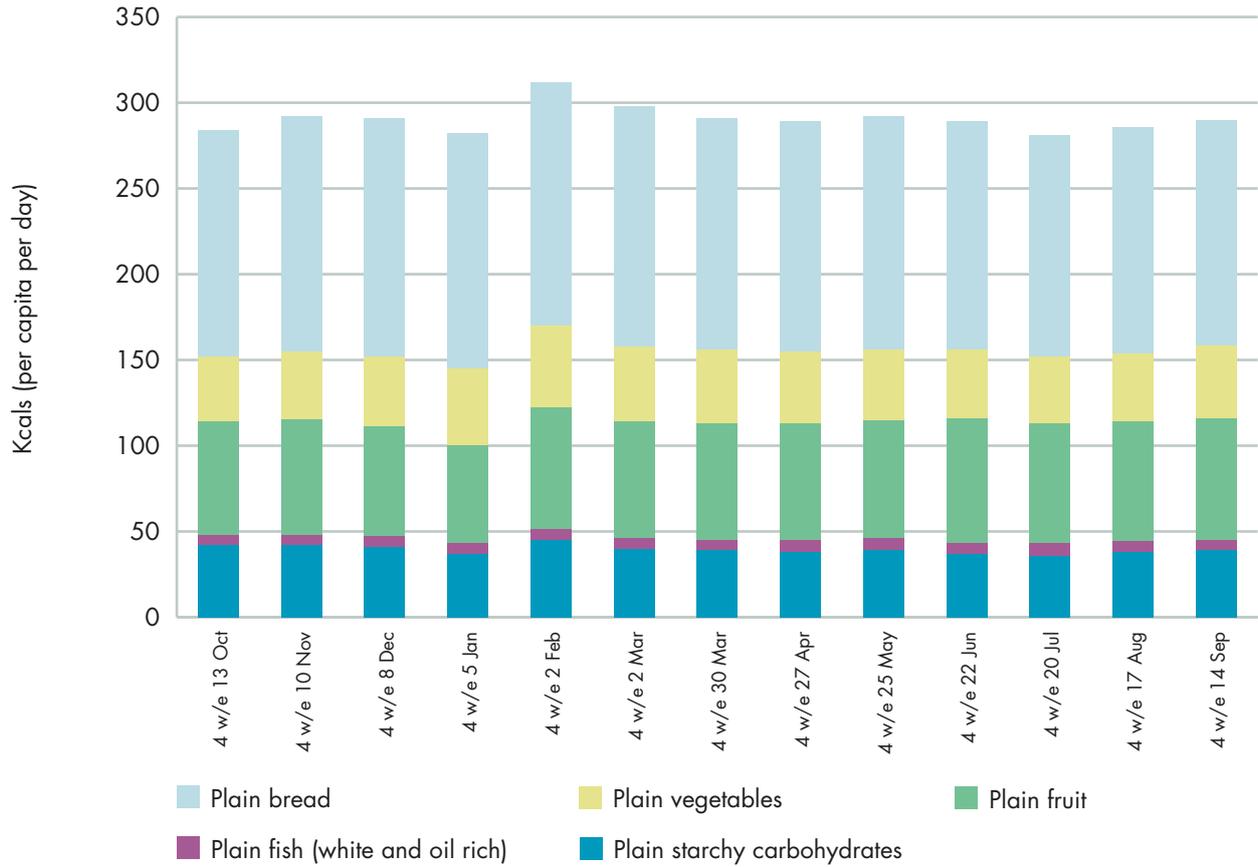
#### Figure 35:

Seasonal purchase of calories (per capita, per day) from discretionary foods and drinks between 2013 and 2014.



