Northern Ireland Take Home Food and Drink Purchases 2018 to 2022 - Appendices

April 2024

Contents

List of figures

List of tables

Appendix 1
Methodology

Recruitment and sample size

Kantar's Worldpanel recruit panellists through use of both mail outs and email recruitment. Incentives are used to reward participation, which include vouchers from most high street retailers.

650 households are chosen to reflect all Northern Ireland households by region and demographics. For some aspects of the data, weighting is applied to ensure the panel is reflective of the Northern Ireland population and their purchasing habits.

Data collected from panellists

Kantar's Worldpanel aims to collect data on all food and drink purchases brought into the home (including in store and online shopping). Food and drink products purchased and consumed out of the home are not included such as supermarket meal deals, restaurant meals, food from takeaways and food on the go. Also, this data does not account for food waste.

In each household, a 'main shopper' is designated and defined as the person who is mainly responsible for grocery shopping in each household. Panellists are provided with a handheld scanner to scan purchases once brought into the home. Panellists scan the barcodes of purchased items alongside their shopping receipt, which collects the product prices. Using a codebook provided, panellists scan unbarcoded products such as loose breads, fruit, and vegetables.

Data analysis and outputs

The FSA in Northern Ireland commissioned Kantar's Worldpanel to provide data for take home food and drink purchasing on 38 categories from 2018 to 2022. Data was collected by households for 52-weeks of the year; 2018 = 52 weeks ending 30th December, 2019 = 52 weeks ending 29th December, 2020 = 52 weeks ending 27th December, 2021 = 52 weeks ending 26th December, and 2022 = 52 weeks ending 25th December. Categories within the dataset were classified as high in fat, sugar or salt (HFSS) or Healthier based on the Eatwell Guidelines and the Nutrient Profiling Model. This categorisation system was used to create three categories: Healthier, HFSS and other (excluded categories or those unable to be classified). Five additional categories were created through combining relevant individual categories: Total Northern Ireland Categories, Total Alcohol Categories, HFSS Categories, Healthier Categories or Other Categories. For all 43 categories, the following data is available:

- spend and volume purchased (analysed by total population and by demographics)
- frequency a category is purchased
- spend and volume purchased on promotion and by type of promotion
- nutritional values (calories, fat, saturated fat, total sugars, and salt)

All the analyses presented in this report are based on the food and drink categories that FSA in Northern Ireland purchased from Kantar's Worldpanel (i.e., 43 categories). Please note that in some sections of the report, not all the data presented for the demographics can be directly compared with each other (notes are included at the relevant sections).

The FSA in Northern Ireland have purchased a set of data as detailed in the methodology. In addition, Kantar's Worldpanel have used their market knowledge to provide wider contextual information to accompany the data in the commissioned report, which is therefore not always included.

Healthier and HFSS categories

For this analysis, alcohol categories were not included as consultations for policies restricting the promotion of HFSS in Great Britian exclude alcohol products. Water and Diet Drinks are excluded as these products do not add macronutrients to the diet. Using the Eatwell Guide as a basis for food categorisation, starchy carbohydrates categories, fruit, vegetables, oily fish, and fish categories are classified as 'healthier' food categories (FSA, 2020). Although high in sugar, current dietary guidelines state that 150ml of pure fruit juice can count towards individuals' 5-a-day of fruits and vegetables. Therefore, these products are classified as healthier. The fats, oils & spreads category includes both unsaturated and saturated fat sources. Although, all types of fats should be limited, unsaturated fat sources are essential in the diet. As such, this category is excluded from this analysis. Similarly, the Meat category is excluded from analysis as it contains a combination of fatty and lean cuts of Meats. Each product from the remaining categories was aligned with a generic food item as listed in McCance and Widdowson's composition of foods integrated dataset (2021) (Mc&W). Only food products ready for consumption were included in analysis (e.g. cooked pastry/diluted juice/unshelled nuts). Unless there were no retail alternative available, homemade products were also excluded. A score for each generic item was calculated based on the Nutrient Profiling Technical Guidance (Department of Health, 2011).

In order to calculate a nutrient score for liquids (e.g. milk based drinks), the nutrient content was adjusted for each product's specific gravity as listed in the Food Portion Size Book published by the FSA (2015). As the specific gravity for soups was not listed in the Food Portion Size Book, the FAO/INFOODS Database was used as a reference. Kantar's Worldpanel categories are made up of subcategories. For example, the breakfast cereals category is made up subcategories of ready to eat cereals, porridge, and granola products. Each sub-category was classified as HFSS if ≥50% of included products were classified as 'less healthy' based on the Nutrient Profiling Technical Guidance. Categories were classified as HFSS if most subcategories were classified as less healthy.

Table 1 Categories classified as high in fat, sugar or salt (HFSS) or Healthier based on the Eatwell Guidelines and the Nutrient Profiling Model

Healthier	HFSS	Other
Pure Fruit Juice, Plain Breads, Bread with Additions, Pasta Rice & Noodles, Potato Products, Vegetables, Fruit, Fish (exc Oily Fish), Oily Fish, Yoghurts & Fromage Frais, Cheese, Milk and Soups	Milk Based Drinks, Regular Soft Drinks, Morning Goods, Breakfast Cereals, Chocolate Confectionery, Sweet Confectionery, Ice Cream Lollies & Sorbets, Biscuits (sweet), Savoury Biscuits & Crackers, Cakes, Puddings, Crisps & Savoury Snacks, Pizza, Meat Products & Processed Meats, Cooking Sauces Table Sauces & Dressings, Dips & Salads	Total Food and Drink, Total alcohol, Beer & Lager, Spirits, Wine, Flavoured Alcoholic Beverages, Diet Soft Drinks, Water, Ready Meals (exc Pizza), Meat, Fats, Oils & Spreads

Percentage change in spend or volume purchased

To calculate the percentage change (increase or decrease) in spend or volume purchased of a particular category (or categories), the value for the later year (final) was subtracted from the initial year. Then this new value was divided by the initial year and multiped by 100 (Appendix 2). For example, the spend of a category in 2022 (final) was subtracted from the spend of the same category in 2018 (initial). This value was then divided by the spend of the category in 2018 (initial) and multiplied by 100.

As the spend and volume purchased for categories were different for each demographic, the change in spend and volume were not directly comparable between family types, social classes, and urban and rural households. Therefore, these figures were only used to compare purchasing within each demographic from year to another year. For example, the spend of Fruit in urban households in 2022 was compared to the spend of Fruit in urban households in 2018.

Percentage share of total spend or total volume purchased

To calculate the percentage share of a category of total spend (i.e., how much each category contributed to the total spend), the spend of the category was divided by the total spend and then multiplied by 100 (Appendix 2). For example, if a household spends an average of £100 per week on take home food and drink, and £10 of this £100 was on Fruit, the share of total spend of Fruit would be equal to 10%.

To calculate the percentage share of a category of total volume purchased, the same calculation was applied but using total volume instead of total spend. By doing this calculation it allowed the percentage share of total spend or volume purchased of a category (or categories) by different demographics to be compared to each other.

Frequency

Frequency is the average number of times a food or drink category has been purchased in a specified period. It is important to note that frequency does not take into account the amount purchased on one shopping occasion. For example, if three pieces of fruit were purchased on one shopping occasion, this would be recorded as one frequency in the dataset.

Nutrient purchasing

Kantar's Worldpanel collects data on nutritional values from product packaging on take home food and drink purchases. The nutrient values are combined with the purchasing information to provide nutrient volumes by product, food category and for the total take home food and drink market. For products that do not have nutritional information e.g. loose fruit and vegetables, the McCance & Widdowson (The Composition of Foods) nutritional handbook is used.

