

The cost of achieving the Eatwell Guide diet update: report

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Abstract

Background: The Eatwell Guide is a pie-chart representing the UK government's dietary advice and is used to promote healthy diets in a range of settings. In 2016, we estimated that the cost of the current diet was £6.02 (95% Confidence Intervals [CIs] £5.96 to £6.08) per adult, per day and the cost of achieving the Eatwell Guide diet (i.e. a diet that meets the dietary recommendations) was £5.99 (95% CIs £5.93 to £6.05) per adult, per day. The food price data used for the 2016 analyses were collected using automated data collection methods to scrape the prices of 7575 food items listed on a UK supermarket price comparison website.

Aims: The aim of this project is to update the price estimates used for calculating for the cost of achieving a healthy diet/the Eatwell Guide diet. The research questions are:

1. What is the cost of achieving a healthy diet (i.e. the Eatwell Guide diet) whilst deviating as little as possible from current diet patterns?
2. What is the cost of achieving a healthy diet if only "budget" versions of food items are purchased?
3. What is the cost of achieving a healthy diet if only "premium" versions of food items are purchased?

Methods: We estimated the cost of achieving the Eatwell Guide diet through linking food price data from foodDB - a time-stamped, weekly updated database of all foods and drinks available for purchases from the UK's leading online supermarkets - with food consumption estimates from the National Diet and Nutrition Survey and the 2016 Eatwell Guide study. We calculated the median, inter-quartile range (IQR), and the 25th and 75th percentiles for the prices of the matched foodDB food items for 125 NDNS sub-food groups. The cost of the Eatwell Guide diet was calculated by summing the median prices for each of the 125 sub-food groups. The sum of the 25th percentile and the 75th percentile of the 125 sub-food group prices was used as a proxy for "budget"/lower cost product ranges and "premium"/higher cost ranges (respectively).

Findings: Based on data for 13912 food items, the cost of achieving a healthy diet is £6.82 per person, per day. If only "budget" versions of foods are purchased the cost of a healthy diet is £4.55 per person, per day. If only premium versions of foods are purchased then the cost is £11.46 per person, per day.

Background

The Eatwell Guide is a pie-chart representing the UK government's dietary advice and is used to promote healthy diets in a range of settings. Five food groups are depicted in the Eatwell Guide:

- fruits and vegetables,
- potatoes, bread, rice, pasta and other starchy carbohydrates,
- beans, pulses, fish, eggs, meat and other proteins,
- dairy and alternatives,
- oils and spreads.

The angles of these food groups were derived from population diet optimisation modelling (a method to find the optimum diet under certain conditions and constraints) based on the population average diet. The constraints/dietary recommendations used for the Eatwell Guide are presented in Table 1. In earlier studies we reported the diet and cost (1) and health (2) implications of achieving the Eatwell Guide diet. In 2016, we estimated that the cost of the current diet was £6.02 (95% Confidence Intervals [CIs] £5.96 to £6.08) per adult, per day and the cost of achieving the Eatwell Guide diet (i.e. a diet that meets the dietary recommendations presented in Table 1 with least deviation from the current diet) was £5.99 (95% CIs £5.93 to £6.05) per adult, per day.

Research questions

The aim of this project is to update the price estimates used for calculating for the cost of achieving a healthy diet/the Eatwell Guide diet. The research questions for this study are:

1. What is the cost of achieving a healthy diet (the Eatwell Guide diet) whilst deviating as little as possible from current diet patterns?
2. What is the cost of achieving a healthy diet if only “budget” versions of food items are purchased?

3. What is the cost of achieving a healthy diet if only “premium” versions of food items are purchased?

Methods

National Diet and Nutrition Survey (NDNS)

The Eatwell Guide diet was developed using the population average diet. The population average diet was calculated using data from the National Diet and Nutrition Survey (NDNS) between 2008 and 2011 for adults aged 19 and over (3). The NDNS dataset contains up to 4 days’ worth of food diaries for each participant and an average daily diet was calculated for each participant.

The NDNS food dairies contain the amount of *food items* consumed by each participant in each eating occasion. The food items are linked to foods in the UK Nutrient Databank (4) allowing us to estimate the nutrient content of food items. Each *food item* is categorised into one of 140 *sub-food groups*, which in turn are categorised into 58 *food groups*. Fifteen sub-food groups containing vitamin and mineral supplements, alcoholic drinks, artificial sweeteners and infant or baby food were excluded. All analyses were on the remaining 125 sub-food groups.