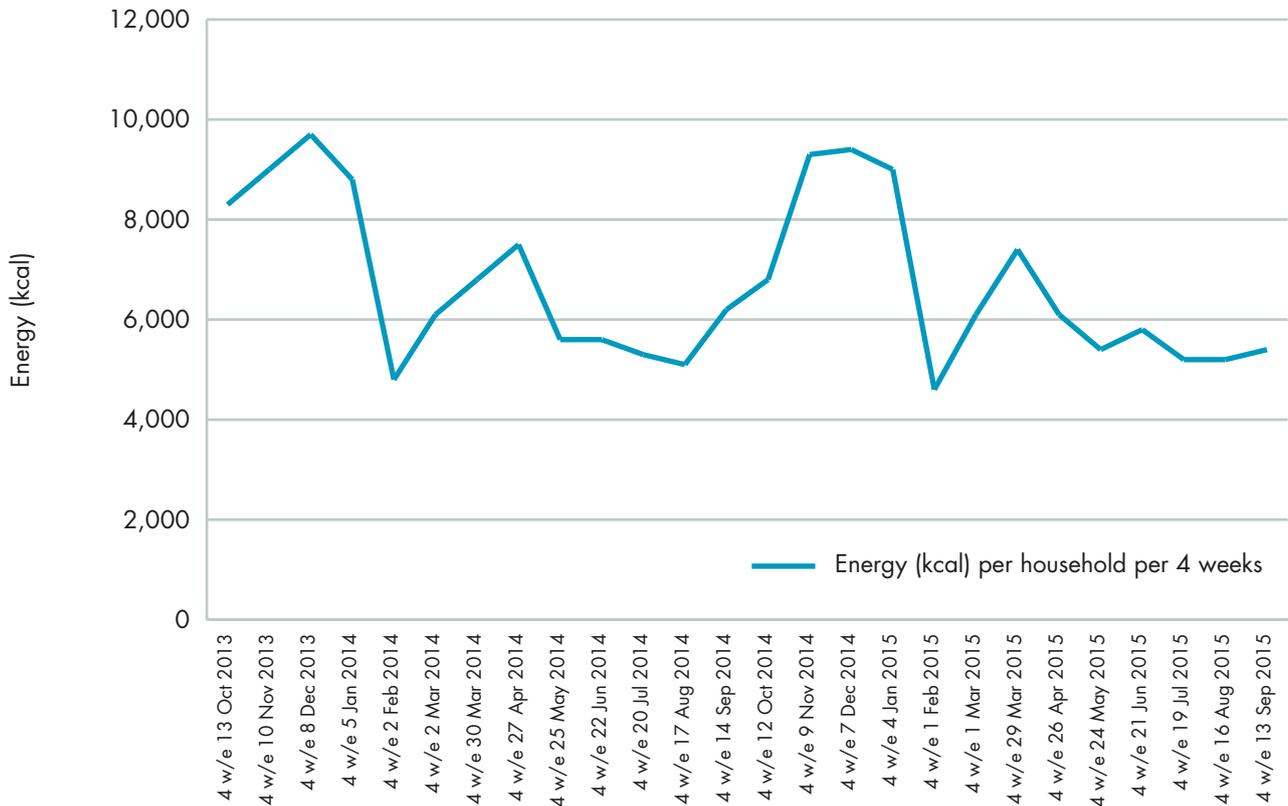
**Figure 36:**

Four-weekly purchase of calories (per capita, per day) from healthier staple food categories average of 2013 and 2014.



**Figure 37:**

Average calories purchased from confectionery (per household, per four weeks)



**Figure 38:**

Average volume of confectionery purchased on promotion (per household, per four weeks)



# 11. Discussion

This paper provides a summary of data provided from KWP to Food Standards Scotland on food and drink purchased into the home in Scotland.

## 11.1 Limitations of the data included in this analysis

A full picture of food and drink purchase is not provided in this report because the data excludes take-away foods and foods and drinks not brought back into the home for consumption. Furthermore, the balance of food purchased into the home may be affected by purchase outside the home for which there is a lack of information, particularly for calories and nutrients purchased.

Most of the analyses presented here are based on total volumes purchased for the population, and therefore as the population has increased over time (by around 1% over this time period) a concomitant rise in purchase is expected. Although data expressed *per capita* can help account for a rise in population, the data cannot be weighted according to sex and age and are therefore likely to contain biases.

## 11.2 Limitations related to weighting

The results cannot be used to estimate individual purchase or consumption. While the calories and the proportion of nutrients, when expressed *per capita*, were similar to what might be expected per person, purchase data cannot be used to estimate intakes because what is purchased does not equate to consumption. The amount of waste cannot be accurately quantified, for example losses during preparation and cooking and edible food which is thrown away, is not captured.

It should be noted that the data in the report is based on total sugar and not on free sugars, which is the basis of current dietary recommendations. Providing data on free sugars requires conversion of the proportion of total sugar that is free within each product category.

The data collected by KWP and presented within this report concerns price-based promotions on foods and drinks purchased into the home and does not include other marketing strategies such as product placement and other advertising and promotional activities, which influence food and drink purchase.

