Public Health England

Protecting and improving the nation's health

Impact of COVID-19 pandemic on grocery shopping behaviours

About Public Health England

Public Health England exists to protect and improve the nation's health and wellbeing and reduce health inequalities. We do this through world-leading science, research, knowledge and intelligence, advocacy, partnerships and the delivery of specialist public health services. We are an executive agency of the Department of Health and Social Care, and a distinct delivery organisation with operational autonomy. We provide government, local government, the NHS, Parliament, industry and the public with evidence-based professional, scientific and delivery expertise and support.

Public Health England
Wellington House
133-155 Waterloo Road
London SE1 8UG
Tel: 020 7654 8000
www.gov.uk/phe
Twitter: @PHE_uk
Facebook: www.facebook.com/PublicHealthEngland

Published November 2020
PHE publications
gateway number: GW-1597

PHE supports the UN Sustainable Development Goals

SUSTAINABLE DEVELOPMENT GOALS

Contents

About Public Health England 2

Executive summary 4

- Introduction 4
- Main findings 4

Introduction 6

Methodology 9

- Introduction 9
- Data source 9
- Metrics used 9
- Nutrition data 10
- Limitations 10

Results 11

- Overall volume sales and trips 11
- Comparison of purchasing of different food and drink types 14
- Trends in purchasing for snacking categories 19
- Other data sources on changes in food behaviours 21
- Trends in purchasing for alcohol 21
- Trends in purchasing by nutrient content 23
- Comparison of volume spend by lifestage and social class 25

Conclusions and next steps 31

Appendix A: Timeline for lockdown measures 32

Appendix B: Units of measurement used in Kantar FMCG data 36

Executive summary

Introduction

This report looks at the changes in grocery purchasing behaviour which took place just before and during the lockdown measures imposed in response to the COVID-19 pandemic. Comparisons are made to purchasing behaviour in the same time period in 2019 and between groups of shoppers and food categories.

When reading this report, it is important to remember that it only covers food and drink purchasing which is then taken into the home[1]. When comparing to purchasing in 2019 therefore, it is important to remember that some or all of the increases in household purchasing from food retailers seen post lockdown will reflect a reduction in food and drink purchased and consumed from the eating out of the home sector (for example quick service restaurants, pubs, cafés and coffee shops) and do not necessarily mean more food and drink has been purchased overall.

For example, some grocery purchasing will simply be replacing meals which were previously school or work lunches and snacks, or meals consumed for leisure or by necessity due to being outside the home for other leisure reasons.

Main findings

Volume sales of food and drink purchased for consumption at home in the year to date up to the week ending 21 June 2020 is 11.1% higher than the same period in 2019.

The week ending 22 March 2020, which was just before formal lockdown was announced on 23 March 2020, saw the highest ever volume sales recorded (volume sales were 43.6% higher than the equivalent week in 2019).

Volume sales have since fallen from this peak but have remained well above the equivalent time periods in 2019, and for the most recent four-week period included in this report (ending 21 June 2020), volume sales were still 17.7% higher than the same four-week period in 2019.

[1] Ready to eat food and drink brought into the home for consumption such as deliveries of cooked pizza or carry out hot coffee drinks for example are not included.

This increase has largely been driven by an increase in volume per trip[2] whilst the number of trips has fallen, although this effect has lessened as some of the lockdown measures have been relaxed.

Categories which have shown the largest increases in the year to date up to 21 June 2020 are alcohol (up 27.6%), home cooking (savoury[3] up 26.2% and sweet[4] up 23.5%), frozen meat (up 19.1%), savoury carbohydrates and snacks (up 18.8%) and frozen confectionery (up 17.8%).

The largest increases in volume sales of food and drink have been for families with the youngest child aged 0-4 years (up 22.2% on year to date up to 21 June 2020), or adults of working age without children (up 21.1%)

There were also increases in volume sales by social class but the differences between groups were smaller. Group C2 (up 15.6%) had the largest increase followed by group AB (up 13.1%).

Volume sales increased for the 8 main nutrient components of food and drinks[5] in the year to date up to 21 June 2020, with increases for sugar (up 11.5%), calories (up 13.7%), salt (up 13.8%) and saturated fat (up 15.0%) compared to total volume sales up 11.1%.

[2] A “trip” will also include an online shop delivered to home.
[3] Savoury home cooking products include flour and cooking oils.
[4] Sweet home cooking products include sugar.
[5] Those typically shown on food labels which are calories, total fat, saturated fat, carbohydrates, sugar, fibre, protein and sodium (that is salt).

Introduction

The COVID-19 pandemic has caused major changes to the way we live as well as having a direct impact on our health.

The lockdown measures introduced on 23 March 2020 and subsequent announcements had a major impact on how we conduct our daily lives. For example, children no longer attended school daily and a large number of people in employment either switched to working at home or were furloughed. Even those members of the public who didn't have young or school aged children and weren't working, such as retirees, also experienced a big change to their daily lives as some were asked to stay at home and vulnerable people were asked to shield.

Due to the change in people's living circumstances and the restrictions placed on the eating out of home sector, the majority of people will have been consuming all their meals at home, whereas previously they may have visited cafés, pubs or restaurants for some snacks and meals. Some families may have experienced temporary growths in their households as older children returned from further education to live at home, or young adult workers returned from house sharing arrangements to their family homes during lockdown. Meanwhile other households may have received food parcels from local authority schemes as they were shielding, so their grocery purchasing may have reduced during lockdown.

Whilst some of the lockdown measures have now been relaxed either partially or wholly, the change in our behaviours due to lockdown has the potential to have a longer-term impact on our health, particularly if they become permanent changes.

This report focuses on grocery purchases using weekly data from Kantar FMCG. It looks at changes in household purchasing of food and drink immediately preceding and during the lockdown period and continues into the period when some of the lockdown measures were relaxed up to 21 June 2020.

The report provides charts and accompanying commentary on the main trends in purchasing. The tables which contain the data behind the charts are available as a separate file in ODS format.

When looking at the trends it is important to realise that the level of grocery purchases before and during lockdown are not directly comparable. This is because we would expect purchases to increase as more meals are being consumed at home due to the lockdown measures. For example, school and work lunches, and evening meals previously consumed outside the home will have been transferred to meal occasions at home in the vast majority of cases.

Therefore, some or all of the increases in household purchasing from food retailers seen post lockdown will be replacing the reduction in food and drink purchased and consumed from the eating out of home sector, and do not necessarily mean more food and drink has been consumed overall. It is also important to remember that grocery purchasing is only a proxy for consumption as some food may never be eaten (that is wastage), while some may sit in domestic store cupboards or freezers for several weeks or even months before being consumed.

However, it is interesting to compare the relative size of the increases seen in different types of food and drink. For example, if sales of foods high in fat, sugar and salt increase by more than the overall average increase, then it might suggest that more unhealthy[6] food is being purchased for consumption at home, and vice versa if they increase by less than the overall average. However, even this does not necessarily mean that people's diets are healthier or unhealthier as it could be that proportionately more unhealthy than healthy meals and snacks were being consumed out of home before lockdown compared to in home.

It is also interesting to look at differences in behaviour during lockdown by different types of households to see for example how the purchasing behaviour of families changed in relation to retired people, or how more affluent households were impacted compared to less affluent households.

When reading this report and interpreting the results, it is also useful to consider the changes which have taken place to how we live our lives. A fuller list of lockdown measures and when they were introduced and relaxed is available in appendix 1 but a brief list of the most significant changes which may have impacted on grocery purchasing is included here:

[6] This is generally food which should be eaten less often and in small amounts.

Timeline: Most significant changes which may have impacted on grocery purchasing

16 March
Prime Minister advises UK against non-essential travel and contact with others, to work from home if possible and avoid using social venues such as pubs, clubs and theatres. Pregnant women, people aged 70+ and those with certain health conditions are told to consider the advice particularly important

18 March
Government announcement that schools will close from 20 March, except for those looking after the children of key workers and vulnerable

20 March
Prime Minister orders all cafes, pubs and restuarants to close from 20 March, except for take-away food

23 March
British public told they must stay at home, except for limited purposes. These include shopping for basic necessities, exercise once per day, any medical need and to travel to and from work only where absolutely necessary

10 May
Prime Minister asks those who could not work from home to go to work, avoiding public transport if possible, and the taking of "unlimited amounts" of outdoor exercise, allowing driving to outdoor destinations in England

28 May
Prime Minister says that from 1 June in England groups of up to six people will be able to meet outdoors in gardens and outdoor private space.

1 June
Primary schools partially reopen in England

13 June
Support bubbles introduced where households with one adult may now become linked with one other household of any size, allowing them to be treated as one for the purpose of permitted gatherings. This also allows the members of one household to stay overnight at the home of the other

15 June
General re-opening of English retail shops and public-facing businesses apart from those specifically excluded including restaurants, bars and pubs

23 June
Prime Minister announces that social distancing rules for England will be relaxed from 4 July, with people required to stay a metre apart but advised to maintain two metres distance where possible. He confirms that pubs, restaurants and hotels can reopen on the same day.
Two households can also meet indoors from 4 July, and do not need to be exclusive to each other like the bubble system

Methodology

Introduction

This report uses commercially available data from Kantar FMCG's consumer panel to look at the changes in grocery purchasing in the week ending 22 March 2020 which led up to lockdown, and the subsequent weeks during lockdown up to 21 June 2020 plus some year-to-date results. Comparisons are made to the same time periods in 2019 and between groups and food categories.

Data source

Kantar FMCG is a global market research business which runs a continuous reporting panel of 30,000 households across Great Britain, recording details of all food and drink purchases brought in to the home, including the volume of sales. Kantar FMCG's sample of households reflects the demographic makeup of the British population. Demographic targets for the sample are based on region, social class, age of main shopper, household composition and household size. The data collected are weighted to provide a representative picture of total food and drink purchasing in Great Britain over the time period for which data are provided.

The data source covers all food and drink (including alcohol) plus some non-food categories but this report focuses on food and drink. A full list of the categories included is listed in appendix B.

Metrics used

This report uses 4 main metrics to analyse the changes in grocery purchasing.

Volume sales

Volume is measured in either kgs, litres or packs depending on the particular products purchased. Therefore adding sales across all products to create a total can lead to sales in different units being added and this should be considered when interpreting the analysis. More information on the units of measurement for each product category is given in appendix B.

Trips per household

Average number of trips per household. A 'trip' will also include an online purchase delivered to home.

Volume per trip

The same issue mentioned under volume sales on products having different units also applies here.

Volume sales of nutrients

The volume sales in kgs, litres and packs are converted to nutrients using information collected by Kantar as explained in the following section. The nutrients included in this report are: sodium, sugar, calories, total and saturated fat, carbohydrates, protein and fibre.

Nutrition data

Kantar FMCG aims to collect all nutrition data from food labels on individual products via the use of fieldworkers who visit key retail stores and capture the information provided on packaging on a rolling 4 monthly basis. Kantar also receive nutrition information from Brandbank on a continuous basis at intervals throughout the year.

Where Kantar FMCG is able to collect the nutrition data, usually for the majority of products in a category, this is termed ‘real ‘(real and found) data. Where this is not possible, nutrition values are either copied across from similar products within the same brand (for example using a different pack size, known as ‘cloned’) or an average value for the category or product type is calculated and used instead. This is known as ‘imputed‘ data. There are some occasions where products are not found by the fieldworkers when they visit stores and older ‘real’ data from a visit in a previous year may be used.

Limitations

Data is not available in this report to assess whether people are purchasing more food and drink during lockdown than they were previously as purchases from the out of home sector before lockdown are not included.

The data is from a consumer panel and is weighted to be representative of the population to remove non-response bias. However, some biases may remain as the weighting is based on demographic factors so does not account for all factors which may affect willingness to take part in a consumer survey about grocery purchasing such as interest in food or cooking. There are also no confidence intervals provided with the data from Kantar FMCG to assess whether changes over time and differences between categories and groups of households are likely to be statistically significant.