For this project we will use the same NDNS data used for the Eatwell Guide (2008-2011) and use the consumption estimates from the 2016 optimisation study (1). We will use new data to estimate the cost of achieving the Eatwell Guide.

Food prices data

The NDNS dataset contains data on food consumption and nutritional composition but does not contain data on food prices. The food price data used for 2016 Eatwell Guide analyses were collected using automated data collection methods to scrape the prices of food items listed on a supermarket price comparison website (Mysupermarket). In total, data were collected for 7575 food items available to purchase from eight online supermarkets in the UK.

For this new analyses we used data from foodDB - a time-stamped, weekly updated database of all foods and drinks available for purchases from the UK's leading online supermarkets (5). We used data from October 2019 which contains approximately 60,000 foods and drink items.

Data linkage

The Eatwell Guide analyses was conducted at the *sub-food group level*. To estimate the costs of sub-food groups we must first match food items in NDNS to similar food items in foodDB. There were 3058 food items consumed at some point in the 2008-2011 NDNS dataset with the number of food items ranging from 1 item to 156 items per sub-group. It is not feasible to individually match each NDNS food item to food items in foodDB. Instead, one or two food items from each *sub-food group* was selected as an indicator food to represent each *sub-food group*. These indicator foods were chosen by calculating the average amount consumed for each NDNS food item and selecting the most commonly consumed food item for each sub-food group. If the top food item comprised less than 75% of the total sub-food group consumption then the next most commonly food was also selected. This resulted in 228 food items. Some NDNS food items were very similar (e.g. MILK WHOLE PASTEURISED WINTER and MILK WHOLE SUMMER PASTEURISED) so these were removed resulting in a list of 204 foods. Search terms were then developed to match these 204 NDNS food items to foods in foodDB.

An R script was developed to run a Boolean search (a search that allows for search modifiers such as “and”, “or”, and “not” to limit, broaden or restrict search results) to match each of the 204 NDNS food items to relevant foods in foodDB. The matches for food items were combined at the sub-food group level.

For example, the sub-food group “APPLES AND PEARS NOT CANNED” comprised two indicator food items: “APPLES EATING RAW FLESH & SKIN ONLY” (58% of the total consumption for that sub-food group) and “PEARS EATING RAW FLESH & SKIN ONLY NO CORE” (25% of the total consumption for that sub-food group). Both food items account for 83% of the consumption for the APPLES AND

PEARS NOT CANNED sub-food group. The searches were designed to identify different variations of words related to apples and pears (e.g. granny smiths, pink lady etc.) whilst excluding irrelevant matches (e.g. juice, smoothies, pies etc.). There were 143 matches for apples and 51 matches for pears resulting in a total of 194 foods matched (before any data cleaning) for the APPLES AND PEARS NOT CANNED sub-food group.

The search terms were refined through multiple rounds of testing. First the price, size, calories, protein, carbohydrates, sugars, fat, fibre and salt outliers were assessed for the entire dataset of matched foods and search terms were refined to exclude inaccurate matches and/or the search terms were broadened to collect more foods. Then the matches for the highest and lowest data points for price, size and calories at the main-food group level and three rounds of checks at the sub-food group level. In some instances the matches were refined through exclusions based on other data with foodDB (e.g. nutrient composition data and/or the food categories used by the retailer).

Price analysis

For each of the 125 sub-food groups we calculated the mean, standard deviation (SD), median, inter-quartile range (IQR), and the 25th and 75th percentiles for the prices of the matched foodDB food items.

The price data in foodDB refers to the price of foods as available to purchase (i.e. price per unit). A standardised price variable (cost (£) per 1 gram) was created for each food where the pack size and price per unit was available. Foods that did not contain both the cost and pack were excluded from analyses.

The data in foodDB contains data for food items as sold whereas the Eatwell Guide analyses uses data for food items as consumed. The amount consumed will differ to the amount purchased as some food items will need to be prepared before consumption (e.g. coffee, concentrated drinks etc.) and/or due to food waste due to inedible parts (e.g. banana skins, avocado stones etc.).