## 11.3 Purchase of nutrients, and food and drink categories into the home in Scotland

Household purchase data showed little change in total calories, total sugar, total fat, saturated fat and fibre, with the exception of sodium. Total purchase of sodium decreased considerably however, particularly between 2010 and January 2013 but has remained relatively stable since then.

The top 20 foods and drinks which contribute to calories, total fat, saturated fat and total sugar purchase were similar to those published in 2013.<sup>8</sup> Discretionary foods such as biscuits, cakes and pastries and confectionery were all within the top 10 food and drink categories contributing to total calorie, total sugar, total fat and saturated fat purchase into the home. Excluding fruit and table sugar, regular soft drinks was the top contributor to total sugar purchase.



There has been little change in the total volume of food and drink purchased since 2010. However, there were changes within some food and drink categories, with some substantial reductions in volumes purchased for regular soft drinks (-21%), savoury pies and pastries (-17%), bread (-12%) and potatoes (-28%).

Although it was encouraging to see a decline in the purchase of some high-fat, sugar foods and drinks, overall purchase of sugar and fat has changed very little. These results suggest that fats and sugars are being recycled into different products within the retail offering and an overall reduction in purchase of fats and sugars will require consistent reductions across all food and drink categories.

Although total purchase of sodium decreased considerably overall, the results suggest that the reduction may have slowed or stalled from 2012 onwards. Future analysis will be able to track the progress of salt reduction in products going forward towards the 2017 salt targets.<sup>10</sup>

### **11.4 Purchasing patterns in relation to area deprivation (SIMD)**

Households in the most deprived areas tended to purchase a higher proportion of calories from biscuits, confectionery, regular soft drinks and bread. Those from the least deprived areas tended to purchase more calories from cakes and pastries, plain starchy carbohydrates, oil-rich fish and fruit. In contrast, purchase of confectionery, regular soft drinks and plain bread was proportionally higher in the most deprived households. These results for purchase show a similar pattern to dietary surveys of intake in Scotland in relation to deprivation. However, the data is not able to show the differences in added sugar seen in intake surveys, as only total sugar purchase is collected.

### **11.5 Purchasing patterns in relation to price promotions**

Results were very similar to previously published data<sup>8</sup> for 2013, with a high proportion of all food and drink purchased on promotion (40% of all calories and 42% of total fat and saturated fat). Discretionary, less healthy food and drink categories including savoury snacks, biscuits and confectionery were more frequently purchased on promotion compared to the staple, healthier categories such as fruit and vegetables and plain starchy carbohydrates.

The results showed that while temporary price reductions were dominant across all categories considered, Y for £X and multibuy promotions featured more prominently in the less healthy categories considered (with the exception of diet soft drinks). For example, 26% of regular soft drinks were purchased through these types of promotions compared with just 4% of vegetables.

The results presented here on promotion are consistent with the analysis provided by KWP and published by Public Health England<sup>11</sup> which revealed that higher sugar food and drink items are more likely to be promoted and more deeply promoted. KWP data published by Public Health England also showed that promotions not only get people to buy more of a category than normal, but that this has the effect of increasing overall take home food and drink volumes. It was estimated that 22% of food and drink purchased on promotion would not be purchased in the absence of promotion. Furthermore, the most 'expandable' categories which we buy more of on promotion and 'consume' more quickly tend to be the discretionary categories, including in-between meal snacks which are often high in sugar, fat and/or salt.



## 11.6 Purchasing and promotion in relation to season

In this report, there was a large increase in calories purchased from the discretionary food categories across the 12-week period of the festive season. For savoury snacks, cakes and pastries and confectionery the increase was 20%, 32% and 54% respectively. This compares with a 10% increase for total food and drink over the same time period. The uplift in calories from confectionery, crisps, savoury snacks, biscuits, cakes, pastries and regular soft drinks is an additional 9,000 kcals purchased *per capita* over the 12-week festive period compared to the rest of the year. Assuming that all of these additional purchases are consumed, this would equate to around 1 kg of weight gained.<sup>r</sup> Without a compensatory reduction for the rest of the year there is an increased risk of population weight gain and diet-related diseases.

The analysis of seasonal data presented here highlights the importance of considering all types of marketing, advertising and promotional activity in addition to price promotions. For example, prominent product placement and the availability of additional seasonal items may also have had a role in encouraging additional purchase of discretionary foods.