Results

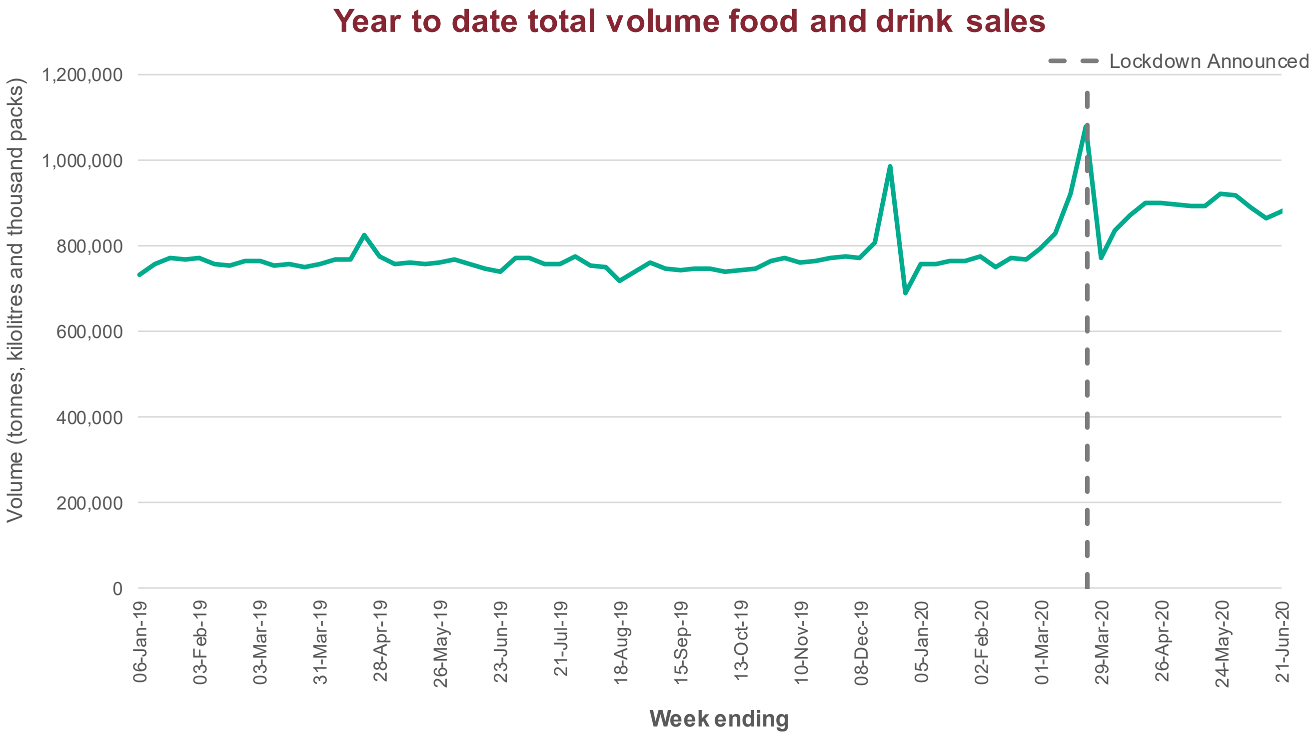
Overall volume sales and trips

Figure 1 shows an increase in volume sales leading up to a peak in the week ending Sunday 22 March, which was the day before lockdown was announced on Monday 23 March. Volume sales for the week ending 22 March were the highest ever recorded by Kantar FMCG (43.6% above the same week in 2019) and surpassed the peak at Christmas. Volume sales fell heavily in the following week ending 29 March which may reflect the amount of stockpiling that took place in the previous few weeks, the difficulty in purchasing certain grocery products due to a lack of supply and the introduction of lockdown measures restricting movement outside of the home. However, sales in that week were still 1.8% above the same week in 2019.

After that initial few weeks of stockpiling and shoppers adjusting to the lockdown measures, volume sales rose and have remained above the equivalent time periods in 2019 by 11.8%, 18.9% and 17.7% for the four-week periods ending 26th April 2020, 24th May 2020 and 21st June 2020, respectively.

Overall, year to date volume sales up to 21 June 2020 are 11.1% above the equivalent period in 2019.

Figure 1: Trend in food & drink volume sales – Great Britain



Figures 2 and 3 show the average volume sales of food and drink per trip and the average number of trips per household over this same period. In the week ending 22 March there was a decrease in the average volume sales per trip and an increase in the average number of trips per household, which may reflect an increase in top up shops for a few items before lockdown began on 23 March. Since then, households have made fewer trips but the average amount purchased per trip has increased. This may reflect the initial lockdown measures which restricted movement outside the home, even though shopping for food was one of the legitimate reasons to leave home, plus public concern about being in an enclosed space with non-household members.

After a few weeks of adjustment to the introduction of lockdown measures, volume sales per trip has fallen steadily and the number of trips per household has increased but they are still at very different levels to what was seen before lockdown in 2019 and the earlier period of 2020.

Figure 2: Trend in average food & drink volume sales per trip – Great Britain

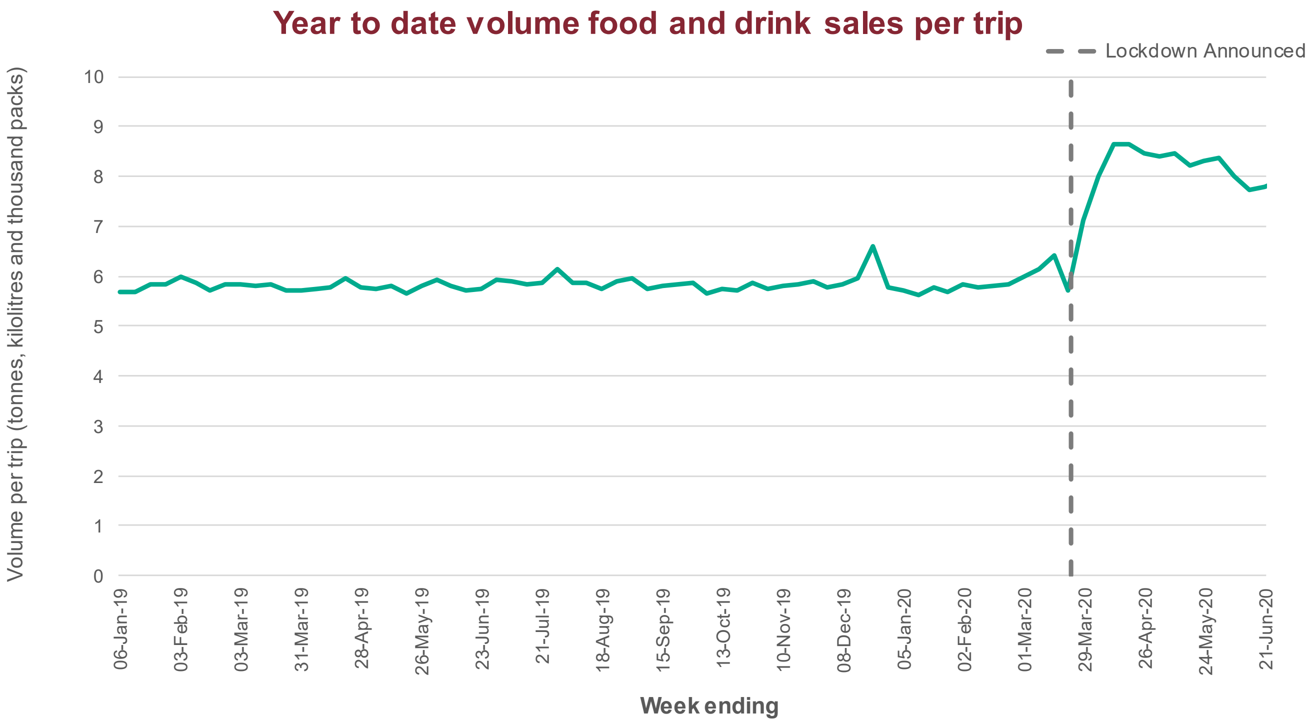
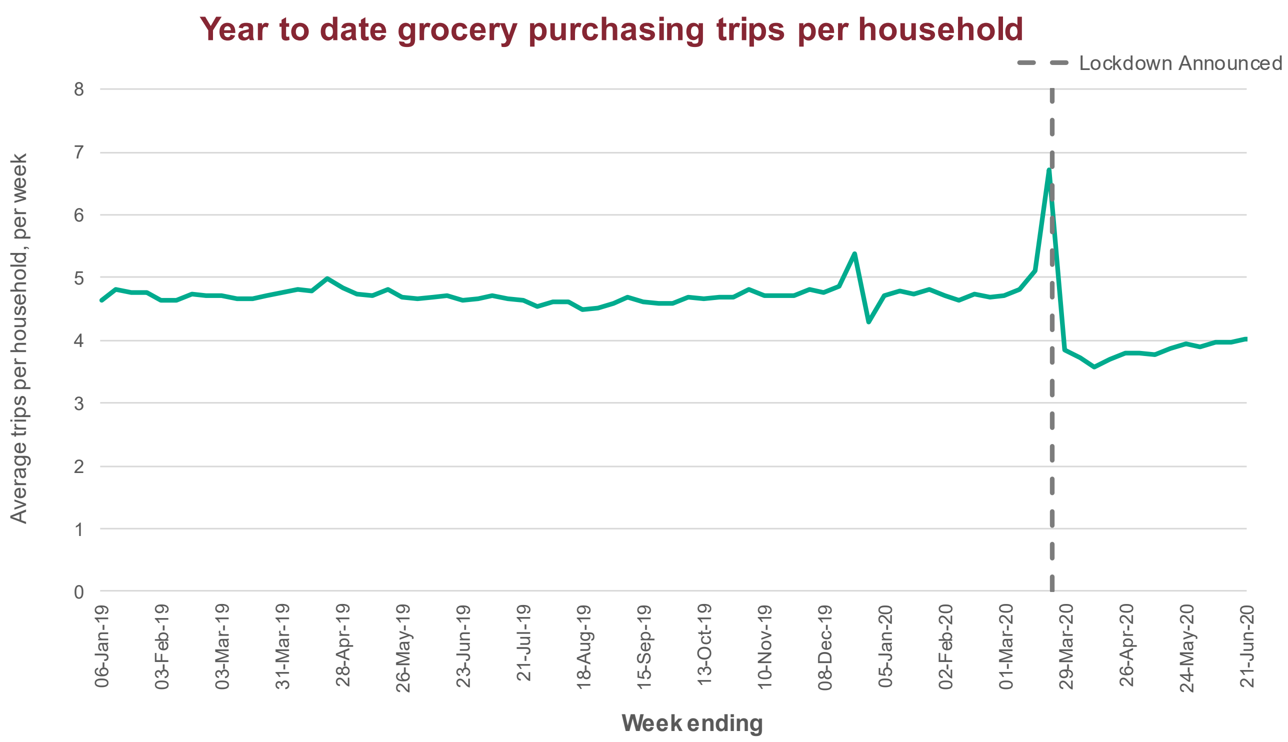


Figure 3: Trend in average number of grocery purchasing trips per household – Great Britain



Comparison of purchasing of different food and drink types

As mentioned in the introduction, whilst we would expect the volume of food and drink purchased to increase as more meals are consumed at home due to the lockdown measures in place, it is interesting to compare the increases seen between different types of food.

Figure 4a to 4f shows the percentage increase in volume sales for different food and drink categories compared to the same period last year. Figures 4a and 4b concentrate on weekly comparisons around the period when lockdown was introduced, whilst figures 4c, 4d and 4e show comparisons over a longer four-week period once lockdown was established and slightly longer term changes in grocery purchasing had become established. Finally 4f combines the data across all of 2020 to week ending 21 June 2020 and compares it to the equivalent period in 2019.

Figure 4a shows the comparison for the week ending 22 March 2020 just before lockdown was introduced on the 23 March 2020. Several categories (frozen meat (+140.5%), baby milk (+140.1%), savoury home cooking (+111.3%), other toiletries (+107.0%) and canned goods (+101.0%)) saw sales volumes of more than double the equivalent week in 2019. These are categories which might be expected to be purchased heavily during an episode of stockpiling as the products in these categories generally have long shelf lives. Overall, volume sales were up 43.6% on the same week in 2019.