To convert the cost of food items as sold (“£ (as sold)”) to the of food items as consumed (“£/100g (as consumed)”), we repeated the methods used in the 2016 paper to adjust the £/100g (as sold) to account for changes in weight due to cooking and to account for food waste. We used category-specific estimates from the 2012 WRAP food waste report (6). To adjust for unavoidable waste we used category-specific conversion factors from raw to cooked weight from the McCance and Widdowson series of food composition tables (7). The estimates for the changes to the amount purchased due to cooking and food waste are presented in Table 2. Some of the *sub-food groups* refer to homemade foods (e.g., ‘Biscuits, homemade’)—for these *sub-food groups* we assigned the price of equivalent foods that can be purchased ready-made from supermarkets.

To answer Research Question 1 (what is the cost of achieving a healthy diet (the Eatwell Guide diet) whilst deviating as little as possible from current diet patterns?) the cost of the Eatwell Guide diet was calculated by summing the median prices for each of the 125 sub-food group £/100g (as consumed).

To answer Research Question 2 (what is the cost of achieving a healthy diet if only “budget” versions of food items are purchased?) and Research Question 3 (what is the cost of achieving a healthy diet if only “premium” versions of food items are purchased?) the sum of the 25th percentile and the 75th percentile of the 125 sub-food group prices was used as a proxy for “budget”/lower cost product ranges and “premium”/higher cost ranges (respectively).

Results

Before any data cleaning, 15,788 foodDB foods (“matched foods”) were matched to the 125 NDNS sub-food groups.

Missing data

There were 1,447 matched foods that did not have any size data (9.4% of all matched foods) and 96 products did not have any price data (0.6% of all matched foods) (Table 3). As both of these variables are needed for the analyses 1,515 foods were removed from the dataset. Once the inaccurate matches were removed 13,912 matches remained.

The percentage of missing size or price data differed by sub-food group; 42 sub-food groups did not have any missing size or price data, 86 had 5% or less missing price or size data, and 9 sub-food groups had 50% or more missing price or size data. These sub-food groups were (percentage missing in parentheses):

- BANANAS (94%)
- OTHER EGGS AND EGG DISHES INCLUDING HOMEMADE (91%)
- APPLES AND PEARS NOT CANNED (78%)
- OTHER BREAD (77%),
- SALAD AND OTHER RAW VEGETABLES (79%)
- BUNS CAKES & PASTRIES MANUFACTURED (69%)
- CITRUS FRUIT NOT CANNED (64%)
- BUNS CAKES & PASTRIES HOMEMADE (62%)
- DAIRY DESSERTS HOMEMADE (56%)

Planned analyses examining the cost of the Eatwell Guide diet stratified by different retailers was not possible due to missing price and/size data resulting in missing food data in some sub-food groups for some retailers (Table 4):

Cost estimates

The updated cost estimates are presented below (Table 5). The costs stratified by sub-food group are presented in Table 6. These estimates are based on data for 13912 food items.

Table 5 Cost for achieving a healthy diet

	Cost of the current, average diet (per person, per day)	Cost of achieving the Eatwell Guide diet (per person, per day)
Overall cost	£6.44	£6.82
“Budget” ranges only	£4.26	£4.55
“Premium” ranges only	£10.14	£11.46

Next steps

We are working to update this work using foodDB data collected in May 2022. We intend to publish this work in a peer review journal by late 2022. The results presented in this report are point-estimates based on average costs summed across multiple food groups to represent the whole diet. They do not account for variability in prices within food groups. The next iteration of this work will incorporate uncertainty analyses around the price estimates and will also include the environmental impact of achieving the Eatwell Guide diet (and the associated uncertainty intervals). For further details please contact Asha Kaur (asha.kaur@ndph.ox.ac.uk) or Peter Scarborough (peter.scarborough@ndph.ox.ac.uk).

References

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Tables

Table 1. UK dietary recommendations used as constraints in the linear programming for the Eatwell guide

	Recommendation/Eatwell Guide constraint
NUTRIENTS	
Energy	No increase in kcal
Carbohydrates	≥50% of food energy
Free sugars	≤5% food energy
Fat	≤35% food energy
Saturated fat	≤11% food energy
Protein	≥14.5 & ≤15.5% of energy
Salt	≤ 6g/2363 mg sodium
Fibre	≥30g (Association of Official Analytical Chemists method for total dietary fibre analysis [AOAC]). Equivalent 18g non-starch polysaccharide fibre.
FOODS	
Fruits and vegetables ¹	≥5 portions a day
Fish	≥ 2 portions a week (2*20g a day), one of which should be oily
Red and processed meat	≤70g/day

¹ Includes a maximum of: 1 portion of juice (from fruit juice or that in a smoothie); 1 portion beans. Portion sizes: 30g dried fruit; 150mL fruit juice; smoothies assumed to contain 50% juice; 80g all other fruits & vegetables.