Data is captured on the following nutrients:
- Calories
- Total sugars (data provided by Kantar's Worldpanel does not differentiate between natural sugars and free sugars)
- Total fat

- Saturated fat
- Salt

Appendix 2 Kantar's Worldpanel Northern Ireland take home food and drink categories

The FSA in Northern Ireland commission Kantar's Worldpanel to provide data for take home food and drink purchasing on 43 different categories which include:

1. Total Food & Drink
2. Total Alcohol
3. Beer & Lager
4. Spirits
5. Wine
6. Flavoured Alcoholic Beverages
7. Pure Fruit Juice
8. Milk Based Drinks
9. Regular Soft Drinks
10. Diet Soft Drinks
11. Water
12. Plain Breads
13. Bread with Additions
14. Morning Goods
15. Pasta Rice Noodles
16. Potato Products
17. Breakfast Cereals

18. Vegetables
19. Fruit
20. Chocolate Confectionery
21. Sweet Confectionery
22. Ice Cream Lollies Sorbets
23. Biscuits (sweet)
24. Savoury Biscuits & Crackers
25. Cakes
26. Puddings
27. Crisps & Savoury Snacks
28. Ready Meals (exc Pizza)
29. Pizza
30. Meat
31. Fish (exc Oily Fish)
32. Oily Fish
33. Meat Products & Processed Meats
34. Yoghurts & Fromage Frais
35. Cheese
36. Milk
37. Fats Oils & Spreads
38. Cooking Sauces Table Sauces
39. Dips & Salads
40. Soups
41. Healthier
42. HFSS
43. Other

Appendix 3
Calculations

1. Change in volume of a category between years were calculated using the following equation (Example: 2018 to 2022):

$$\text{Change in volume} = \frac{\text{volume of category in 2022 - volume of category in 2018}}{\text{volume of category in 2018}} \times 100$$

2. Change in spend of a category between years were calculated using the following equation (Example: 2018 to 2022):

$$\text{Change in spend} = \frac{\text{spend of category in 2022 - spend of category in 2018}}{\text{spend of category in 2018}} \times 100$$

3. Percentage share of volume was calculated using the following equation:

$$\% \text{ share of total volume} = \frac{\text{volume of category}}{\text{total volume}} \times 100$$

4. Percentage share of spend was calculated using the following equation:

$$\% \text{ share of total spend} = \frac{\text{spend of category}}{\text{total spend}} \times 100$$

5. Change in percentage share of volume of categories between years were calculated using the following equation (Example: 2022 to 2018):

Change in volume = % share of volume in 2022 - % share of volume in 2018

6. Change in percentage share of spend of categories between years were calculated using the following equation (Example: 2022 to 2018):

Change in spend = % share of spend in 2022 -% share of spend in 2018
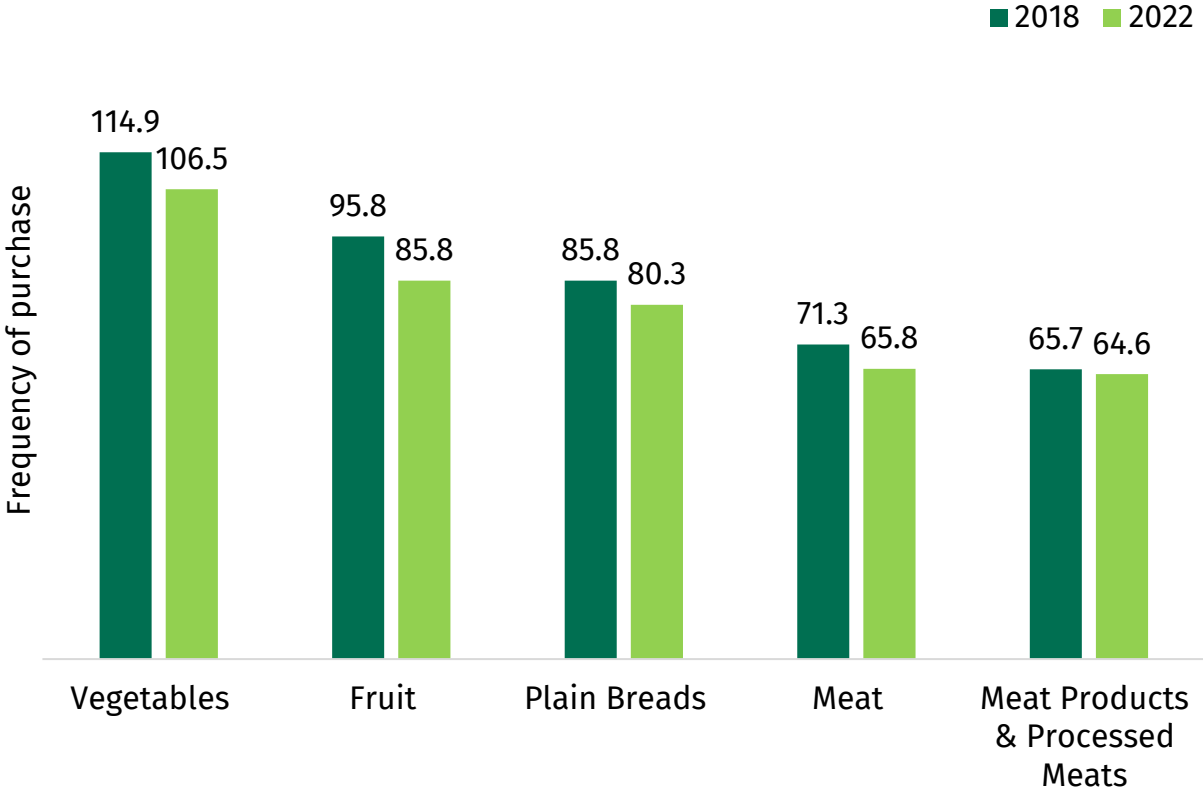
Appendix 4

Supplementary Tables

Figure 1 Top five categories with the highest average frequency purchased in 2022, compared to 2018.

Table 2 Top ten food and drink categories contributing to the take home purchase of calories in 2022, compared to 2018, 2019, 2020, and 2021.

Categories	% Contribution to calorie purchasing in 2018	% Contribution to calorie purchasing in 2019	% Contribution to calorie purchasing in 2020	% Contribution to calorie purchasing in 2021	% Contribution to calorie purchasing in 2022
Plain Breads	9.2	9.2	9.0	9.1	9.2
Fats Oils & Spreads	8.2	8.4	8.6	8.4	8.2
Meat Products & Processed Meats	6.3	6.3	6.3	6.3	6.4
Biscuits (sweet)	6.0	5.9	5.6	5.7	5.8
Chocolate Confectionery	4.2	4.3	4.5	4.7	4.8
Meat	5.4	5.3	5.2	4.9	4.7
Milk	4.7	4.7	4.5	4.6	4.7
Breakfast Cereals	4.7	4.7	4.6	4.6	4.4
Crisps & Savoury Snacks	3.8	4.0	4.0	3.9	4.0
Total Alcohol	4.3	4.0	4.4	4.2	3.9

Table 3 Top ten food and drink categories contributing to the take home purchase of total fat in 2022, compared to 2018, 2019, 2020, and 2021.

Categories	% Contribution to total fat purchasing in 2018	% Contribution to total fat purchasing in 2019	% Contribution to total fat purchasing in 2020	% Contribution to total fat purchasing in 2021	% Contribution to total fat purchasing in 2022
Fats Oils & Spreads	23.1	23.5	24.1	23.5	22.9
Meat Products & Processed Meats	10.6	10.4	10.4	10.5	10.5
Biscuits (sweet)	6.7	6.6	6.2	6.3	6.4
Chocolate Confectionery	5.6	5.7	6.0	6.3	6.4
Crisps & Savoury Snacks	5.9	6.0	6.2	5.9	6.1
Meat	6.7	6.7	6.5	5.9	5.5
Cheese	5.0	5.0	5.1	5.2	5.5
Milk	4.9	4.8	4.6	4.8	4.8
Plain Breads	2.7	2.9	2.8	3.0	3.0
Cooking Sauces Table Sauces	2.7	2.7	2.9	2.8	3.0

Table 4 Top ten food and drink categories contributing to the take home purchase of saturated fat in 2022, compared to 2018, 2019, 2020, and 2021.

Categories	% Contribution to saturated fat purchasing in 2018	% Contribution to saturated fat purchasing in 2019	% Contribution to saturated fat purchasing in 2020	% Contribution to saturated fat purchasing in 2021	% Contribution to saturated fat purchasing in 2022
Fats Oils & Spreads	20.4	20.7	21.6	20.3	20.3
Chocolate Confectionery	8.6	8.7	9.1	9.6	9.9
Meat Products & Processed Meats	9.6	9.5	9.4	9.5	9.6
Cheese	8.2	8.4	8.6	8.5	8.9
Biscuits (sweet)	9.1	8.9	8.4	8.5	8.8
Milk	8.0	7.9	7.4	7.8	7.9
Meat	6.6	6.6	6.3	5.8	5.3
Ice Cream Lollies Sorbets	3.0	2.7	3.2	3.5	3.0
Cakes	3.4	3.3	2.7	2.9	2.9
Crisps & Savoury Snacks	1.8	1.8	1.9	1.9	2.1

Table 5 Top ten food and drink categories contributing to the take home purchase of total sugar in 2022, compared to 2018, 2019, 2020, and 2021.

Categories	% Contribution to total sugar purchasing in 2018	% Contribution to total sugar purchasing in 2019	% Contribution to total sugar purchasing in 2020	% Contribution to total sugar purchasing in 2021	% Contribution to total sugar purchasing in 2022
Fruit	16.1	16.3	15.3	15.8	15.8
Chocolate Confectionery	8.6	9.0	9.3	9.7	10.0
Milk	8.3	8.4	7.9	8.2	8.4
Biscuits (sweet)	8.1	8.1	7.7	7.6	7.8
Vegetables	5.9	5.8	5.7	5.7	5.7
Sweet Confectionery	4.0	4.1	4.2	4.1	4.1
Cakes	4.1	4.0	3.4	3.5	3.7
Regular Soft Drinks	4.0	3.9	3.9	3.4	3.3
Breakfast Cereals	3.5	3.3	3.2	3.2	3.0
Plain Breads	2.6	2.7	2.8	2.8	2.9

Table 6 Top ten food and drink categories contributing to the take home purchase of salt in 2022, compared to 2018, 2019, 2020, and 2021.