Figure 4b shows the comparison for the week ending 29 March 2020, which was therefore the first week of lockdown, compared to the same week in 2019. It can be seen that overall volume sales were very similar to the same week in 2019 following a large increase in the previous week. Savoury home cooking showed the largest increase (up 33.7% on the same week in 2019) followed by sweet home cooking (up 25.3%), alcohol (up 21.1%) and savoury carbohydrates and snacks (also up 21.1%). These increases for the week ending 29 March 2020 begin to establish trends which were then consistently seen in the following figures of more home cooking, increased alcohol purchasing and more snacks being consumed at home. Meanwhile volume sales for baby milk were 25.1% lower than the equivalent week in 2019 following a large increase in the previous week. There were also large decreases for frozen confectionery (for example ice cream - down 24.5%), take home confectionery (down 19.9%) and oral care (down 19.7%), which were also reversing the increases seen in the previous week.

Figure 4c shows the changes over a longer period of time by comparing volume sales in the four-week period ending 26 April 2020 with the same period in 2019. Both these four-week periods in 2020 and 2019 included Easter. As with the first week of lockdown, sweet home cooking (up 39.1%), alcohol (up 38.4%), and savoury home cooking (up

32.8%) continued to show large increases compared to the same period in 2019. They were joined by savoury carbohydrates and snacks (up 25.4%) and fresh meat (up 19.9%). Take home confectionery was up 10.2% and this category will include Easter eggs. Baby milk continued to show a large decrease compared to 2019 (down 17.5%) adding further evidence that the increased purchasing in the week ending 22 March 2019 was due to stockpiling.

Figure 4d shows the change over the next four-week period ending 24 May 2020. Again alcohol showed one of the largest increases (up 42.7%) which may partly reflect the VE bank holiday on 8 May. This was generally more of a home-catered event compared to the equivalent early May bank holiday in 2019, with several households holding social distanced street parties. In addition, the very end of this period will include purchasing in advance of the Whitsun May bank holiday on 25 May 2020.

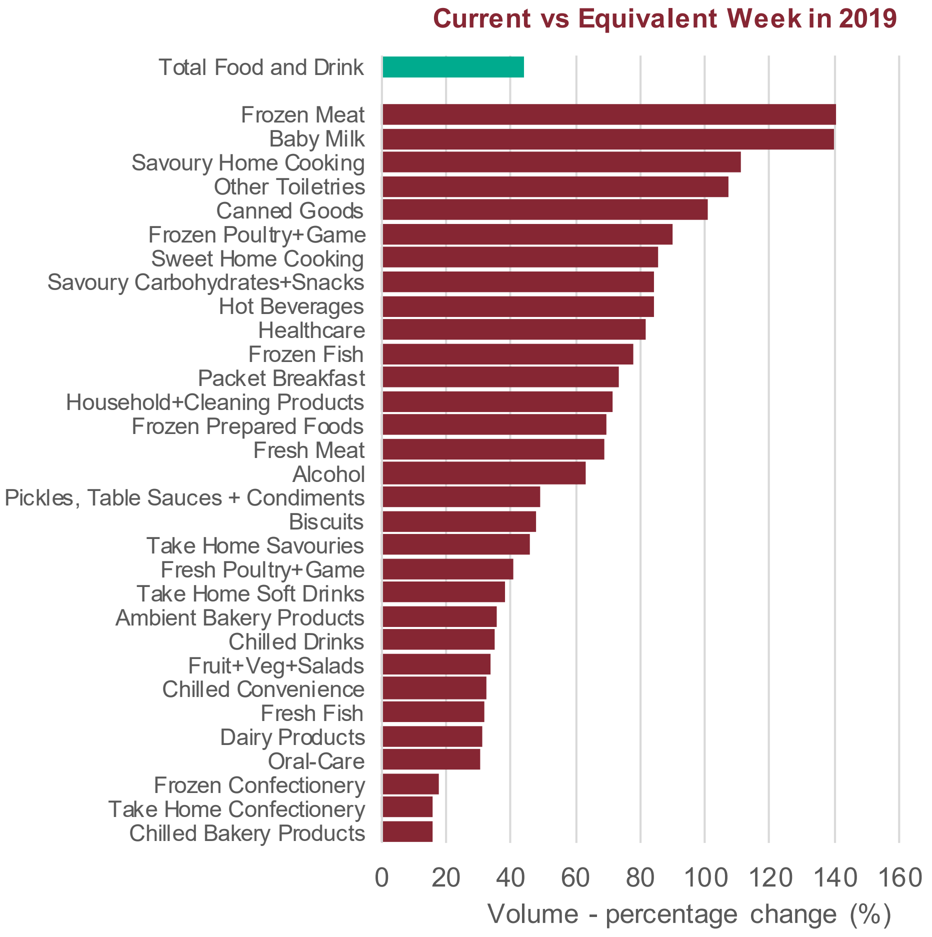
Savoury home cooking (up 46.6%) and sweet home cooking (up 44.0%) continued to flourish and these greater increases from 2019, compared to those seen in figure 4c may also reflect additional volume spend for the 2 May bank holidays.

Figure 4e shows the change for the four-week period ending 21 June 2020. Again, alcohol continues to show the largest increase (up 54.0%) compared to the same four-week period in 2019. Other categories showing large increases were take home confectionery (up 44.9%) and frozen confectionery (up 39.0%). Some of the increase in confectionery purchasing may reflect that the first week of this period was a school half-term holiday when some families will have been purchasing food for consumption at home when they may have holidayed abroad at this time in previous years, or they may have previously holidayed in the UK but eaten out of the home more often.

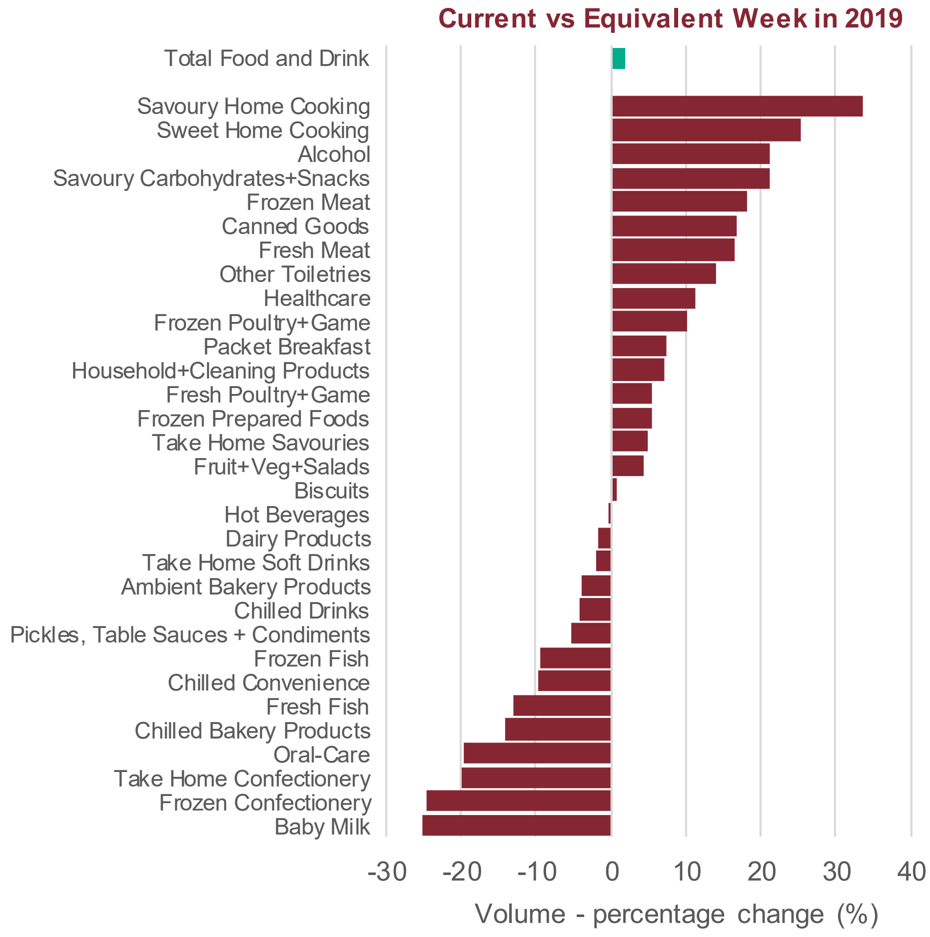
Figure 4f summarises the trends seen before and during lockdown by comparing grocery volume sales in 2020 up to 21 June with the equivalent time period in 2019. It shows that volume sales for total food and drink are 11.1% higher in 2020 than in 2019 and the largest increases have been for alcohol (up 27.6%), savoury home cooking (up 26.2%), sweet home cooking (up 23.5%), frozen meat (up 19.1%) and savoury carbohydrates and snacks (up 18.8%), while oral care is the only category to have seen a decrease (down 2.6%).

Figure 4a to f: Comparisons of volume sales with the same time period for the previous year