Table 2. Number of matches per subgroup and missing price and size data
(Mis': missing, n: number of matched foods)

Code	Sub-food group	n	Price n	Price Mis'	Size n	Size Mis'	Both Mis'	Either Mis'	Size % Mis'	Price % Mis'	Either % Mis'
1C	PIZZA	377	376	1	376	1	0	2	0.3	0.3	0.5
1D	PASTA MANUFACTURED PRODUCTS & READY MEALS	92	92	0	92	0	0	0	0.0	0.0	0.0
1E	OTHER PASTA INCLUDING HOMEMADE DISHES	9	9	0	9	0	0	0	0.0	0.0	0.0
1F	RICE MANUFACTURED PRODUCTS & READY MEALS	40	40	0	40	0	0	0	0.0	0.0	0.0
1G	OTHER RICE INCLUDING HOMEMADE DISHES	11	11	0	11	0	0	0	0.0	0.0	0.0
1R	OTHER CEREALS	31	31	0	31	0	0	0	0.0	0.0	0.0
2R	WHITE BREAD (NOT HIGH FIBRE; NOT MULTISEED BREAD)	26	26	0	26	0	0	0	0.0	0.0	0.0
3R	WHOLEMEAL BREAD	51	50	1	49	2	0	3	3.9	2.0	5.9

Code	Sub-food group	n	Price n	Price Mis'	Size n	Size Mis'	Both Mis'	Either Mis'	Size % Mis'	Price % Mis'	Either % Mis'
4R	OTHER BREAD	39	39	0	9	30	0	30	76.9	0.0	76.9
5R	WHOLEGRAIN & HIGH FIBRE BR'FAST CEREALS	260	258	2	259	1	0	3	0.4	0.8	1.2
6R	OTHER BREAKFAST CEREALS (NOT HIGH FIBRE)	45	45	0	45	0	0	0	0.0	0.0	0.0
7A	BISCUITS MANUFACTURED / RETAIL	58	58	0	56	2	0	2	3.4	0.0	3.4
7B	BISCUITS HOMEMADE	98	98	0	85	13	0	13	13.3	0.0	13.3
8B	FRUIT PIES MANUFACTURED	27	27	0	18	9	0	9	33.3	0.0	33.3
8C	FRUIT PIES HOMEMADE	52	52	0	36	16	0	16	30.8	0.0	30.8
8D	BUNS CAKES & PASTRIES MANUFACTURED	52	52	0	16	36	0	36	69.2	0.0	69.2
8E	BUNS CAKES & PASTRIES HOMEMADE	61	61	0	23	38	0	38	62.3	0.0	62.3
9C	CEREAL BASED MILK PUDDINGS - MANUFACTURED	46	46	0	46	0	0	0	0.0	0.0	0.0
9D	CEREAL BASED MILK PUDDINGS - HOMEMADE	52	51	1	51	1	1	1	1.9	1.9	1.9
9E	SPONGE PUDDINGS - MANUFACTURED	23	22	1	21	2	0	3	8.7	4.3	13.0
9F	SPONGE PUDDINGS - HOMEMADE	11	11	0	11	0	0	0	0.0	0.0	0.0
9G	OTHER CEREAL BASED PUDDINGS - MANUFACTURED	216	212	4	207	9	0	13	4.2	1.9	6.0
9H	OTHER CEREAL BASED PUDDINGS - HOMEMADE	194	193	1	190	4	0	5	2.1	0.5	2.6
10R	WHOLE MILK	65	65	0	65	0	0	0	0.0	0.0	0.0
11R	SEMI SKIMMED MILK	82	81	1	81	1	0	2	1.2	1.2	2.4
12R	SKIMMED MILK	54	54	0	54	0	0	0	0.0	0.0	0.0
13B	CREAM (INCLUDING IMITATION CREAM)	59	59	0	59	0	0	0	0.0	0.0	0.0
13R	OTHER MILK	56	54	2	56	0	0	2	0.0	3.6	3.6
14A	COTTAGE CHEESE	31	31	0	31	0	0	0	0.0	0.0	0.0
14B	CHEDDAR CHEESE	299	299	0	281	18	0	18	6.0	0.0	6.0
14R	OTHER CHEESE	297	297	0	279	18	0	18	6.1	0.0	6.1
15B	YOGURT	72	70	2	72	0	0	2	0.0	2.8	2.8
15C	FROMAGE FRAIS AND DAIRY DESSERTS MANUFACTURED	7	7	0	7	0	0	0	0.0	0.0	0.0
15D	DAIRY DESSERTS HOMEMADE	9	8	1	4	5	1	5	55.6	11.1	55.6
16C	MANUFACTURED EGG PRODUCTS INCLUDING READY MEALS	86	86	0	83	3	0	3	3.5	0.0	3.5
16D	OTHER EGGS AND EGG DISHES INCLUDING HOMEMADE	156	156	0	14	142	0	142	91.0	0.0	91.0
17R	BUTTER	67	66	1	67	0	0	1	0.0	1.5	1.5
18A	POLYUNSATURATED MARGARINE	23	22	1	23	0	0	1	0.0	4.3	4.3
18B	POLYUNSATURATED OILS	63	62	1	63	0	0	1	0.0	1.6	1.6
19A	POLYUNSATURATED LOW FAT SPREAD	44	43	1	44	0	0	1	0.0	2.3	2.3
19R	LOW FAT SPREAD NOT POLYUNSATURATED	48	47	1	48	0	0	1	0.0	2.1	2.1
20A	BLOCK MARGARINE	4	4	0	4	0	0	0	0.0	0.0	0.0
20B	SOFT MARGARINE NOT POLYUNSATURATED	23	22	1	23	0	0	1	0.0	4.3	4.3
20C	OTHER COOKING FATS AND OILS NOT PUFA	398	396	2	396	2	0	4	0.5	0.5	1.0