Categories	% Contribution to salt purchasing in 2018	% Contribution to salt purchasing in 2019	% Contribution to salt purchasing in 2020	% Contribution to salt purchasing in 2021	% Contribution to salt purchasing in 2022
Meat Products & Processed Meats	12.7	12.7	12.7	13.2	13.1
Plain Breads	12.1	11.9	11.5	11.5	11.2
Cooking Sauces Table Sauces	6.2	6.1	5.7	5.5	5.8
Meat	6.1	6.0	5.6	5.3	5.0
Cheese	3.9	4.1	4.0	4.1	4.2
Fats Oils & Spreads	4.3	4.2	4.2	4.2	4.0
Crisps & Savoury Snacks	3.6	3.8	3.7	3.5	3.5
Milk	2.9	3.3	3.3	3.5	3.3
Vegetables	3.1	3.1	3.0	3.0	2.7
Ready Meals (exc Pizza)	2.9	3.0	2.8	2.9	2.7
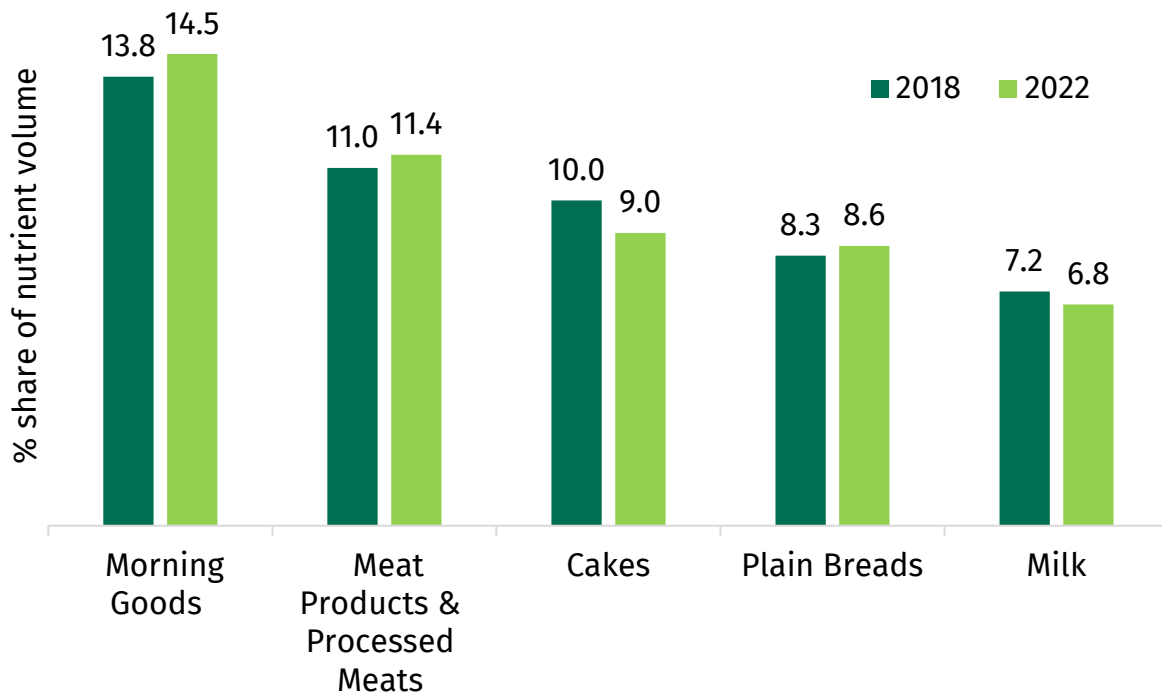
Figure 2 Top five take home food and drink categories with the highest percentage (%) share of total volume purchased for the Older Family/Dependents family type in 2022, compared to 2018.
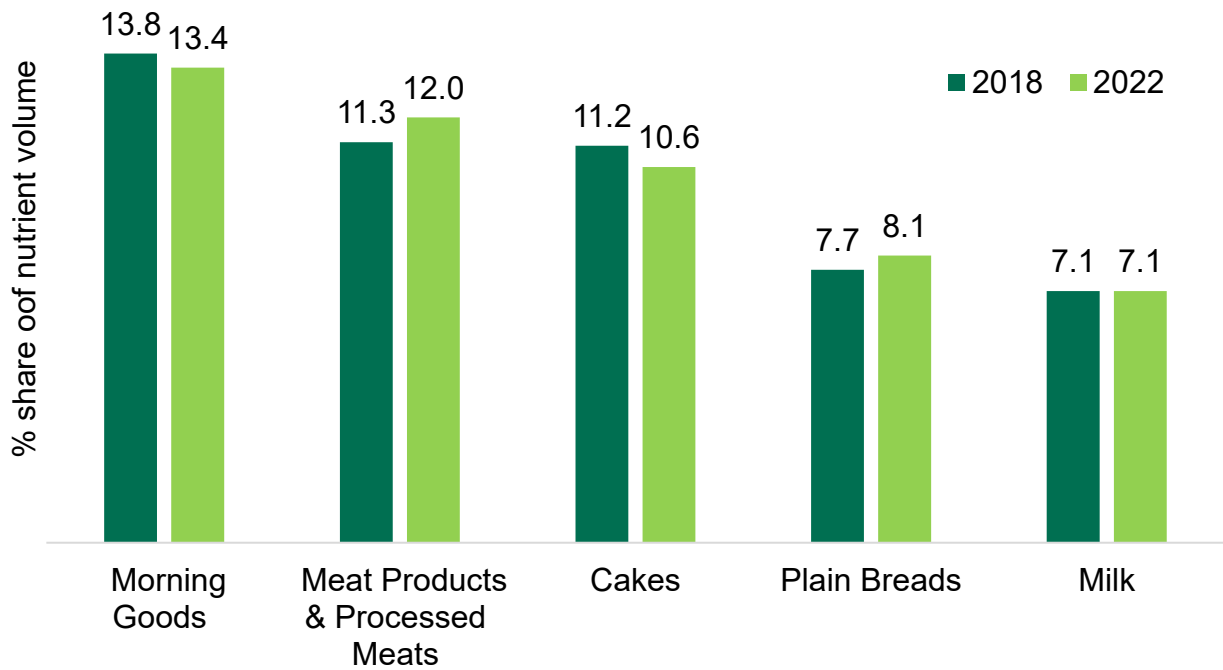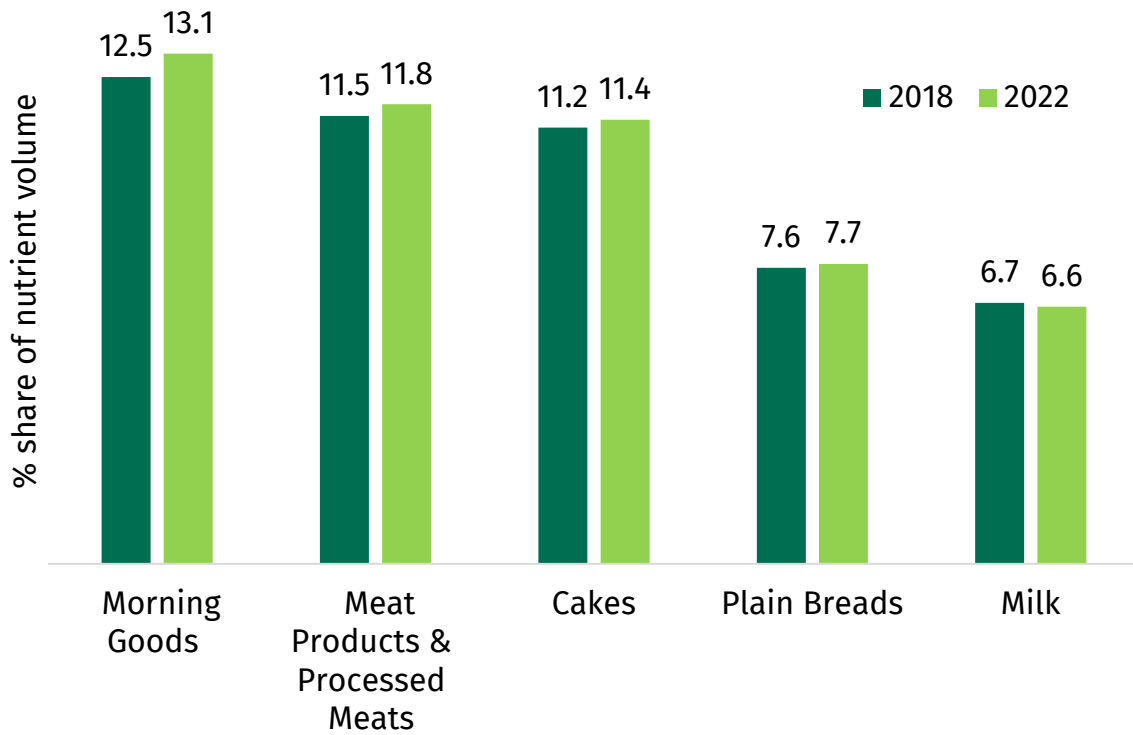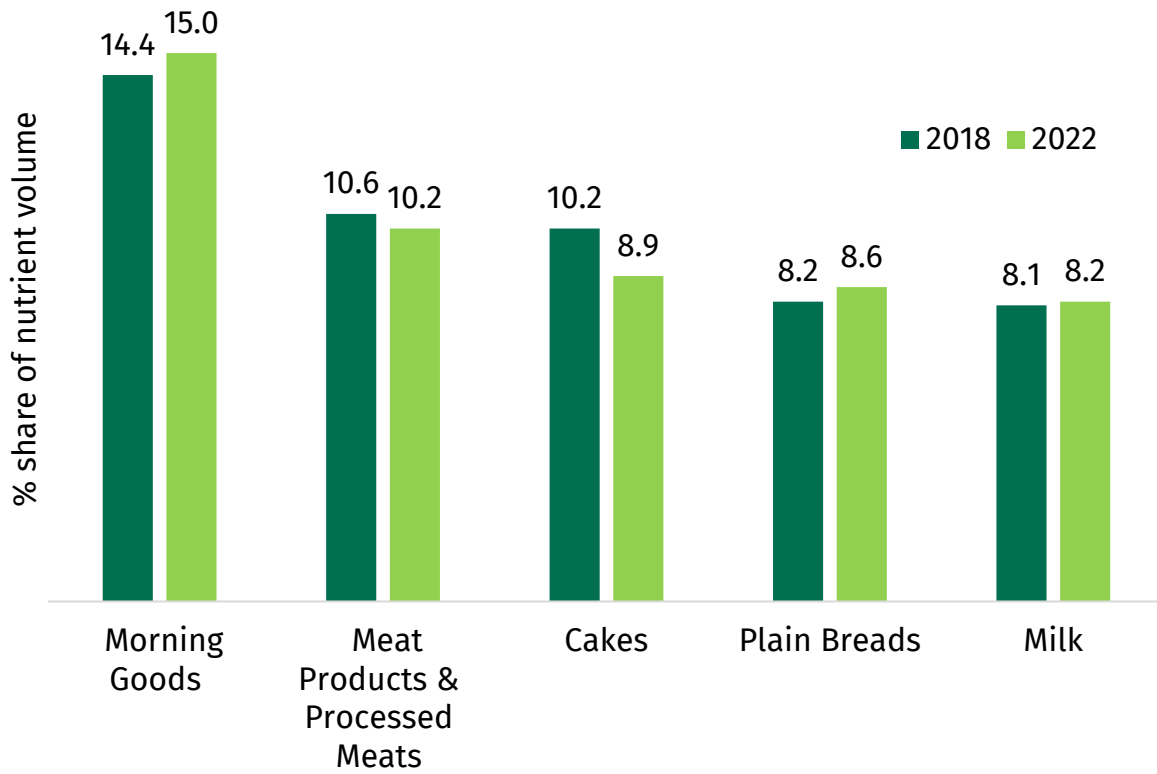
**Figure 3** Top five take home food and drink categories with the highest percentage (%) share of total volume purchased for the Empty Nesters/Retired family type in 2018 and 2022.
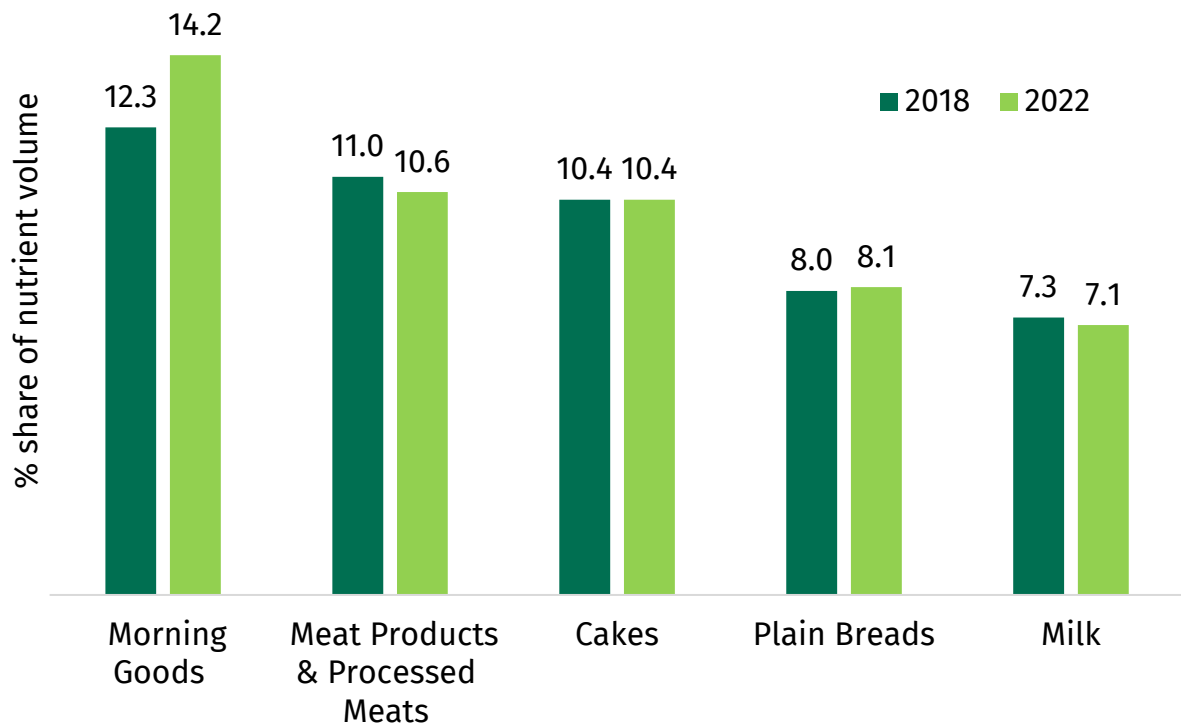
Figure 4 Top five take home food and drink categories with the highest percentage (%) share of total volume purchased for the ABC1 households in 2018 and 2022.