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<sup>r</sup> Calculations for the amount of weight gained were obtained from the US Department of Agriculture's body weight planner tool, for a woman aged 50 yrs, with height and weight of 165 cm and 65 kg and a PAL of 1.6: <https://www.supertracker.usda.gov/bwp/index.html>. This tool was developed based upon: Hall et al. (2011). Quantification of the effect of energy imbalance on bodyweight. *The Lancet*, 378(9793), pp. 826–837: [http://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736\(11\)60812-X.pdf](http://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736(11)60812-X.pdf).

If the older, more commonly used '3500 kcal per pound' rule was used, which doesn't account for the dynamic physiological adaptations to altered body weight that lead to changes of both the resting metabolic rate as well as the energy cost of physical activity, this would result in an increase in body weight of around 1.2 kg (Hall KD (2008). What is the required energy deficit per unit weight loss?: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2376744/>)



# 12. Summary of results

## 12.1 Trends in the purchase of food and drink into the home in Scotland

- There was little change in the total volumes of food and drink, calories and nutrients purchased between 2010 and September 2015.
- Total salt purchased decreased up to 2013, but has remained fairly static since then.
- Discretionary foods such as biscuits, cakes and pastries, and confectionery were all present within the top 10 food and drink categories contributing to calories, sugars and fats purchased into the home. Excluding fruit and table sugar, regular soft drinks were the top contributor to total sugar purchase.
- There were decreases in the volume purchased for regular soft drinks (-21%), savoury pies and pastries (-17%), bread (-12%) and potatoes (-28%). However, despite reductions in fats from savoury pies and pastries and sausages, and a considerable reduction in sugars from regular soft drinks, overall the total purchase of sugars and fats in Scotland has not decreased.

## 12.2 Food and drink purchase into the home in relation to deprivation

- Households in the most deprived areas purchased a higher proportion of their total calories from Confectionery, regular soft drinks and bread compared to the least deprived areas. Those from the least deprived areas purchased a higher proportion of their total calories from cakes and pastries, plain starchy carbohydrates, oil-rich fish and fruit and vegetables compared to those from the most deprived areas.
- In relation to deprivation, the food and drink purchasing patterns presented here are very similar to patterns of food and drink intake from the FSS dietary monitoring programme.

## 12.3 Food and drink purchase on price promotion

- Around 40% of all take home food and drink is purchased on price promotion in Scotland.
- Discretionary, less healthy food and drink categories were more frequently purchased on promotion (around 50% of purchase) compared to the staple, healthier categories (around 30% of purchase).
- Promotions which are particularly aimed at driving additional purchase (Y for £X and multibuy) were generally more prominent for the less healthy categories compared to the staple, healthier categories considered in this report.



## 12.4 Seasonal purchase and seasonal price promotion

- There were considerable fluctuations in purchase of some discretionary categories particularly around Christmas and Easter. Average confectionery purchase varied by as much as 100% between four-week periods.
- Compared with the rest of the year, purchase of savoury snacks, cakes and pastries and confectionery increased by 20%, 32% and 54% respectively in the 12 weeks leading up to Christmas, while the average food and drink increase was 10%.
- Additional purchase of confectionery, crisps, savoury snacks, biscuits, cakes, pastries and regular soft drinks over a sustained 12-week period including Christmas equates to about 9,000 kcals which, if consumed, is equivalent to an average weight gain of around 1 kg for everyone in Scotland.
- Overall, there was little increase in the proportion of discretionary foods purchased on promotion over the festive period (with the exception of confectionery and savoury snacks). The seasonal uplift in the purchase of some discretionary foods may be influenced more by other types of marketing strategy, such as product placement and other advertising and promotional activities.