Code	Sub-food group	n	Price n	Price Mis'	Size n	Size Mis'	Both Mis'	Either Mis'	Size % Mis'	Price % Mis'	Either % Mis'
21A	REDUCED FAT SPREAD (POLYUNSATURATED)	18	18	0	18	0	0	0	0.0	0.0	0.0
21B	REDUCED FAT SPREAD (NOT POLYUNSATURATED)	74	74	0	74	0	0	0	0.0	0.0	0.0
22A	READY MEALS / MEAL CENTRES BASED ON BACON AND HAM	12	12	0	12	0	0	0	0.0	0.0	0.0
22B	OTHER BACON AND HAM INCLUDING HOMEMADE DISHES	395	390	5	371	24	0	29	6.1	1.3	7.3
23A	MANUFACTURED BEEF PRODUCTS INCLUDING READY MEALS	170	170	0	168	2	0	2	1.2	0.0	1.2
23B	OTHER BEEF & VEAL INCLUDING HOMEMADE RECIPE DISHES	99	97	2	91	8	2	8	8.1	2.0	8.1
24A	MANUFACTURED LAMB PRODUCTS INCLUDING READY MEALS	27	27	0	27	0	0	0	0.0	0.0	0.0
24B	OTHER LAMB INCLUDING HOMEMADE RECIPE DISHES	103	99	4	89	14	2	16	13.6	3.9	15.5
25A	MANUFACTURED PORK PRODUCTS INCLUDING READY MEALS	68	67	1	66	2	0	3	2.9	1.5	4.4
25B	OTHER PORK INCLUDING HOMEMADE RECIPE DISHES	27	26	1	25	2	1	2	7.4	3.7	7.4
26A	MANUFACTURED COATED CHICKEN / TURKEY PRODUCTS	118	117	1	90	28	0	29	23.7	0.8	24.6
27A	MANUFACTURED CHICKEN PRODUCTS INCL READY MEALS	52	52	0	52	0	0	0	0.0	0.0	0.0
27B	OTHER CHICKEN / TURKEY INCL HOMEMADE RECIPE DISHES	320	319	1	317	3	0	4	0.9	0.3	1.3
28R	LIVER AND DISHES	11	11	0	10	1	0	1	9.1	0.0	9.1
29R	BURGERS AND KEBABS PURCHASED	128	127	1	125	3	0	4	2.3	0.8	3.1
30A	READY MEALS BASED ON SAUSAGES	23	22	1	23	0	0	1	0.0	4.3	4.3
30B	OTHER SAUSAGES INCLUDING HOMEMADE DISHES	214	214	0	214	0	0	0	0.0	0.0	0.0
31A	MANUFACTURED MEAT PIES AND PASTRIES	75	75	0	70	5	0	5	6.7	0.0	6.7
31B	HOMEMADE MEAT PIES AND PASTRIES	106	106	0	103	3	0	3	2.8	0.0	2.8
32A	OTHER MEAT PRODUCTS MANUFACTURED INCL READY MEALS	43	43	0	42	1	0	1	2.3	0.0	2.3
32B	OTHER MEAT INCLUDING HOMEMADE RECIPE DISHES	87	86	1	66	21	1	21	24.1	1.1	24.1
33R	WHITE FISH COATED OR FRIED	37	37	0	37	0	0	0	0.0	0.0	0.0
34C	MANUFACTURED WHITE FISH PRODUCTS INCL READY MEALS	86	85	1	84	2	1	2	2.3	1.2	2.3
34D	OTHER WHITE FISH INCLUDING HOMEMADE DISHES	148	144	4	132	16	3	17	10.8	2.7	11.5
34E	MANUFACTURED SHELLFISH PRODUCTS INCL READY MEALS	34	34	0	34	0	0	0	0.0	0.0	0.0
34F	OTHER SHELLFISH INCLUDING HOMEMADE DISHES	261	261	0	249	12	0	12	4.6	0.0	4.6
34G	MANUFACTURED CANNED TUNA PRODUCTS INCL READY MEALS	45	45	0	45	0	0	0	0.0	0.0	0.0
34H	OTHER CANNED TUNA INCLUDING HOMEMADE DISHES	45	45	0	45	0	0	0	0.0	0.0	0.0
35A	MANUFACTURED OILY FISH PRODUCTS INCL READY MEALS	28	28	0	28	0	0	0	0.0	0.0	0.0