Figure 5 Top five take home food and drink categories with the highest percentage (%) share of total volume purchased for the C2DE households in 2018 and 2022.

Figure 6 Top five take home food and drink categories with the highest percentage (%) share of total volume purchased for the urban households in 2018 and 2022.

Figure 7 Top five take home food and drink categories with the highest percentage (%) share of total volume purchased for the rural households in 2022, compared to 2018.
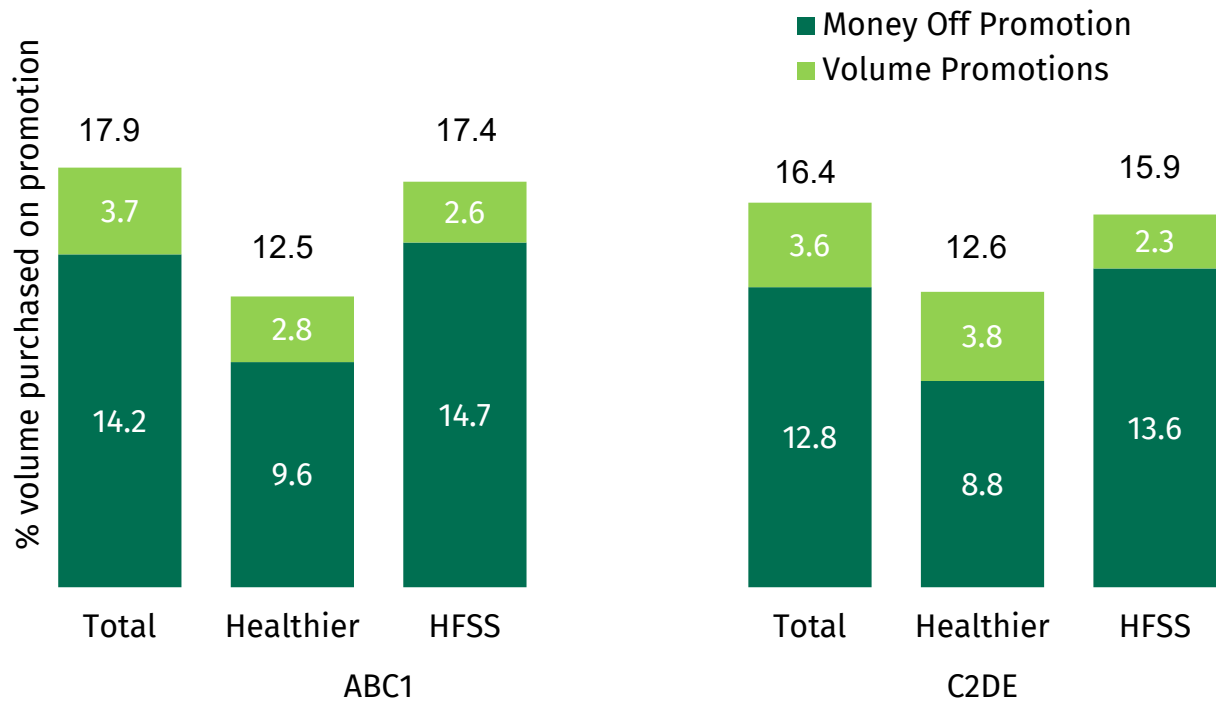
Figure 8 Share for volume of Total Food and Drink, and Healthier and HFSS categories purchased on promotion for ABC1 and C2DE households.