# 13. References

- <sup>1</sup> Secondary analysis of the Living Costs and Food Survey:  
<http://www.foodstandards.gov.scot/latest-estimation-food-and-nutrient-intakes-interim-report>
- <sup>2</sup> Survey of sugar intake among children in Scotland: [http://www.foodstandards.gov.scot/sites/default/files/607-1-1097\\_sugarintakescot2008rep.pdf](http://www.foodstandards.gov.scot/sites/default/files/607-1-1097_sugarintakescot2008rep.pdf)
- <sup>3</sup> Survey of diet among children in Scotland:  
<http://www.foodstandards.gov.scot/survey-diet-among-children-scotland>
- <sup>4</sup> A survey of 24-hour and spot urinary sodium and potassium excretion in a representative sample of the Scottish population:  
[http://www.foodstandards.gov.scot/sites/default/files/654-1-1154\\_S14032\\_Revised.pdf](http://www.foodstandards.gov.scot/sites/default/files/654-1-1154_S14032_Revised.pdf)
- <sup>5</sup> A survey of 24-hour urinary sodium excretion in a representative sample of the Scottish population as a measure of salt intake:  
[http://www.foodstandards.gov.scot/sites/default/files/681-1-1229\\_S14047.pdf](http://www.foodstandards.gov.scot/sites/default/files/681-1-1229_S14047.pdf)
- <sup>6</sup> Kantar WorldPanel: <http://www.kantarworldpanel.com/global>
- <sup>7</sup> Monitoring progress in Scotland against the Food Standards Agency salt targets using market research data: [http://www.foodstandards.gov.scot/sites/default/files/808-1-1480\\_salt\\_paper2542013finalversion\\_sent\\_for\\_publication.pdf](http://www.foodstandards.gov.scot/sites/default/files/808-1-1480_salt_paper2542013finalversion_sent_for_publication.pdf)
- <sup>8</sup> Background paper to Supporting Healthy Choices:  
<http://www.gov.scot/Resource/0045/00454311.pdf>
- <sup>9</sup> Supporting Healthy Choices. A framework for voluntary action:  
<http://www.gov.scot/Resource/0045/00454204.pdf>
- <sup>10</sup> Salt reduction targets: <http://www.foodstandards.gov.scot/2017-salt-targets>
- <sup>11</sup> Sugar Reduction: The evidence for action.  
<https://www.gov.uk/government/publications/sugar-reduction-from-evidence-into-action>



# ANNEXE 1

Table 1: All 73 categories of foods and drinks for this analysis making up the total take home diet in Scotland

Category
1. Total Food and Drinks
2. Total Food and Milk
3. Total Alcohol
4. Total Bread and Morning Goods (Ambient)
5. Total Bread (Ambient)
6. Plain Bread (Ambient)
7. Morning Goods (Ambient)
8. Higher Sugar/Fat Morning Goods (Ambient)
9. Other Morning Goods (Ambient)
10. Total Biscuits
11. Total Cakes and Pastries (Ambient)
12. Higher Fat Cakes and Pastries (Ambient)
13. Sweet Pastries and Sweet Pies
14. Cakes
15. Savoury Pies and Pasties
16. Ice Cream
17. Edible Ices/Frozen Dairy Desserts excl. Ice Cream
18. Take Home Savouries
19. Total Breakfast Cereals (incl. Rolled Oats and Oatmeal)
20. Breakfast Cereals that meet criteria (<5g sugar and <0.68g salt)
21. Frozen Processed Potatoes (incl. Chips)
22. Plain Starchy Carbohydrates (excl. Potatoes and Sweet Potatoes)
23. Total Ambient Take Home Confectionery
24. Chocolate Confectionery
25. Chocolate Block
26. Egg/Novelty/Seasonal Chocolate
27. Total Soft Drinks (Ambient and Chilled) (excl. Flav. Milk)
28. Total Soft Drinks (Ambient and Chilled) (incl. Flav. Milk)
29. Total Soft Drinks (Ambient) (incl. Flav. Milk)
30. Diet Soft Drinks (Ambient and Chilled) (based on 'healthy' attribute)
31. Regular Soft Drinks (Ambient and Chilled) (based on 'healthy' attribute)
32. Diet Soft Drinks (Ambient) (based on 'healthy' attribute)
33. Regular Soft Drinks (Ambient) (based on 'healthy' attribute)
34. Squash
35. Total carbonates
36. Diet carbonates (based on 'healthy' attribute)
37. Regular carbonates