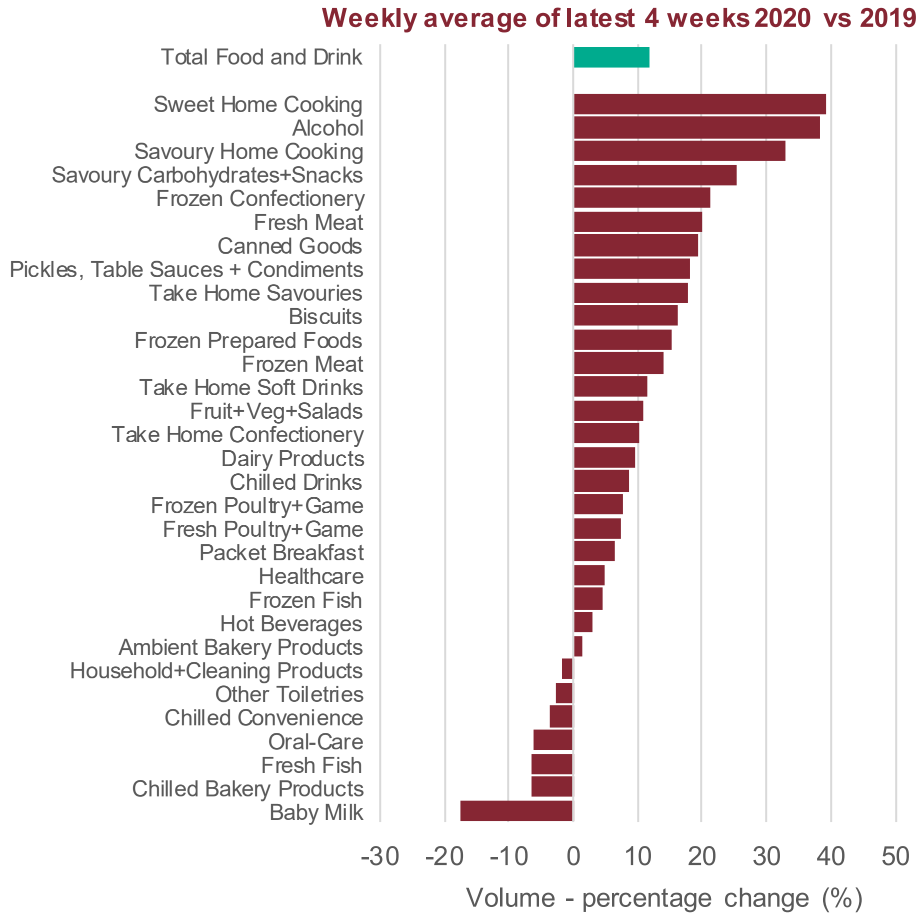
4a: Week ending 22 March 2020



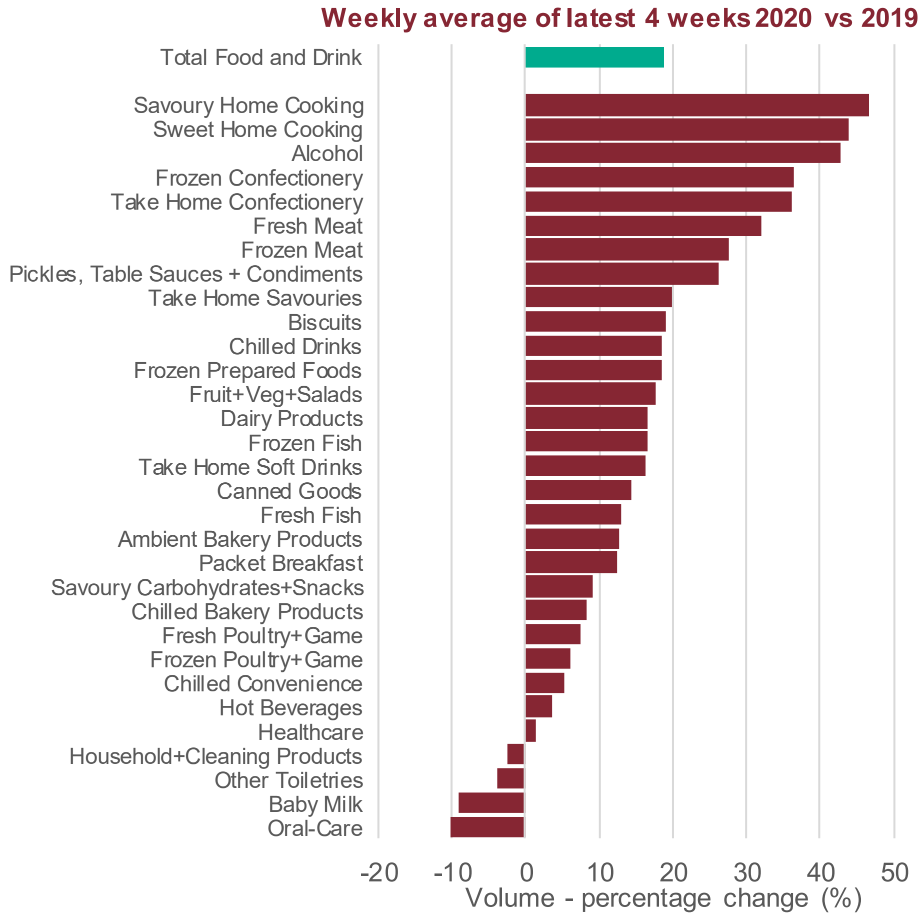
4b: Week ending 29 March 2020



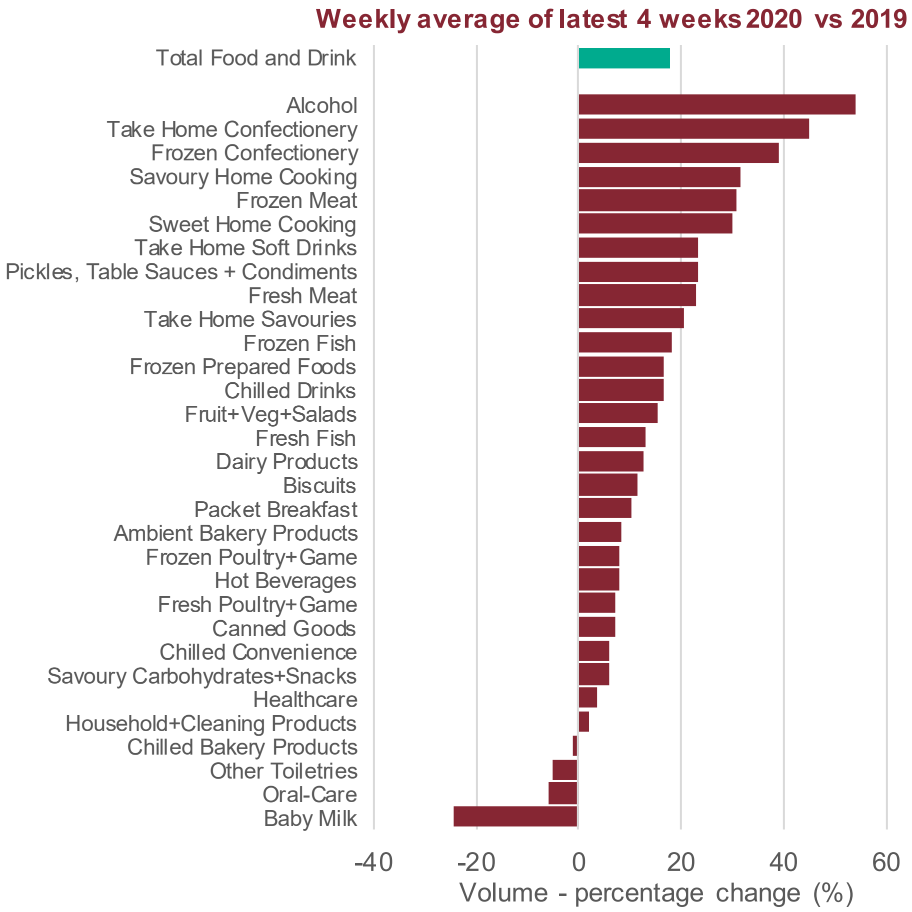
4c: Four weeks ending 26 April 2020



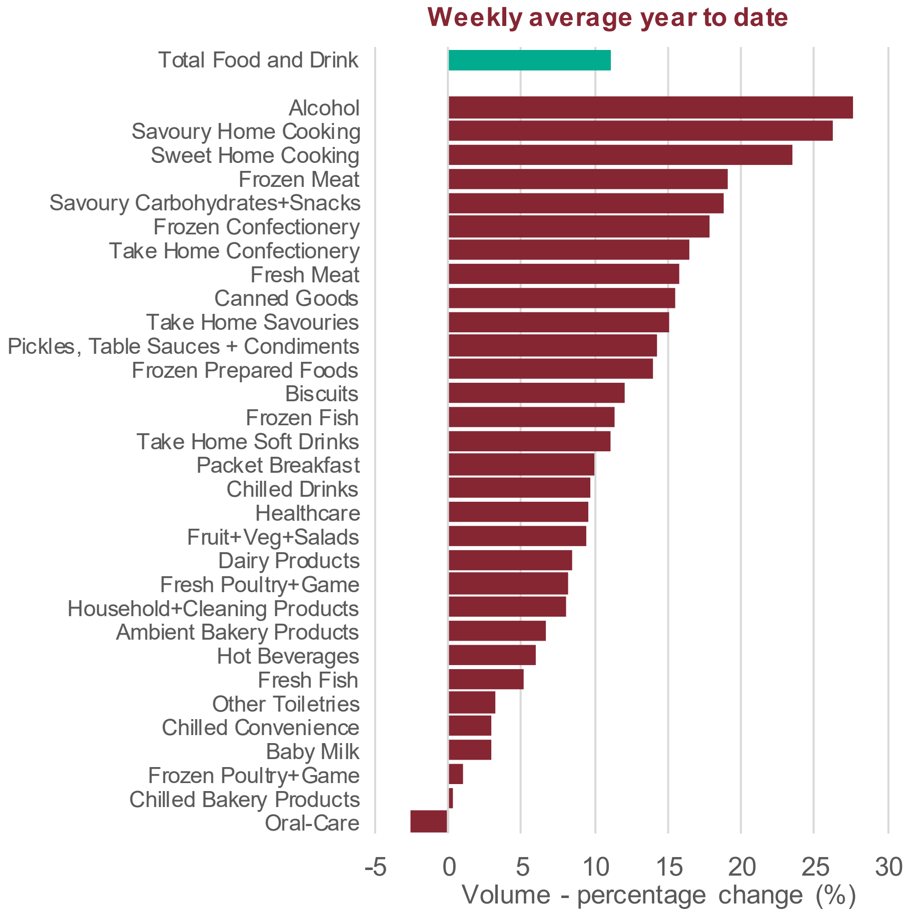
4d: Four weeks ending 24 May 2020



4e: Four weeks ending 21 June 2020



4f: Year to date ending 21 June 2020



Trends in purchasing for snacking categories

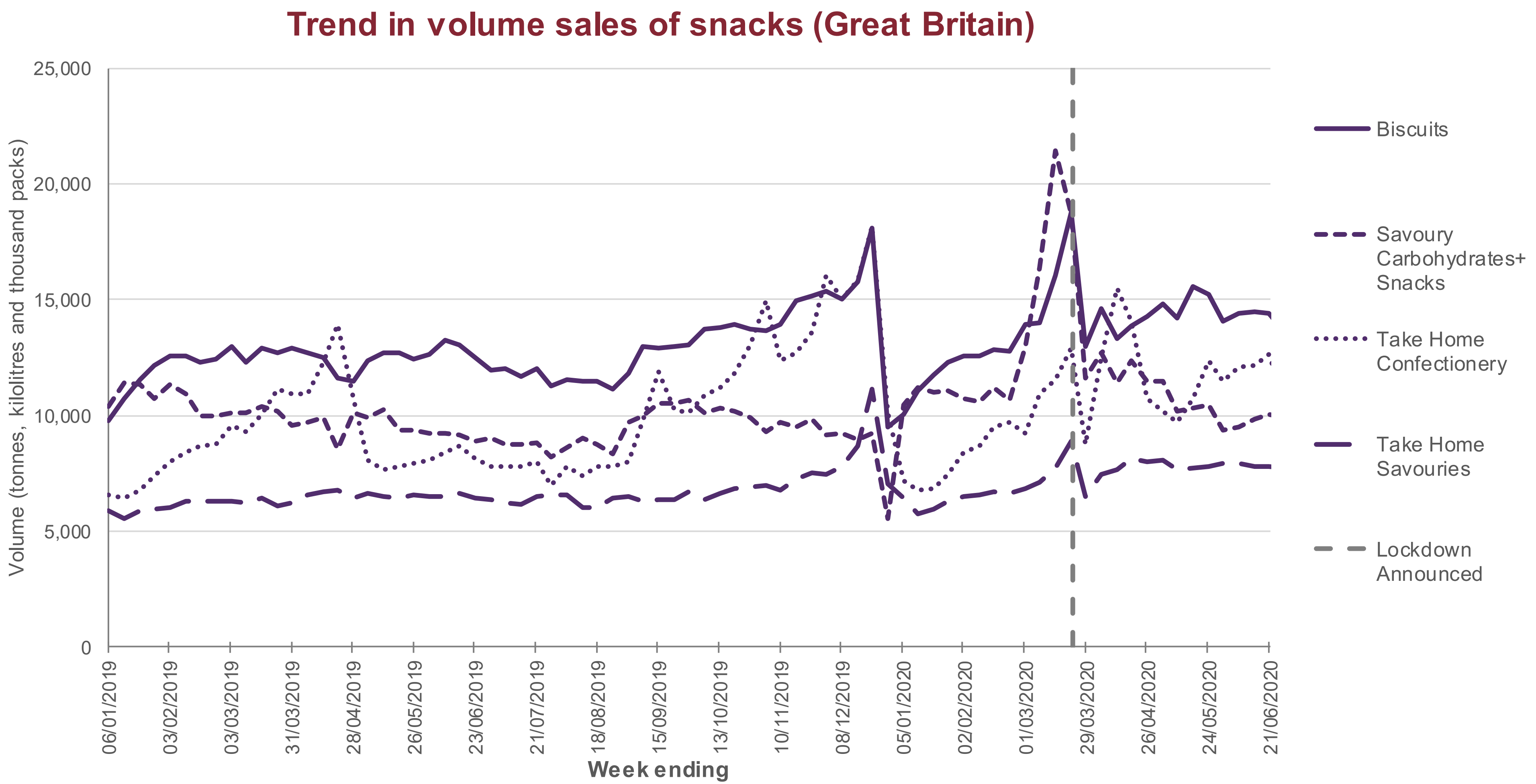
As seen in the previous section, some food and drink categories experienced quite different levels of change to others and this section focuses on 4 categories which, on average, tend to be eaten as snacks more than most other categories. These categories are biscuits, savoury carbohydrates and snacks[7], take home confectionery and take home savouries[8].

Figure 5 shows the trend in volume sales for these categories. Savoury carbohydrates and snacks peaked in the week ending 15 March (up 107.1% compared to the same week in 2019) whilst sales of biscuits and take home savouries both peaked one week later in the week ending 22 March 2020 (up 47.5% and 45.7% respectively on the same week in 2019). Sales on all 3 categories have since fallen post the lockdown announcement on 23 March, although volume sales in the year to date up to 21 June 2020 are still above the same period in 2019 (up 18.8% for savoury carbohydrates and snacks, up 15.1% for take home savouries and up 12.1% for biscuits).