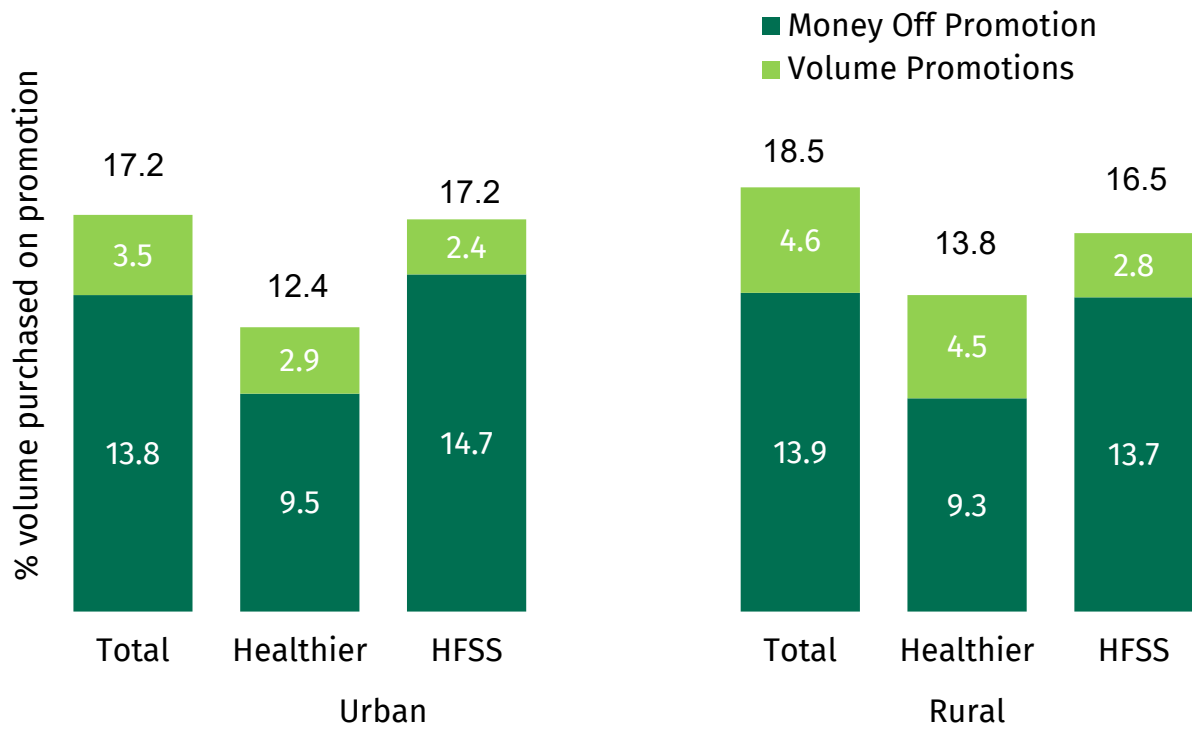
Figure 9 Share of volume for Total Food and Drink, and Healthier and HFSS categories purchased on promotion for Urban and Rural households.
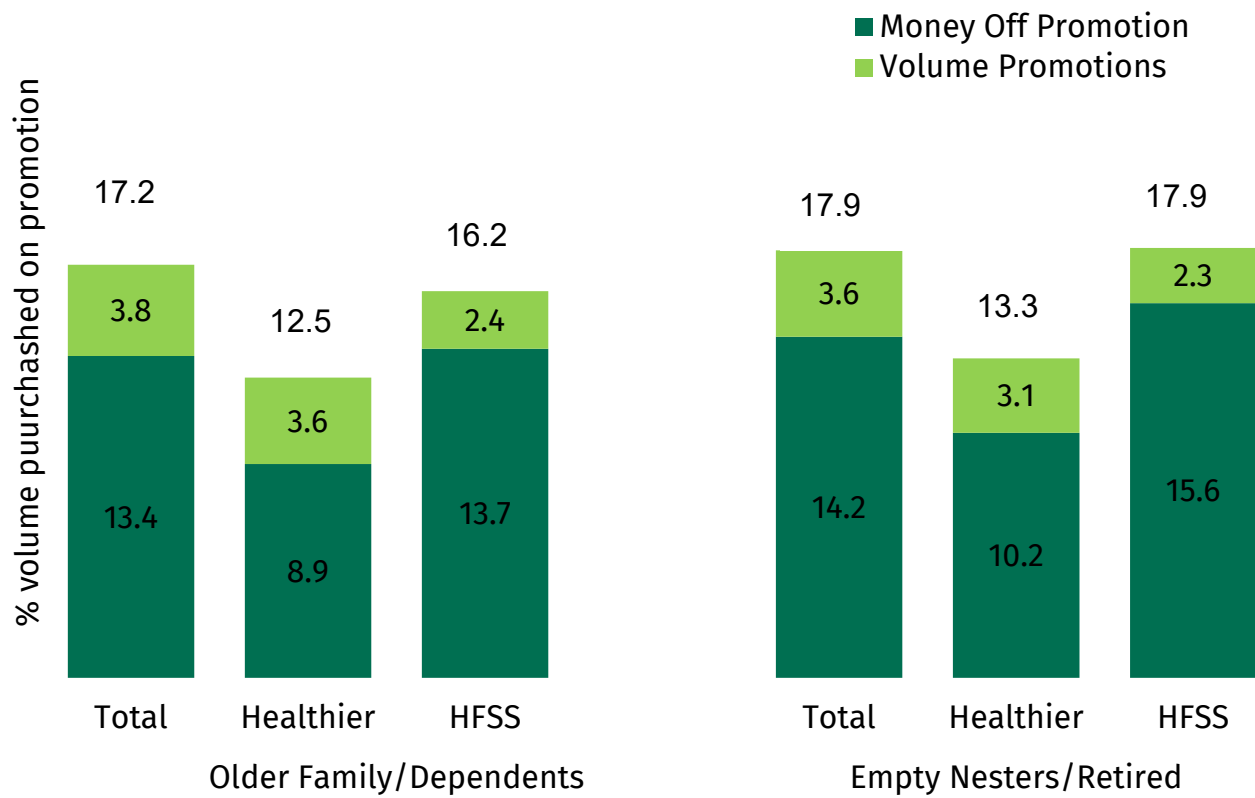
Figure 10 Share of volume for Total Food and Drink, and Healthier and HFSS categories purchased on promotion for Older Family/Dependents and Empty Nesters/Retired households.
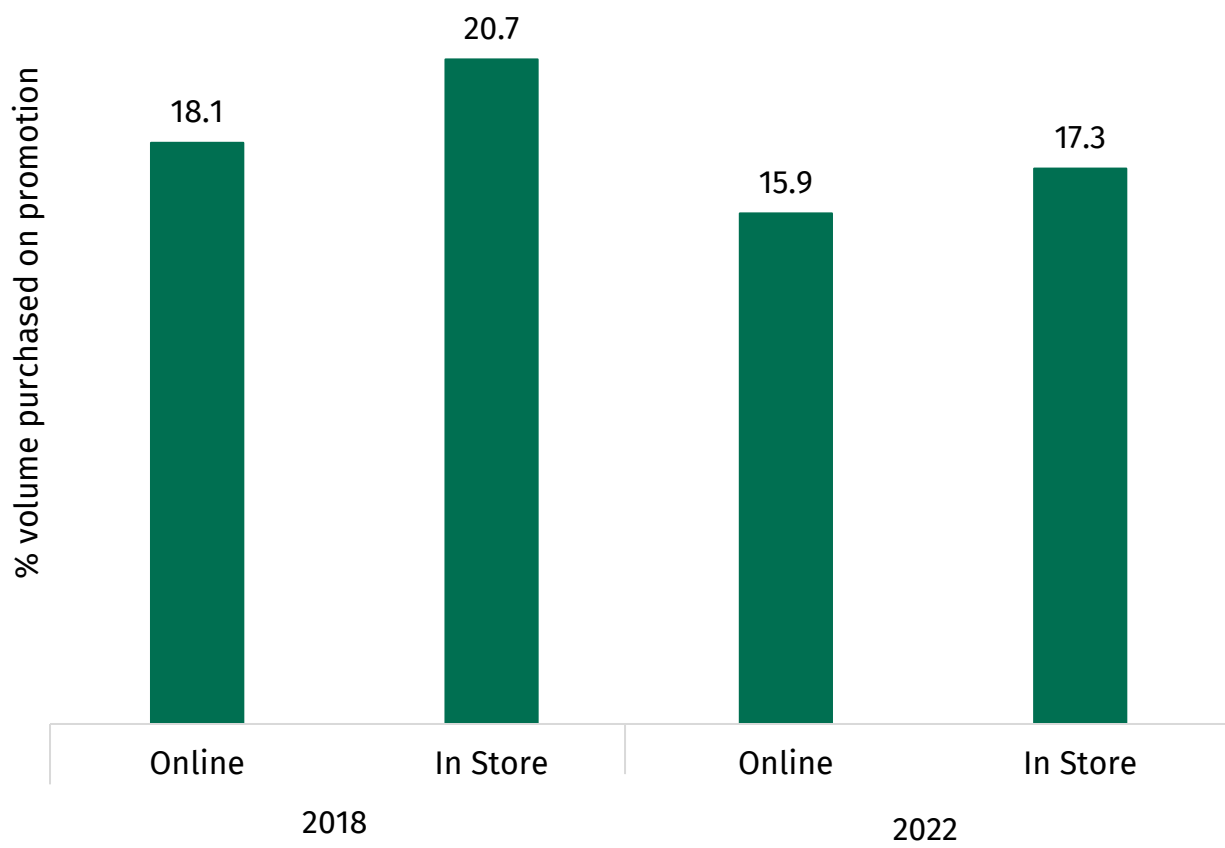
Figure 11 Share of volume purchased on promotion through online and in store purchases in 2018 and 2022.
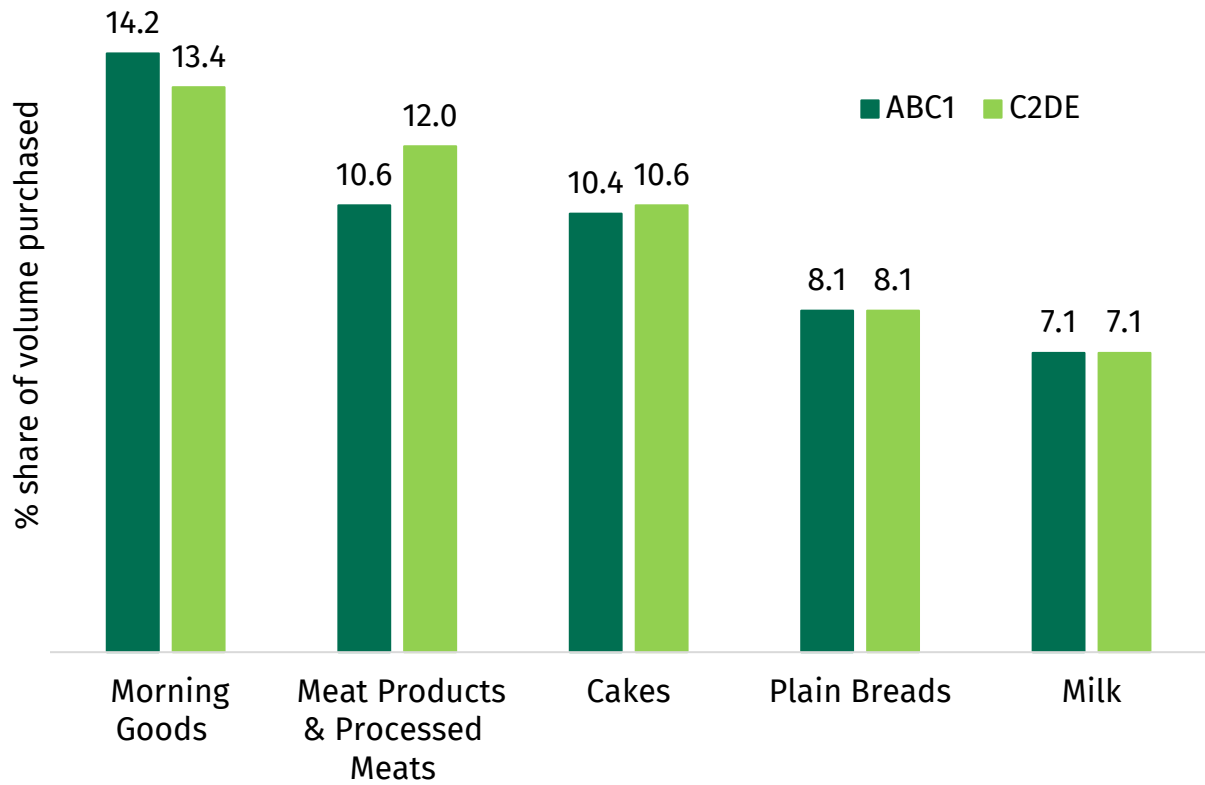