Category
38. Water (Still, Carbonated and Flavoured; excl. Soda)
39. Pure Fruit Juice
40. Total Dairy Products
41. Total Milk
42. Whole Milk
43. Semi-Skimmed Milk
44. Reduced Fat Milk (Skimmed and 1%)
45. Total Cheese
46. Total Cheddar Cheese
47. Total Yoghurt
48. Yogurt that meets criteria ( $\leq 3\text{g}$ fat and $\leq 10\text{g}$ sugar)
49. Total Cream
50. Yellow Fats
51. Total Fish
52. Plain Oily Fish
53. Plain White Fish
54. Total Fruit
55. Plain Fruit
56. Fresh Fruit and Vegetables
57. Total Vegetables and Salad Leaves
58. Plain Vegetables
59. Canned Beans in Sauce
60. Total Plain and Sweet Potatoes
61. Total Red Meat and Products
62. Total Sausages
63. Total Poultry and Products
64. Plain Chicken and Turkey
65. Ready Meals
66. Pizza
67. Savoury Home Cooking (excl. Salt)
68. Total Pickle, Table Sauce and Condiment
69. Table Salt
70. Sweet Home Cooking (excl. Sugar)
71. Table Sugar
72. Breakfast Spreads
73. Total Puddings and Desserts



# ANNEXE 2

Food and drink categories included in top 20 contributors to purchase of energy, fats and sugars: Kantar WorldPanel (KWP) definitions<sup>s</sup>

Category	Kantar Definition
Dairy Products	Includes milk, yoghurt, cheese, fresh cream, butter, spreads, lard, dripping, excludes eggs
Yellow Fats	Includes butter, spreads, lard and dripping
Total Milk	All milk including buttermilk and soya milk
Total Cream	All fresh, flavoured and synthetic cream
Total Cheese	All hard and soft cheese including continental and specialty cheeses
Ice Cream	Ice-cream, including filled cones cups and tubs
Edible Ices and Frozen Dairy Desserts	Includes ice-lollies, choc ices, frozen yoghurts, mousse and sorbets, excluding ice-cream
Total Yoghurt	All yoghurt including low fat, plain and flavoured
Frozen Processed Potatoes	All frozen potato products including chips
Total Plain and Sweet Potatoes	All fresh and canned plain and sweet potatoes
Plain Starchy Carbohydrates	Includes plain fresh and dry pasta, rice, noodles and cous cous excluding potatoes and sweet potatoes
Total Bread and Morning Goods	All bread and rolls including pre-packed, part-baked and freshly baked, plain and fruit scones, crumpets, pikelets, English muffins, scotch pancakes, bagels, croissants, brioche, waffles etc.
Crisps and Savoury Snacks	Includes crisps, popcorn, savoury snacks and nuts
Savoury Pies and Pasties	All fresh and canned pies, pasties, and sausage rolls
Total Biscuits	All sweet and savoury biscuits
Savoury Home Cooking	Includes ambient cooking sauces, cooking oils, flour, herbs, spices, meat extract, packet stuffing, suet, savoury mixes and vinegar, excludes salt
Total Pickle, Table Sauces and Condiments	All ambient table sauces including salad cream, horseradish sauce, hollandaise sauce, tomato ketchup, mustard, dips, pickles, chutney, relishes
Total Red Meat and Products	All fresh, canned, frozen, processed red meat or red meat products including burgers, grills, bacon and offal
Total Poultry and Products	All fresh, chilled, frozen, raw and cooked poultry or poultry products

<sup>s</sup> All other definitions of food/drink categories available from FSS on request.



Category	Kantar Definition
Total Sausages	All chilled and frozen sausages including sausage meat and products and continental sausages
Ready Meals	Chilled, frozen and canned ready meals including English, Italian, Indian and Chinese etc.
Total Vegetables and Salad Leaves	All fresh, chilled, pre-prepared, frozen and canned vegetables including canned beans and herbs but excluding potatoes and sweet potatoes
Fresh Fruit and Vegetables	Fresh and chilled fruit, vegetables and herbs, excludes frozen fruit and vegetables
Total Fruit	All fresh, chilled, frozen and tinned fruit
Total Puddings and Desserts	Ambient, chilled, canned, powdered and frozen desserts including jellies, sponge puddings, rice pudding, custard, mousses and cheesecakes
Total Cakes and Pastries	All ambient, chilled and frozen cakes and pastries including pies, flans and tarts All higher fat and/or sugar morning goods including tea cakes, croissants, scones, iced buns, waffles and other morning pastries
Total Ambient Take Home Confectionery	All ambient sugar and chocolate confectionery and chewing gum
Sweet Home Cooking	Includes long life desserts, syrup and treacle, table and quick set jellies , baking fruit, snacking fruits and nuts, evaporated and condensed milk, non-dairy cream
Breakfast Spreads	Includes jam, marmalade, peanut butter, lemon curd and honey
Table Sugar	All white and brown granulated, caster, icing and cubed sugar
Total Alcohol	All alcoholic drinks, including wine, spirits, beer and cider
Pure Fruit Juice	All ambient or chilled pure fruit juice
Regular Soft Drinks	All ambient and chilled soft drinks with added sugar, including squash, fruit juice and all carbonated drinks Excludes all still, carbonated and flavoured waters (excluding soda)