Take home confectionery shows a slightly different trend with 2 peaks; week ending 22 March just before lockdown was announced and the week ending 12 April which was Easter Day. Volume sales have been lower than these peaks during the remainder of the lockdown period but were still 16.5% above the equivalent sales in 2019 for the year up to 21 June 2020.

[7] Savoury carbohydrates and snacks includes pasta, rice, pot noodles and packet soup.
[8] Take home savouries includes crisps, nuts and popcorn.

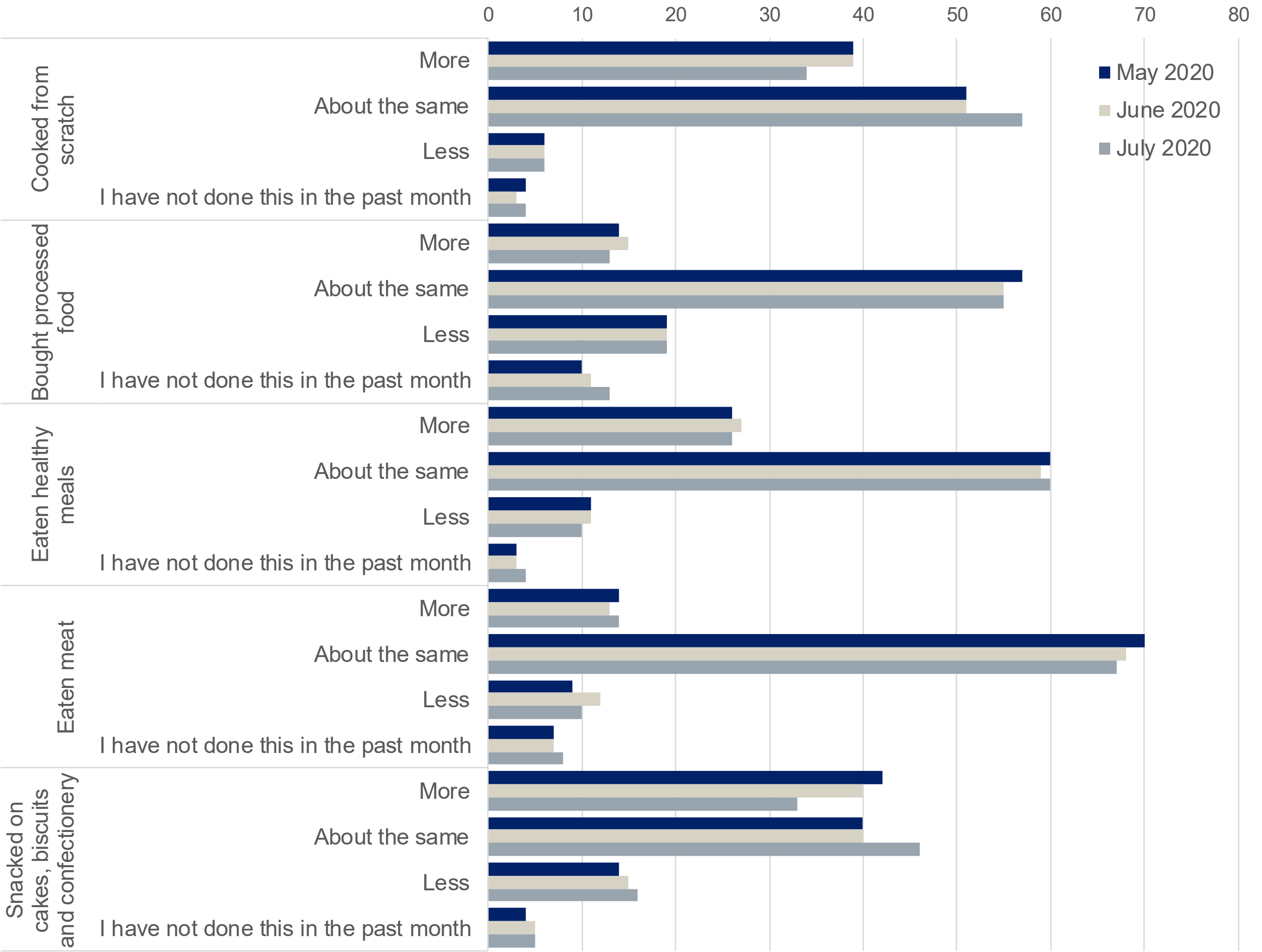
Figure 5: Trend in snacks volume sales – Great Britain



Other data sources on changes in food behaviours

The changes in purchasing of specific food categories mentioned previously are supported by evidence from a consumer tracker survey during lockdown. Figure 6 shows that respondents to the Food Standards Agency COVID-19 tracker survey were more likely to report doing more cooking from scratch, eating more healthy meals and eating more snacks than doing less of these behaviours in the previous 4 weeks to being surveyed. The findings are consistent across each of the 3 waves of the survey in May, June and July.

Figure 6: Changes in food behaviours



Source: Food Standards Agency and IPSOS Mori: COVID-19 Consumer Tracker; adults aged 16-75; Base: 2,040 (8-12 May 2020), 2,045 (12-15 June 2,020), 2,068 (10-14 July 2020)

Trends in purchasing for alcohol

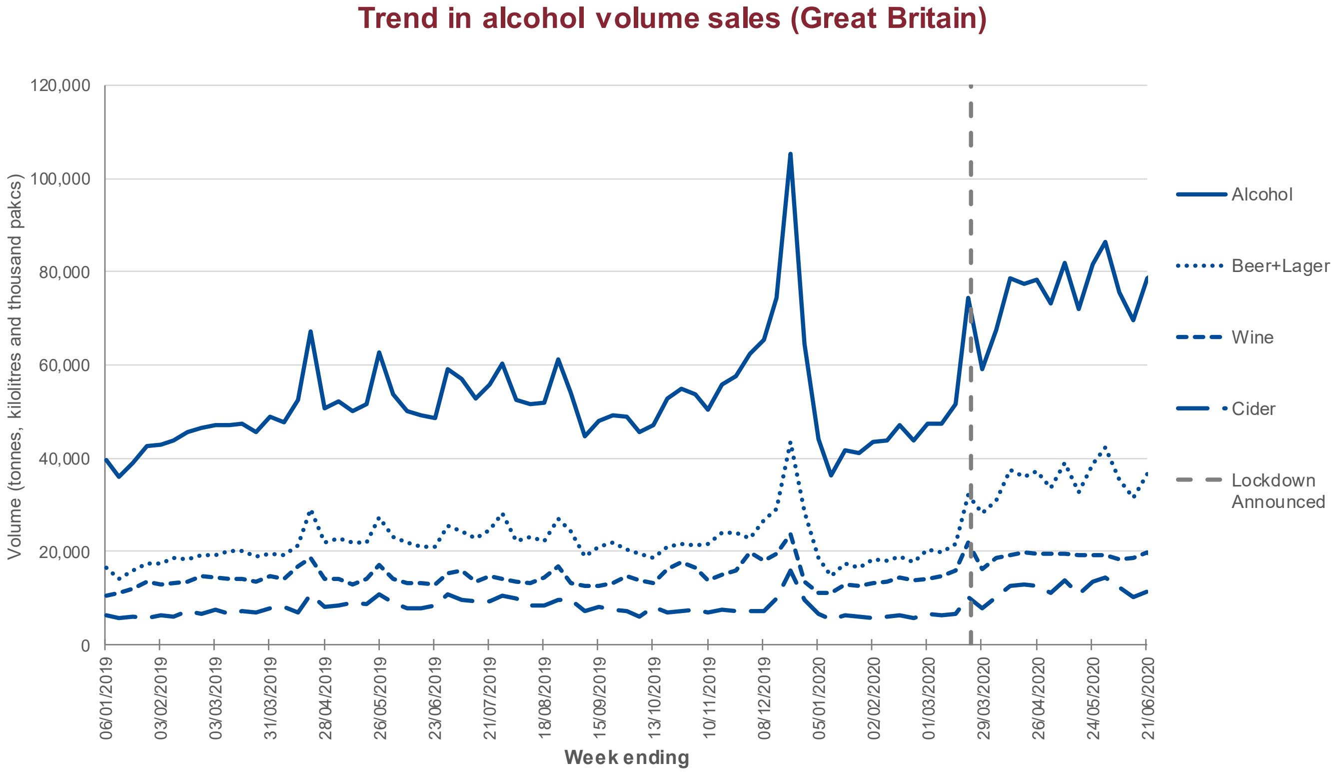
As mentioned previously, alcohol volume sales have increased during lockdown and are well above pre-lockdown levels. Figure 6 shows alcohol volume sales does have a similar pattern to other food categories although it is noticeable that the peak in the week ending 22 March 2020 is not as high as the peak at Christmas, which is an event occasion for the alcohol industry. It is also noticeable that after dropping in the week ending 29 March 2020, which is the week when lockdown began, alcohol volume sales in subsequent weeks have generally been higher than the pre-lockdown peak in the week ending 22 March 2020.

There may be several reasons for this such as a general improvement in the weather since lockdown began, 2 bank holidays in that period of which VE day on 8 May was more of an event than in previous years, and the relaxation of some of the lockdown measures from 1 June 2020 when groups of up to 6 people were permitted to meet outdoors in gardens and outdoor private spaces.

Overall, alcohol volume sales are up 27.6% in the year ending 21 June 2020 compared to the same period in 2019 although it must be remembered that pubs and restaurants were mainly closed during the period of lockdown covered by this report, so some or possibly all of this increase will be replacing sales which would previously have taken place in those settings.

Figure 7 shows that this trend since lockdown has been primarily driven by beer and lager sales. Volume sales for cider and wine are also included as these are the next 2 highest selling subcategories.

Figure 7: Trend in alcohol volume sales – Great Britain



Trends in purchasing by nutrient content

The Kantar FMCG data includes nutrition information so it is also interesting to look at the trends in volume sales just before and during lockdown for different nutrients. Again, it should be noted that we would expect the volume of the different nutrients purchased to increase post lockdown as explained previously. However, it is interesting to make comparisons between different nutrients as the increase might represent a move to shoppers' baskets becoming relatively healthier or unhealthier during lockdown.

Figure 8a to 8f shows the percentage increase in total volume in 2020 for 8 nutrients compared to the same period in 2019. Figures 8a and 8b concentrate on weekly comparisons around the period when lockdown was introduced, whilst figures 8c, 8d and 8e show comparisons over a longer four-week period once lockdown was established and longer term changes in grocery purchasing may have become established. Finally 8f combines the data across all of 2020 up to 21 June 2020 and compares it to the equivalent period in 2019.

Figure 8a shows the comparison for the week ending 22 March 2020 just before lockdown was introduced on the 23 March 2020. It can be seen that of all the nutrients reported on, sodium volume sales (up 65.1%) showed the largest increase compared to the same week in 2019. Calories were up 52.3% and sugar was up 42.2%, which was below the overall increase in volume sales of 43.6%.

Figure 8b shows the comparison for the week ending 29 March 2020 which was therefore the first week of lockdown. It can be seen that the volume of sodium purchased for consumption at home was 10.2% higher than the same week in 2019 and calories was 3.2% higher. However the volume of sugar purchased was 2.8% lower than at the same time in 2019.

Figure 8c shows the changes over a longer period of time by comparing volume sales in the four-week period ending 26 April 2020 with the same period in 2019. Both these four-week periods in 2020 and 2019 included Easter. Sodium was still the nutrient with the highest increase compared to the same period in 2019 with an increase in volume purchased of 18.5% followed by saturated fat at 16.3%. Calories were 14.6% higher and sugar was 12.0% higher.