Figure 12 Top five food and drink categories with highest percentage (%) share of total spend for ABC1 and C2DE households in 2022.
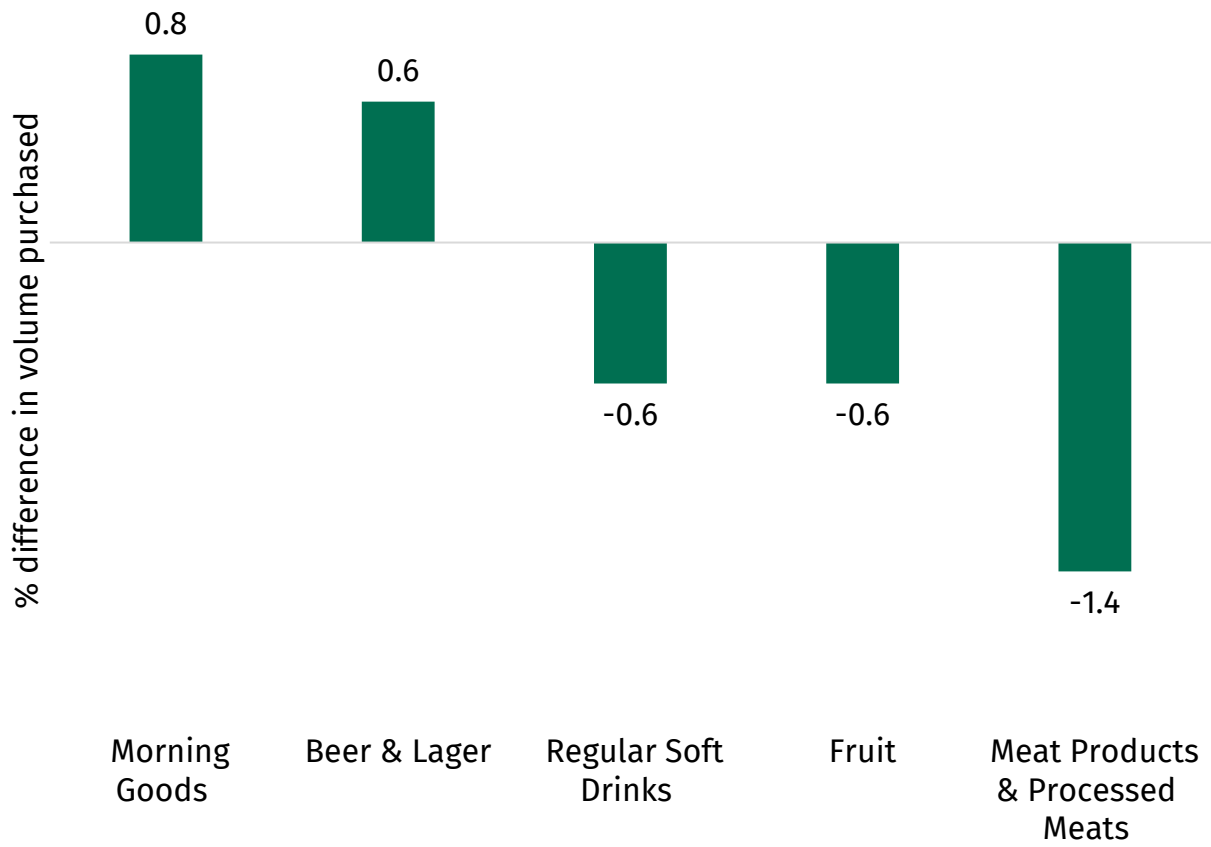
Figure 13 Categories with the greatest difference in share of volume purchased between ABC1 and C2DE households in 2022.
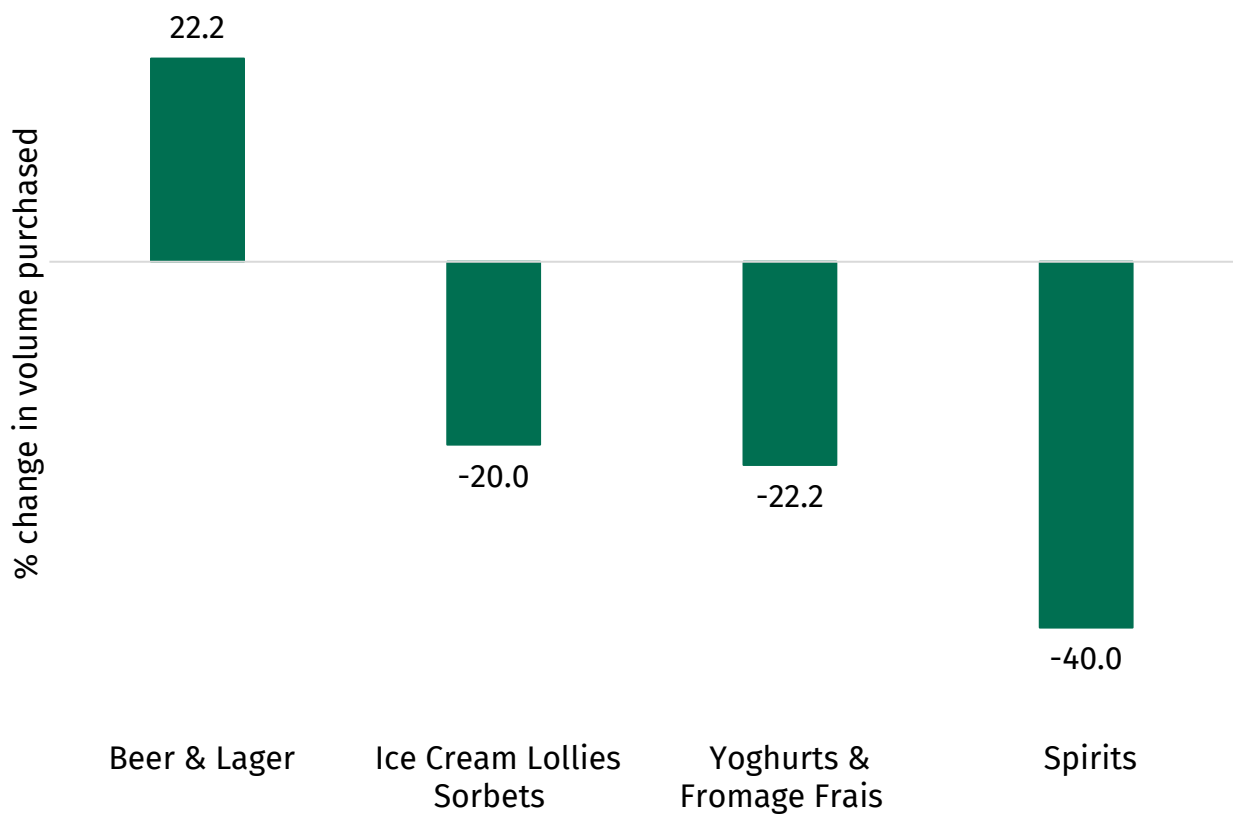
Figure 14 Categories with the greatest percentage change in share of volume purchased for ABC1 households from 2018 to 2022.
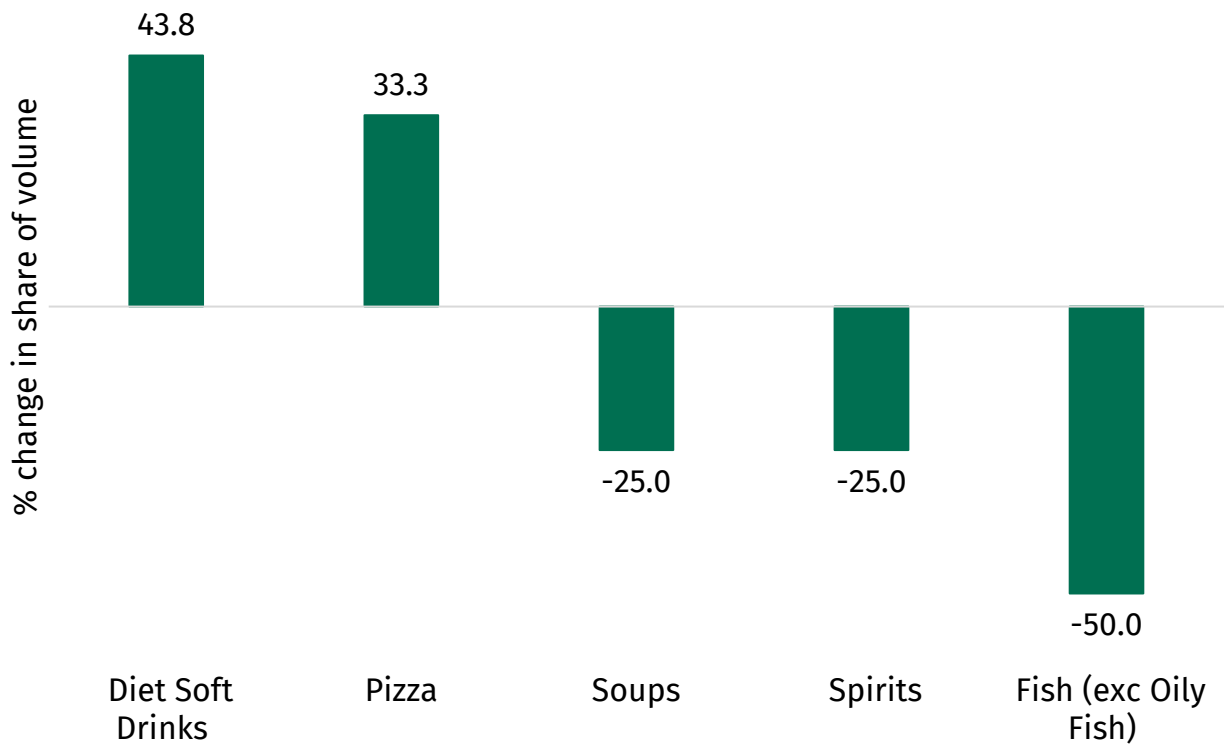
Figure 15 Categories with the greatest percentage change in share of volume purchased for C2DE households from 2018 to 2022.