# ANNEXE 3

## Definitions of food and drink categories used within this analysis<sup>†</sup>

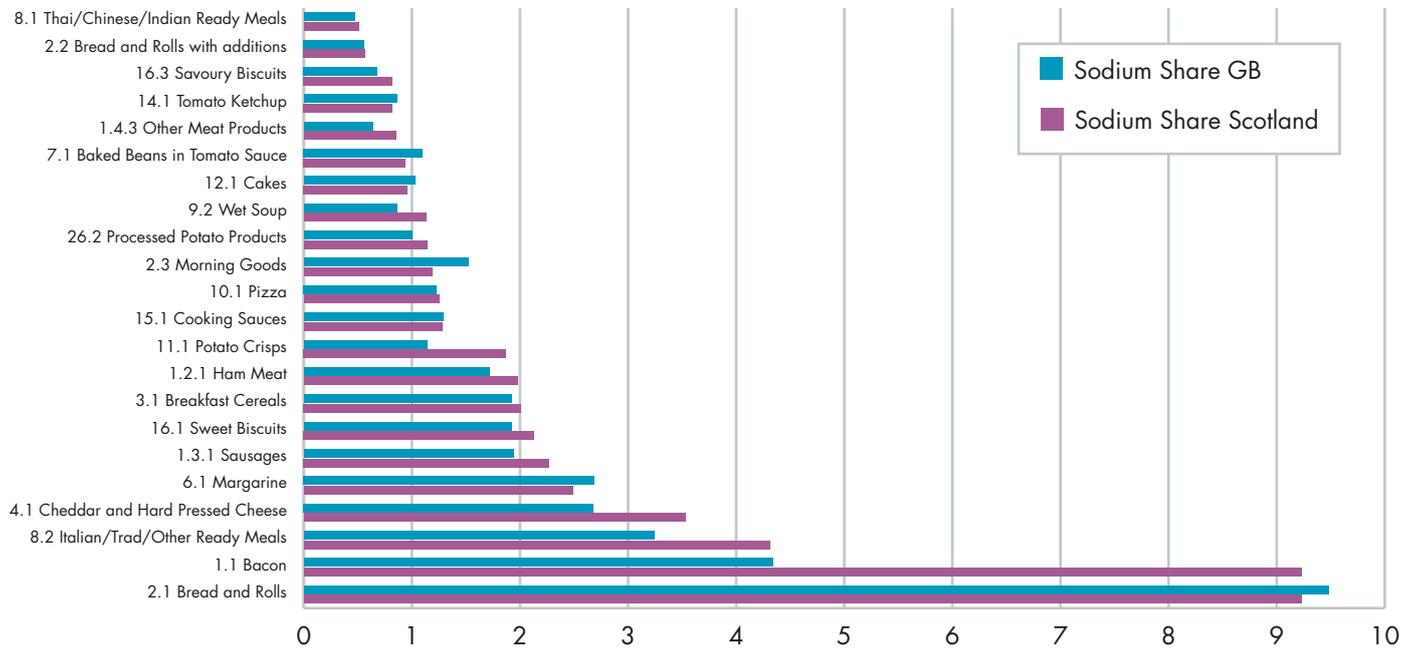
Food/Drink referenced within the report	Products included within definition
Regular soft drinks	All ambient soft drinks with added sugar, including squash, juice drinks, all carbonated drinks and still and flavoured waters Excludes all still, carbonated and flavoured waters (excluding soda)
Diet soft drinks	All ambient and chilled soft drinks which are low or no sugar, including squash, juice drinks, all carbonated drinks and still and flavoured waters
Cakes and pastries	All ambient, chilled and frozen cakes and pastries including pies, flans and tarts in addition to all higher fat and/or sugar morning goods including tea cakes, croissants, scones, iced buns, waffles and other morning pastries
Biscuits	All sweet and savoury biscuits, crackers and crisp breads
Confectionery	All chocolate, gum and sugar confectionery, and ice cream cones
Puddings and desserts	All ambient and canned puddings, powdered desserts and custard, long-life desserts, chilled desserts and frozen confectionery
Savoury pies and pastries	All fresh and canned pies, pasties, and sausage rolls
Sausages	All chilled and frozen sausages including sausage meat and products and continental sausages
Crisps and savoury snacks	Includes crisps, popcorn, savoury snacks and nuts
Milk	All milk including buttermilk and soya milk
Cheese	All hard and soft cheese including continental and specialty cheeses
Fruit	Includes all fresh, frozen, dried and tinned (including pre-prepared) plain fruit
Vegetables	Includes all fresh, frozen, dried and tinned (including pre-prepared) plain vegetables and prepared beans
Oil-rich fish	Includes all tinned, fresh and smoked oil-rich fish
Plain starchy carbohydrates	Includes plain fresh and dry pasta, rice, noodles and cous cous excluding bread, potatoes and sweet potatoes
Plain bread	Includes all plain white, brown, wholemeal and granary bread
Potatoes	All fresh and canned plain and sweet potatoes