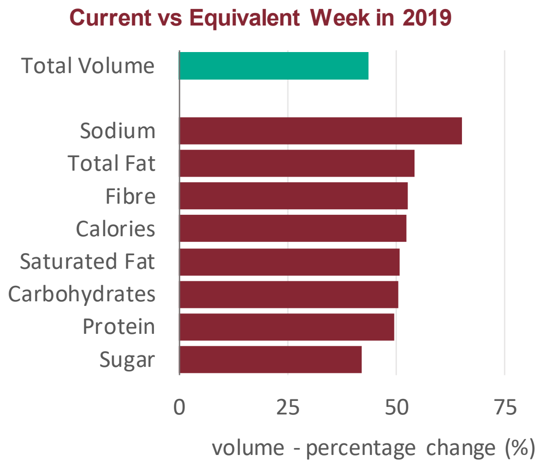
Figure 8d shows the change over the next four-week period ending 24 May 2020. Saturated fat is now the nutrient with the largest increase compared to the same period in 2019 with an increase of 26.3%. Calories, sodium and sugar were up 23.0%, 22.6% and 21.4% respectively.

Figure 8e shows saturated fat continued to have the largest increase (up 22.9%) in the four-week period ending 21 June 2020 compared to the same period in 2019. Calories, sodium and sugar were up 20.1%, 19.5% and 19.2% respectively.

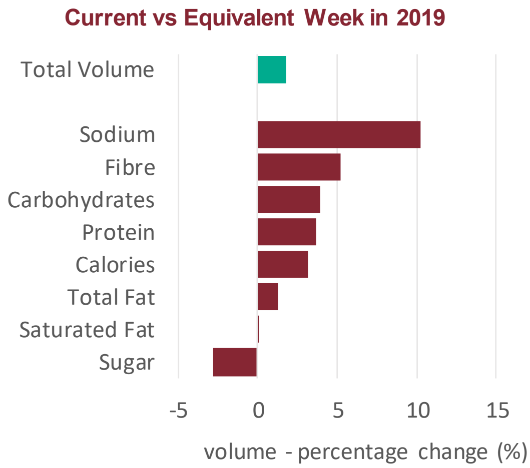
Figure 8f shows the change in the year 2020 up to 21 June 2020 compared with the equivalent time period in 2019. Volume sales of all nutrients have increased with saturated fat and total fat showing the largest increases (up 15.0% and 14.9% respectively). Sodium, calories and sugar were up 13.8%, 13.7% and 11.5% respectively, and were all greater than the increase seen in total volume sales of 11.1%. This might be an indication that take home grocery purchasing in 2020 has become less healthy compared to 2019, however we do not know how much of this purchasing is replacing meals and snacks purchased outside the home which are generally less healthy than those purchased in food retailers and taken into the home.

Figure 8a to 8f: Comparisons of volume sales by nutrient content with the same time period for the previous year

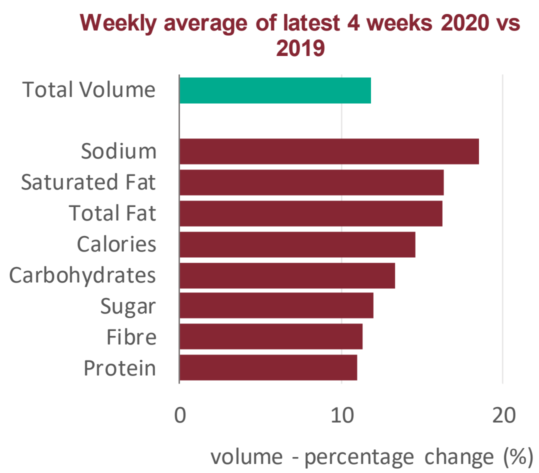
8a: Week ending 22 March 2020



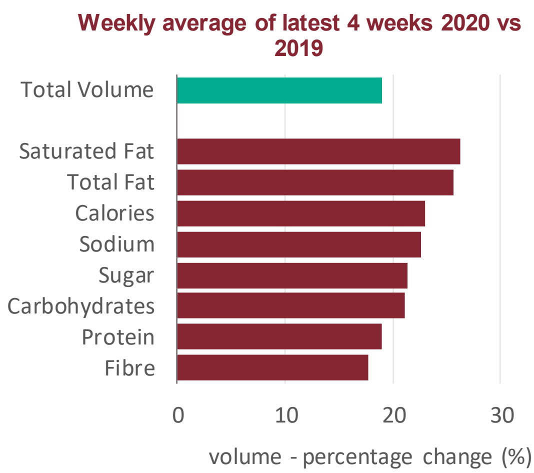
8b: Week ending 29 March 2020



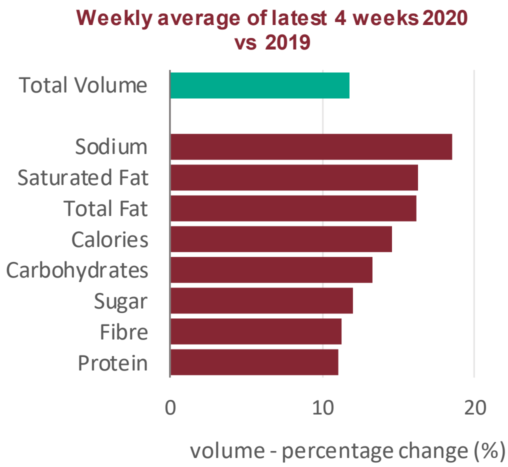
8c: Four weeks ending 26 April 2020



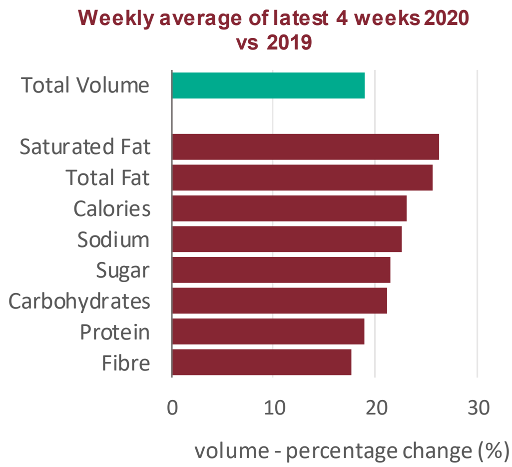
8d: Four weeks ending 24 May 2020



8e: Four weeks ending 21 June 2020



8f: Year to date ending 21 June 2020



Comparison of volume spend by lifestage and social class

Lifestage

It is also interesting to see if there are any differences in purchasing behaviours as a result of lockdown measures between types of households. The Kantar FMCG data contains a lifestage variable to allow investigation by household composition. Table 1 shows the list of categories captured by this variable.

Table 1: Lifestages

Lifestage	Age of Main Shopper	Age of youngest child
Pre-Family	<45	No children
Young Family 0-4 Years	Any	0-4
Middle Family 5-9 Years	Any	5-9
Older Family 10+ Years	Any	10-15
Older Dependents	45+	No children but 3+ adults
Empty Nesters	45-65	No children but 1-2 adults
Retired	65+	No children but 1-2 adults

As before, figures 9a and 9b concentrate on weekly comparisons around the period when lockdown was introduced, whilst figures 9c, 9d and 9e show comparisons over a longer four-week period following lockdown and slightly longer term changes in grocery purchasing had become established. Finally, 9f combines the data across all of 2020 up to 21 June 2020 and compares it to the equivalent period in 2019.

As before, we would expect volume sales for all groups to increase due to the displacement of food and drink previously purchased outside the home to in home, but it is interesting to look at the differences in the changes between household groups.

Figure 9a shows the comparison for the week ending 22 March 2020 just before lockdown was introduced on the 23 March 2020. Overall volume sales were up 43.6% compared to the same week in the previous year and all lifestages showed large increases. Pre-Families (up 50.2%), Older Dependents (up 47.5%) and Empty Nesters (up 52.1%) all showed increases above the level seen for overall volume sales. Middle Families (up 35.7%) and Older Families (up 32.1%) showed the smallest increases which may reflect that these households are running on tighter budgets and therefore have less disposable income to stockpile additional groceries.

Figure 9b shows the comparison for the week ending 29 March 2020 which was the first week of lockdown. There are some big differences seen between lifestages with Pre-Families (up 11.9%), Young Families (up 11.0%), Middle Families (up 7.3%) and Empty Nesters (up 8.8%) continuing to show increases compared to purchasing in the same week in 2019 whereas Older Dependents (up 0.3%) showed little change, Older Families showed no change and Retirees (down 12.6%) showed a decrease.

This may reflect the different requirements of households in these lifestages during lockdown. Families will have been replacing school lunches and snacks with meals in the family home and those families with working adults will be doing the same for adult meals they may have been consuming at work previously. Meanwhile, families where the youngest child was aged 10-15 may be more likely to have been taking packed lunches to school pre-lockdown so fewer school canteen meals will need to be replaced with lunches at home. Empty Nesters may have older children at university or living in shared rented accommodation who have returned to live in the family home during lockdown, as well as having to replace their own work lunches with lunches at home. Retirees on the other hand are unlikely to be working and therefore may not have such an ongoing need to replace daytime meals previously eaten outside the home with meals at home. They may also make less use of restaurants for meals outside the home in normal times and therefore in general need to make fewer changes to their normal eating and drinking behaviours. The Retirees group will also contain households who may have started to shield during this time and may have had food and drink purchased and delivered to them by their adult children or friends and neighbours, (although they will have been recording this as their own purchasing if they were reimbursing the person making the initial purchase).

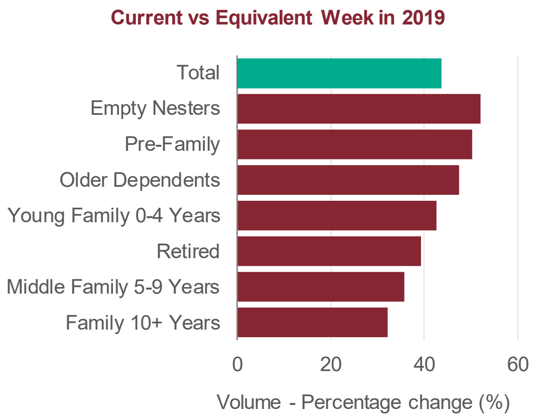
Figures 9c and 9d show all groups with the exception of Retirees having greater volume sales for the 4 weeks ending 26 April 2020 and 24 May 2020 compared to the same periods last year. The largest increases are for the Pre-Family group and Young and Middle Families. Retirees continued to show a decrease in volume sales and an additional factor here will have been the delivery of free food parcels from local authority schemes as many people advised to shield will have been in this group.

Chart 9e shows a similar pattern for volume sales up to the 4 weeks ending 21 June 2020 with the exception that the Retired group did also have an increase of 3.0%.

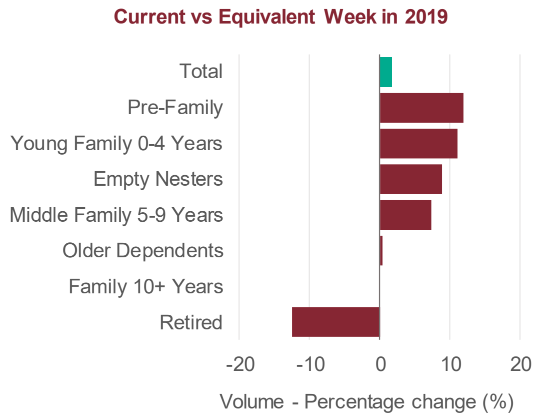
Chart 9f shows the changes for all of 2020 up to 21 June compared to the same period in 2019. As mentioned previously, Pre-families (up 21.1%) and Young Families (up 22.2%) have all shown large increases but the Retired group has a small change (down 0.8%) which will reflect the differing impact on usual behaviours for these groups caused by lockdown that has been mentioned previously. Middle Families and Older Dependents also showed above average increases of 16.1% and 14.0%, respectively.