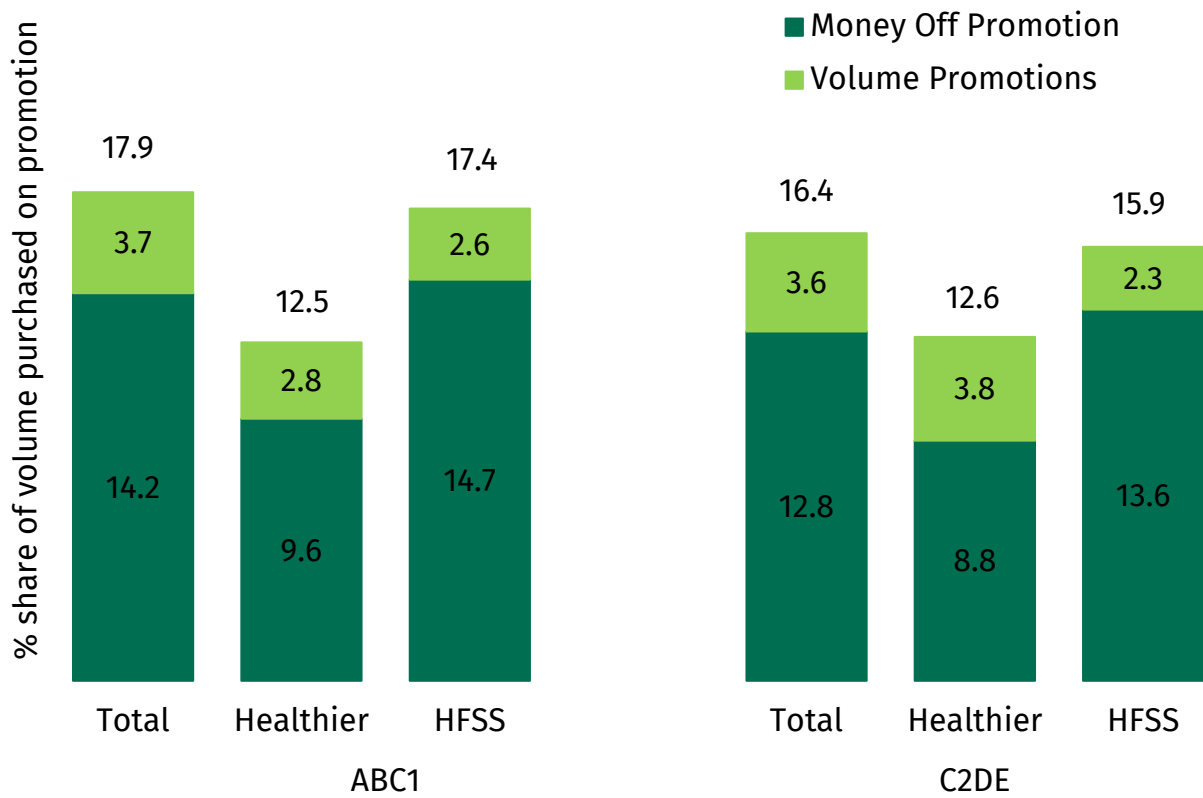
Figure 16 Share for volume of Total Food and Drink, and Healthier and HFSS categories purchased on promotion for ABC1 and C2DE households in 2022.
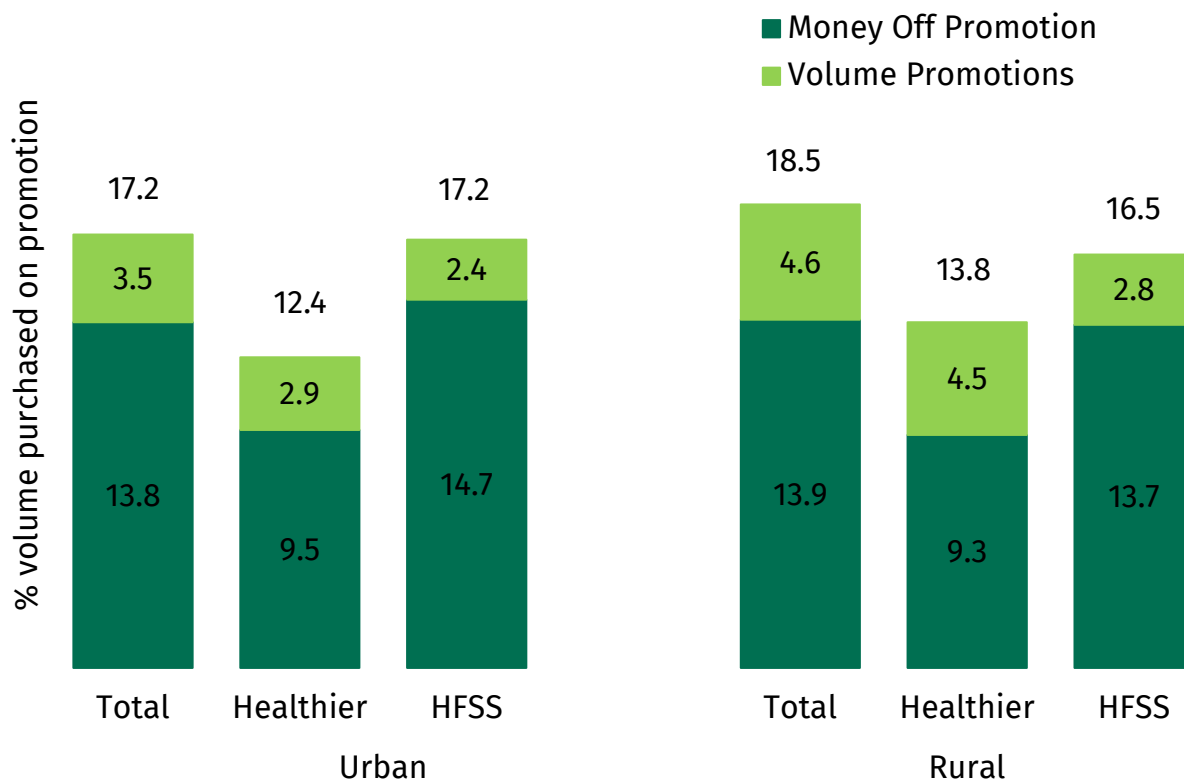
Figure 17 Share of volume for Total Food and Drink, and Healthier and HFSS categories purchased on promotion for Urban and Rural households* in 2022.
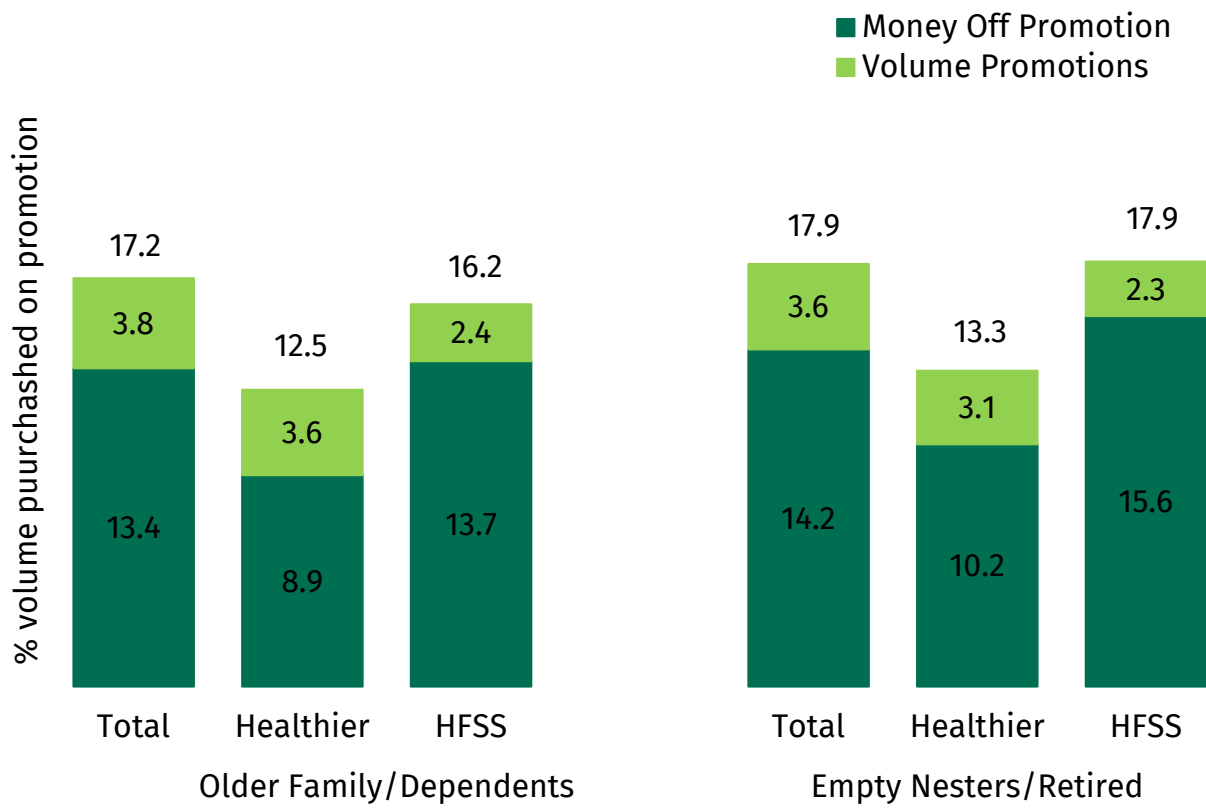
Figure 18 Share of volume for Total Food and Drink, and Healthier and HFSS categories purchased on promotion for Older Family/Dependents and Empty Nesters/Retired households in 2022.