<sup>†</sup> All other definitions of food /drink categories available from FSS on request.



# ANNEXE 4

Percentage sodium contributions to the take home diet for Scotland and Great Britain (based on Kantar Worldpanel data for Food Standards Scotland)



# ANNEXE 5

Average calories purchased (*per capita per day*) in the last 12 weeks of the year (festive season) compared to the rest of the year (including data from October 2013 to September 2015)

	Average calories purchased between early January and mid October	Average calories purchased between October and early January	% change
<b>Total Food and Drinks</b>	2,041.4	2,249.4	10.2%
<b>Plain Bread</b>	134.5	137.5	2.2%
<b>Plain Vegetables</b>	41.8	42.1	0.7%
<b>Plain Fruit</b>	69.4	62.7	-9.7%
<b>Plain Oily and White Fish</b>	6.4	5.9	-7.5%
<b>Plain Starchy Carbohydrates</b>	39.4	40.0	1.4%
<b>Total Take Home Confectionery</b>	94.2	144.8	53.6%
<b>Total Biscuits</b>	132.5	148.4	12.0%
<b>Regular Soft Drinks</b>	52.2	57.5	10.2%
<b>Total Cakes and Pastries</b>	57.4	75.7	31.9%
<b>Take Home Savouries</b>	72.1	86.7	20.3%



# ANNEXE 6

Average percentage of volume purchased on promotion purchased in the last 12 weeks of the year (festive season) compared to the rest of the year (including data from October 2013 to September 2015)

	Average purchase on price promotion between early January and mid October	Average purchase on price promotion between October and early January	% change
<b>Total Food and Drinks</b>	36.3%	35.63%	-1.9%
<b>Plain Bread</b>	27.5%	28.46%	3.4%
<b>Plain Vegetables</b>	25.94%	26.94%	3.9%
<b>Plain Fruit</b>	28.75%	29.42%	2.3%
<b>Plain Oily and White Fish</b>	32.02%	34.22%	6.9%
<b>Plain Starchy Carbohydrates</b>	22.74%	21.72%	-4.5%
<b>Total Take Home Confectionery</b>	49.17%	53.56%	8.9%
<b>Total Biscuits</b>	44.73%	43.36%	-3.1%
<b>Regular Soft Drinks</b>	47.95%	49.78%	3.8%
<b>Total Cakes and Pastries</b>	41.18%	39.07%	-5.1%
<b>Take Home Savouries</b>	52.59%	55.55%	5.6%



# About Food Standards Scotland

Food Standards Scotland (FSS) is the public sector food body for Scotland. We are here to ensure that information and advice on food safety and standards, nutrition and labelling is independent, consistent, evidence-based and consumer-focused.

Our primary concern is consumer protection – making sure that food is safe to eat, ensuring consumers know what they are eating and improving nutrition. With that in mind, our vision is to deliver a food and drink environment in Scotland that benefits, protects and is trusted by consumers.

FSS was established by the Food (Scotland) Act 2015 as a non-ministerial office, part of the Scottish Administration, alongside, but separate from, the Scottish Government. We are mainly funded by government but we also charge fees to recover costs for regulatory functions.

See more at:

<http://www.foodstandards.gov.scot/about-us>

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