Figure 9a to 9f: Comparisons of volume sales with the same time period for the previous year by lifestage

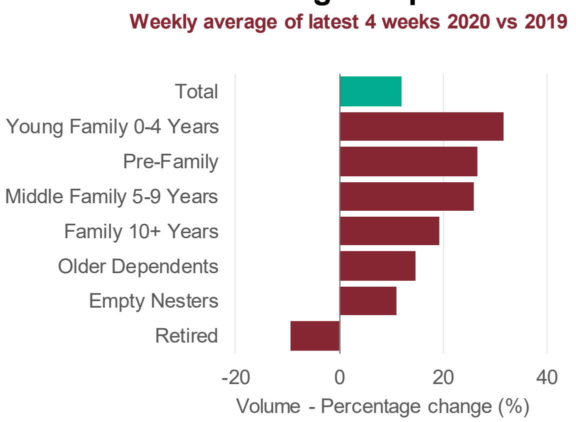
9a: Week ending 22 March 2020



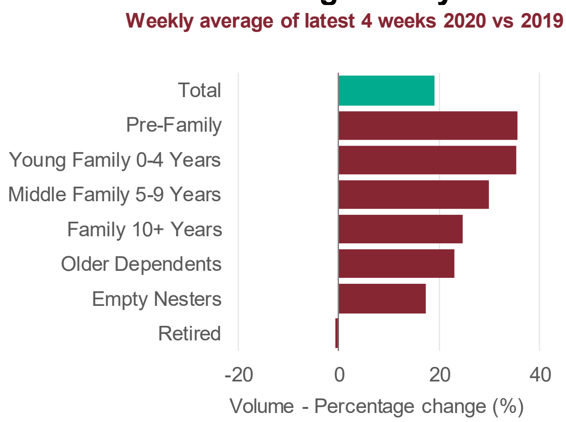
9b: Week ending 29 March 2020



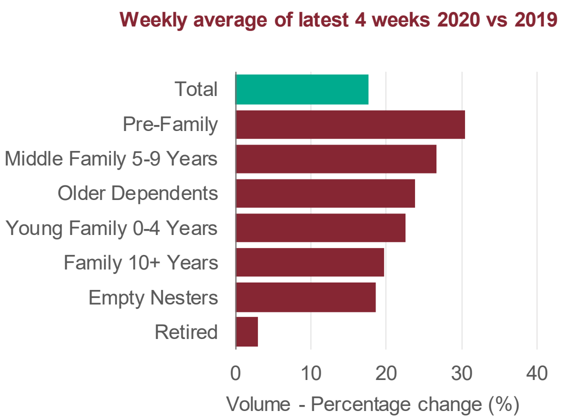
9c: Four weeks ending 26 April 2020



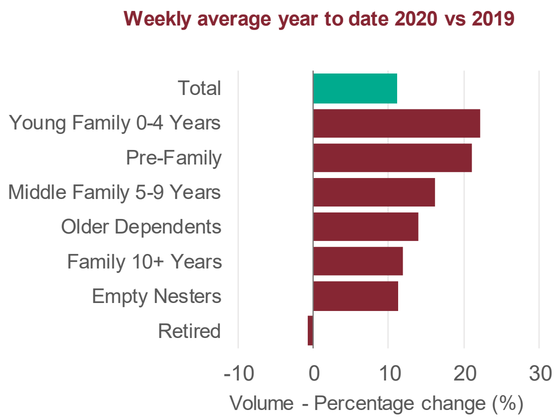
9d: Four weeks ending 24 May 2020



9e: Four weeks ending 21 June 2020



9f: Year to date ending 21 June 2020



Social class

It is interesting to see whether there has been any difference in grocery purchasing behaviour by socioeconomic status. Figures 10a to 10f show the percentage change in volume sales by social class compared to the same period in 2019. Kantar assign social class to a household based on the occupation of the chief income earner and table 2 shows the definition for each group.

Table 2: Definition of social class

AB	Higher and 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 (including pension) only

As before, figures 10a and 10b concentrate on weekly comparisons around the period when lockdown was introduced, whilst figures 10c, 10d and 10e show comparisons over a longer four-week period once lockdown was established and slightly longer term changes in grocery purchasing had become established. Finally 10f combines the data across all of 2020 up to 21 June 2020 and compares it to the equivalent period in 2019.

Figure 10a shows the comparison for the week ending 22 March 2020 just before lockdown was introduced on the 23 March 2020. All groups showed increases in purchasing during this week compared to the same week in the previous year. Slightly greater increases for households in the more affluent groups AB (up 44.6%), C1 (up 45.8%) and C2 (up 46.8%) compared to D (up 34.6%) and E (up 42.5%) can be observed, which may reflect a reduced ability to spend additional money on stockpiling for groups D and E relative to the other groups.

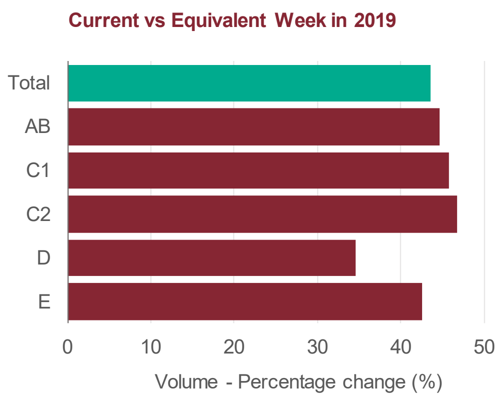
Figure 10b shows a more marked difference between the more affluent groups AB, C1 and C2 and groups D and E for the week ending 29 March 2020 compared to the same week in 2019. Groups AB, C1 and C2 continued to show increased volume spend while groups D and E showed a decrease (group D down 4.3% and E down 4.6%). This may be due to some of the increase seen in the previous week being the result of stockpiling, and group E in particular contains a lot of retired people or people on benefits who may not have as many meals and drinks needing to be displaced from school and work lunches, and restaurants, pubs and cafés to an in home setting.

Moving onto the 4-week periods ending 26 April, 24 May and 21 June in figures 10c-10e, the differences between groups AB, C1 and C2 compared to D and E continue. All groups show an increase compared to the same periods last year but the increases for D and E are much smaller than the other groups. Again, this may reflect the fact that these groups purchased fewer meals outside the home in the pre lockdown period compared to groups AB, C1 and C2.

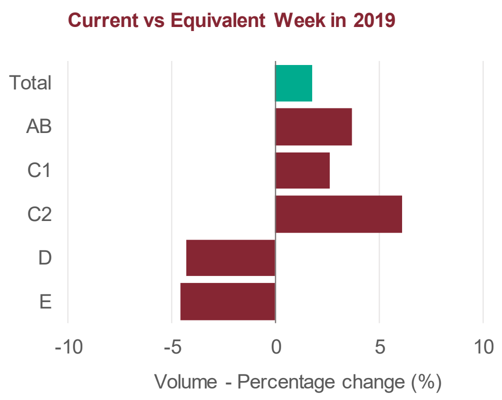
Chart 10f shows the changes for all of 2020 to date compared to the same period in 2019. All social classes have shown an increase in volume sales compared to 2019 but the increases are above the overall average increase of 11.1% for the more affluent groups; up 13.1% for AB, 11.5% for C1 and 15.6% for C2, and below average for the less affluent groups D (up 5.1%) and E (up 5.5%).

Figure 10a to f: Comparisons of volume sales with the same time period for the previous year by social class

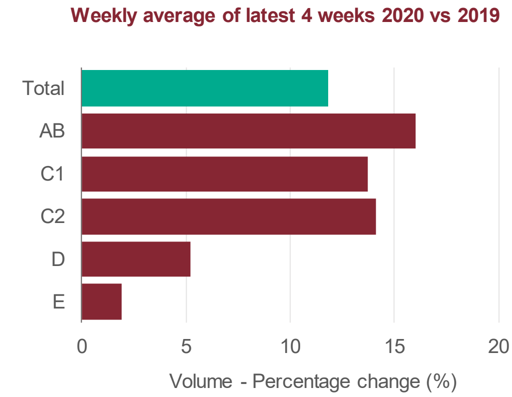
10a: Week ending 22 March 2020



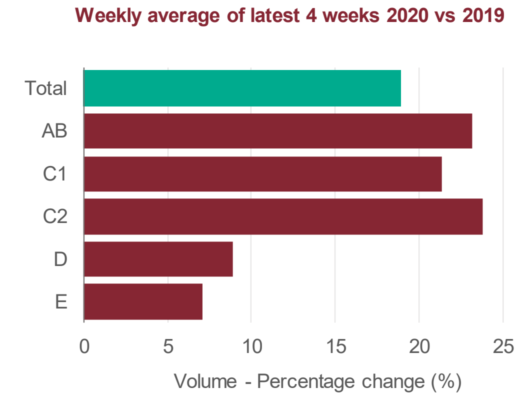
10b: Week ending 29 March 2020



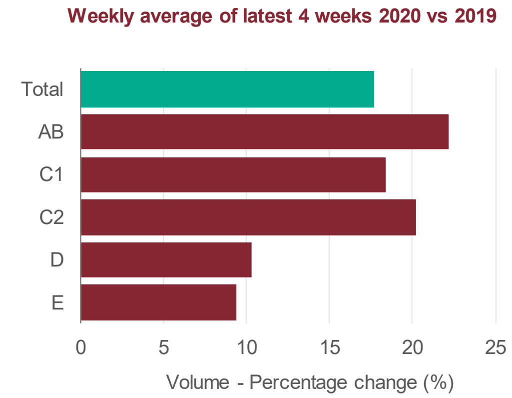
10c: Four weeks ending 26 April 2020



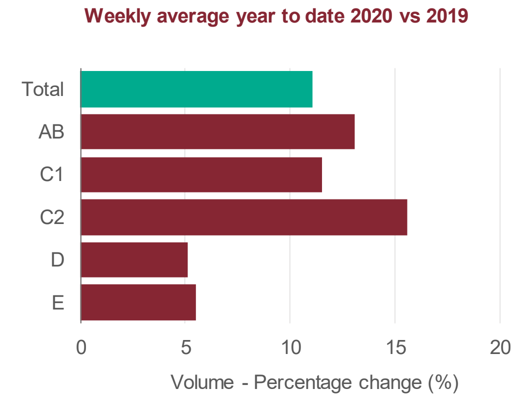
10d: Four weeks ending 24 May 2020



10e: Four weeks ending 21 June 2020



10f: Year to date ending 21 June 2020



Conclusions and next steps

This report has highlighted the changes in grocery purchasing bought into the home just before and during the lockdown period. It also examines the changes seen as some of the lockdown measures were relaxed.

It shows an increase in volume sales of nearly all grocery categories; however, some or all of these increases will reflect a reduction in food and drink purchased and consumed from the eating out of the home sector (for example quick service restaurants, pubs, cafés and coffee shops) and do not necessarily mean more food and drink has been purchased overall.

It is interesting to see the reaction of households to lockdown of having larger baskets, on average, but making fewer trips as consumers responded to the need to purchase additional food during lockdown whilst reacting to the restrictions in place at that time.

Some categories such as alcohol, home cooking and snacking have seen much larger increases than others as shoppers spent more time at home and needed to replace food and drink previously consumed in pubs and restaurants, or work and school lunches, for example.

It is not clear how this will impact on dietary intakes and therefore health, including levels of obesity, as it only includes food purchasing taken into home so the net impact after adjusting for food and drink which would normally have been purchased for consumption out of the home is not known.

PHE will be publishing a report early in 2021 based on a sample of previous respondents to the National Diet and Nutrition Survey who were asked to record their food and drink consumption for 4 days during August to October 2020. This will enable the combined impact of increased consumption in home and decreased consumption out of home to be estimated.

PHE has also recently published a summary of evidence indicating that increased BMI is a risk factor for hospitalisation and death from COVID-19[1].

Appendix A: Timeline for lockdown measures

Table 1: Timeline for introduction of lockdown measures

Date	Measure
12 March	The UK Chief Medical Officers raise the risk to the UK from moderate to high. The government advises that anyone with a new continuous cough or a fever should self-isolate for 7 days.
15 March	Health Secretary Matt Hancock says that every UK resident over the age of 70 will be told within the coming weeks to self-isolate for a very long time to shield them from coronavirus.
16 March	Prime Minister Boris Johnson advises everyone in the UK against non-essential travel and contact with others, to work from home if possible and avoid visiting social venues such as pubs, clubs or theatres. Pregnant women, people over the age of 70 and those with certain health conditions are urged to consider the advice particularly important and will be asked to self-isolate within days.
18 March	The government announces that all schools in the country will shut from the afternoon of Friday 20 March, except for those looking after the children of key workers and vulnerable children.
20 March	Prime Minister Boris Johnson orders all cafes, pubs and restaurants to close from the evening of 20 March, except for take-away food.
21 March	The Health Protection (Coronavirus, Business Closure) (England) Regulations 2020 (SI 327) come into legal effect at 2pm, enforcing the closure in England of businesses selling food and drink for consumption on the premises.
23 March	The British public are instructed that they must stay at home, except for certain very limited purposes – shopping for basic necessities; for one form of exercise a day; for any medical need; and to travel to and from work when absolutely necessary.
16 April	Announcement that lockdown restrictions would continue for "at least" another 3 weeks. Announcement included the definition of the 5 conditions for any easing of the lockdown.
10 May	Prime Minister Boris Johnson asked those who could not work from home to go to work, avoiding public transport if possible; and encouraged the taking of "unlimited amounts" of outdoor exercise, and allowing driving to outdoor destinations within England.