Appendix 5 References

Department of Health & Social Care. (2023). *Restricting promotions of products high in fat, sugar or salt by location and by volume price: implementation guidance*. [Online]. gov.uk. Last Updated: 29 September 2023. Available at: https://www.gov.uk/government/publications/restricting-promotions-of-products-high-in-fat-sugar-or-s [Accessed 15 March 2024].

Department of Health & Social Care. (2011). *Nutrient Profiling Technical Guidance*. [Online]. gov.uk. Last Updated: 14 January 2011. Available at: https://www.gov.uk/government/publications/the-nutrient-profiling-model [Accessed 15 March 2024].

FAO/INFOODS. (2012). *FAO/INFOODS Food Composition Databases*. [Online]. fao.org. Last Updated: 20 October 2022. Available at: https://www.fao.org/infoods/infoods/tables-and-databases/faoinfoods-databases/en/ [Accessed 15 March 2024].

Food Standards Agency. (2015). *Food portions sizes*. 4th ed. Norwich: The Stationery Office.

Public Health England. (2020). *The Eatwell Guide*. [Online]. food.gov.uk. Last Updated: 5 October 2023. Available at: https://www.food.gov.uk/business-guidance/the-eatwell-guide-and-resources [Accessed 15 March 2024].

Public Health England. (2021). *McCance and Widdowson's composition of foods integrated dataset*. [Online]. gov.uk. Available at: https://www.gov.uk/government/publications/composition-of-foods-integrated-dataset-cofid [Accessed 15 March 2024].

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