	The 'Stay at Home' slogan was changed to 'Stay Alert' as part of this statement.
11 May	COVID-19 5-level alert system announced, to be run by a new joint biosecurity centre. Prime Minister Boris Johnson stated that the UK was on level 4, moving towards level 3
28 May	Prime Minister Boris Johnson says the government's 5 tests have been met, and from 1 June in England groups of up to 6 people will be able to meet outdoors in gardens and outdoor private space
1 June	Car and caravan showrooms, outdoor sports amenities and outdoor non-food markets may reopen. The prohibitions on leaving home are replaced by a prohibition on staying overnight away from home, with certain specific exceptions. Gatherings of people from more than one household are limited to 6 people outdoors and are prohibited entirely indoors, with exceptions including education. Primary schools partially reopen in England.
13 June	In England and Northern Ireland, households with one adult may now become linked with one other household of any size, allowing them to be treated as one for the purpose of permitted gatherings. This also allows the members of one household to stay overnight at the home of the other. The government refers to this as a “support bubble”. The rules on gatherings are also relaxed to allow medical appointments and births to be accompanied, and to permit some visits to people in hospital, hospices and care homes.
15 June	General re-opening of English retail shops and public-facing businesses apart from those that are on a list of specific exclusions such as restaurants, bars, pubs, nightclubs, most cinemas, theatres, museums, hairdressers, indoor sports and leisure facilities. Outdoor animal-related attractions such as farms, zoos and safari parks may open. Places of worship may again be used for private prayer (but not for communal worship). Secondary schools partially reopen in England.
19 June	The UK's COVID-19 Alert Level is lowered from Level 4 (severe risk, high transmission) to Level 3 (substantial risk, general circulation), following the agreement of all 4 Chief Medical Officers
23 June[9]	Prime Minister Boris Johnson announces that social distancing rules for England will be relaxed from 4 July, with people required to stay a metre apart but advised to maintain 2 metres distance whenever possible. He also confirms that pubs, restaurants, hotels and hairdressers can reopen on the same day, but social

[9] Note that the data used in this report ends at 21 June 2020 but some later changes to lockdown measures are included here for completeness.

	distancing must be maintained. Spas, nail bars and gyms are among premises that must continue to remain closed. Two households can also meet up indoors from 4 July and need not be exclusive to each other like the bubble system. Weddings with up to 30 guests will also be permitted.
29 June	Following a spike in COVID-19 cases in Leicester, Health Secretary Matt Hancock announces the reintroduction of stricter lockdown measures for the city, including the closure of non-essential retailers from the following day, and the closure of schools from 2 July. People in Leicester are advised to stay at home as much as possible, while it is recommended that all but essential travel to, from and within the city should be avoided.
4 July	Changes announced on 23 June come into force. People required to stay a metre apart but advised to maintain 2 metres distance whenever possible. Pubs, restaurants, hotels and hairdressers reopen, but social distancing must be maintained. Two households allowed to meet up indoors and need not be exclusive to each other. Weddings with up to 30 guests permitted.
14 & 24 July	The UK government announces that the wearing of face coverings will become compulsory in shops and supermarkets in England from 24 July.
17 July	Prime Minister Boris Johnson announces a further easing of lockdown restrictions for England, with plans for a "significant return to normality" by Christmas. The new rules allow people to use public transport for non-essential journeys with immediate effect, while employers will have more discretion over their workplaces from 1 August.
24 July	Face coverings become compulsory in shops and most other enclosed public places in England.
27 July	Prime Minister Boris Johnson announces measures to tackle obesity, including a UK-wide ban on junk food advertising on television before 9.00pm, and rules in England restricting where foods high in fat and sugar can be displayed in stores, a ban on "buy one, get one free" offers for unhealthy foods, and the addition of calorie content information on menus.
30 July	In a bid to avoid a resurgence of COVID-19, the period for which someone testing positive for, or showing signs of, the virus is required to self-isolate is extended from 7 to 10 days. Restrictions are placed on Greater Manchester, and parts of East Lancashire and Yorkshire prohibiting separate households from meeting indoors following an "increasing rate of transmission" in those areas caused by people failing to adhere to social distancing rules. The restrictions take effect from midnight.

31 July	Prime Minister Boris Johnson postpones some lockdown easing measures scheduled to begin in England on 1 August for 2 weeks amid concerns about rising COVID-19 cases. Bowling alleys and casinos will remain closed until 15 August, while wedding receptions of up to 30 people are also moved back to that date. Trials of spectator sporting events are also paused. From 8 August the wearing of face coverings in more indoor settings, such as cinemas and places of worship will become mandatory.
2 August	A major incident is declared in Greater Manchester after rises in coronavirus infection rates.
3 August	The month-long "Eat Out to Help Out" scheme begins, offering a 50% discount on meals at indoor venues, 3 days per week, with the remainder of the cost picked up by the government.
28 August	The UK government announces the launch of a drive to encourage people to return to their workplaces, starting in the first week of September.
1-7 Sept	The majority of schools in England, Wales and Northern Ireland reopen for the autumn term.
9 Sept	New rules regarding social gatherings in England from 14 September are outlined by Prime Minister Boris Johnson in a government press conference, alongside details of new legal requirements for data gathering on behalf of venues, social distancing "martials" to enforce restrictions, and a "moonshot" plan to further control the virus with greatly expanded mass virus testing.
14 Sept	New rules announced on 9 September come into force.

Appendix B: Units of measurement used in Kantar FMCG data

Parent Category	Category	Kgs	Litres	Packs	Units	Number in Pack
Total Food & Drink	Total Food & Drink	Y	Y	Y	-	-
Alcohol	Alcohol	-	Y	-	-	-
Alcohol	Beer+Lager	-	Y	-	-	-
Alcohol	Cider	-	Y	-	-	-
Alcohol	Flavoured Alcoholic Beverages	-	Y	-	-	-
Alcohol	Fortified Wines	-	Y	-	-	-
Alcohol	Non Alcoholic Beer	-	Y	-	-	-
Alcohol	Sparkling Wine	-	Y	-	-	-
Alcohol	Spirits	-	Y	-	-	-
Alcohol	Wine	-	Y	-	-	-
Ambient Bakery Products	Ambient Bakery Products	Y	-	Y	-	-
Ambient Bakery Products	Total Bread	Y	-	Y	-	-
Biscuits	Biscuits	Y	-	-	-	-
Canned Goods	Canned Goods	Y	-	-	-	-
Chilled Bakery Products	Chilled Bakery Products	-	-	Y	-	-
Chilled Convenience	Chilled Convenience	Y	-	-	-	-
Chilled Convenience	Chilled Ready Meals	Y	-	-	-	-
Chilled Drinks	Chilled Drinks	Y	Y	-	-	-
Dairy Products	Dairy Products	Y	Y	Y	-	-
Dairy Products	Butter	Y	-	-	-	-
Dairy Products	Eggs	-	-	Y	-	-
Dairy Products	Margarine	Y	-	-	-	-
Dairy Products	Total Cheese	Y	-	-	-	-
Dairy Products	Total Milk	Y	Y	-	-	-
Fresh Fish	Fresh Fish	Y	-	-	-	-
Fresh Fish	Chilled Prepared Fish	Y	-	-	-	-
Fresh Fish	Shellfish	Y	-	-	-	-
Fresh Fish	Wet Smoked Fish	Y	-	-	-	-
Fresh Meat	Fresh Meat	Y	-	-	-	-
Fresh Meat	Fresh Beef	Y	-	-	-	-
Fresh Meat	Fresh Lamb	Y	-	-	-	-
Fresh Meat	Fresh Pork	Y	-	-	-	-
Fresh Poultry+Game	Fresh Poultry+Game	Y	-	-	-	-
Fresh Poultry+Game	Fresh Poultry	Y	-	-	-	-
Frozen Confectionery	Frozen Confectionery	Y	Y	-	-	-
Frozen Fish	Frozen Fish	Y	-	-	-	-
Frozen Meat	Frozen Meat	Y	-	-	-	-

Parent Category	Category	Kgs	Litres	Packs	Units	Number in Pack
Frozen Meat	Frozen Beef	Y	-	-	-	-
Frozen Meat	Frozen Lamb	Y	-	-	-	-
Frozen Meat	Frozen Pork	Y	-	-	-	-
Frozen Poultry+Game	Frozen Poultry+Game	Y	-	-	-	-
Frozen Prepared Foods	Frozen Prepared Foods	Y	-	Y	-	-
Frozen Prepared Foods	Frozen Meat Products	Y	-	-	-	-
Frozen Prepared Foods	Frozen Pizzas	Y	-	-	-	-
Frozen Prepared Foods	Frozen Ready Meals	Y	-	-	-	-
Frozen Prepared Foods	Frozen Vegetables	Y	-	-	-	-
Frozen Prepared Foods	Frozen Vegetarian Products	Y	-	-	-	-
Fruit+Veg+Salads	Fruit+Veg+Salads	Y	-	-	-	-
Fruit+Veg+Salads	Chilled Prepared Fruit+Veg	Y	-	-	-	-
Fruit+Veg+Salads	Fruit	Y	-	-	-	-
Fruit+Veg+Salads	Vegetable	Y	-	-	-	-
Hot Beverages	Hot Beverages	Y	-	-	-	-
Packet Breakfast	Packet Breakfast	Y	-	-	-	-
Packet Breakfast	Breakfast Cereals	Y	-	-	-	-
Pickles, Table Sauces + Condiments	Pickles, Table Sauces + Condiments	Y	-	-	-	-
Savoury Carbohydrates+Snacks	Savoury Carbohydrates+Snacks	Y	-	-	-	-
Savoury Carbohydrates+Snacks	Ambient Rice+Savoury Noodles	Y	-	-	-	-
Savoury Carbohydrates+Snacks	Dry Pasta	Y	-	-	-	-
Savoury Carbohydrates+Snacks	Dry Pulses+Cereal	Y	-	-	-	-
Savoury Home Cooking	Savoury Home Cooking	Y	-	-	-	-
Savoury Home Cooking	Cooking Oils	Y	-	-	-	-
Savoury Home Cooking	Flour	Y	-	-	-	-
Savoury Home Cooking	Salt	Y	-	-	-	-
Sweet Home Cooking	Sweet Home Cooking	Y	Y	-	-	-
Sweet Home Cooking	Sugar	Y	-	-	-	-
Take Home Confectionery	Take Home Confectionery	Y	-	-	-	-
Take Home Savouries	Take Home Savouries	Y	-	-	-	-
Take Home Soft Drinks	Take Home Soft Drinks	Y	Y	-	-	-
Household+Cleaning Products	Household+Cleaning Products	Y	Y	-	Y	-
Household+Cleaning Products	Facial Tissues	-	-	-	Y	-
Household+Cleaning Products	Kitchen Towels	-	-	-	Y	-
Household+Cleaning Products	Liquid Soap	-	Y	-	-	-
Household+Cleaning Products	Toilet Tissues	-	-	-	Y	-
Healthcare	Healthcare	Y	Y	-	Y	Y
Oral-Care	Oral-Care	-	Y	-	Y	-
Other Toiletries	Other Toiletries	-	-	-	Y	-
Baby Milk	Baby Milk	Y	-	-	-	-

[1] Excess weight and COVID-19: insights from new evidence (2020). Available at www.gov.uk/government/publications/excess-weight-and-covid-19-insights-from-new-evidence