Code	Sub-food group	n	Price n	Price Mis'	Size n	Size Mis'	Both Mis'	Either Mis'	Size % Mis'	Price % Mis'	Either % Mis'
35B	OTHER OILY FISH INCLUDING HOMEMADE DISHES	129	126	3	117	12	3	12	9.3	2.3	9.3
36A	CARROTS RAW	91	91	0	84	7	0	7	7.7	0.0	7.7
36B	SALAD AND OTHER RAW VEGETABLES	91	91	0	19	72	0	72	79.1	0.0	79.1
36C	TOMATOES RAW	355	351	4	336	19	1	22	5.4	1.1	6.2
37A	PEAS NOT RAW	92	92	0	91	1	0	1	1.1	0.0	1.1
37B	GREEN BEANS NOT RAW	56	56	0	56	0	0	0	0.0	0.0	0.0
37C	BAKED BEANS	153	153	0	153	0	0	0	0.0	0.0	0.0
37D	LEAFY GREEN VEGETABLES NOT RAW	77	76	1	74	3	0	4	3.9	1.3	5.2
37E	CARROTS NOT RAW	87	87	0	80	7	0	7	8.0	0.0	8.0
37F	TOMATOES NOT RAW	42	42	0	42	0	0	0	0.0	0.0	0.0
37I	BEANS AND PULSES INCL READY MEAL & HOMEMADE DISHES	147	147	0	147	0	0	0	0.0	0.0	0.0
37K	MEAT ALTERNATIVES INCL READY MEALS & HOMEMADE DISH	310	306	4	309	1	0	5	0.3	1.3	1.6
37L	OTHER MANUFACTURED VEGETABLE PRODUCTS INCL RM	28	28	0	28	0	0	0	0.0	0.0	0.0
37M	OTHER VEGETABLES INCLUDING HOMEMADE DISHES	251	248	3	214	37	0	40	14.7	1.2	15.9
38A	CHIPS PURCHASED INCLUDING TAKEAWAY	48	48	0	47	1	0	1	2.1	0.0	2.1
38C	OTHER MANUFACTURED POTATO PRODUCTS FRIED/BAKED	30	30	0	30	0	0	0	0.0	0.0	0.0
38D	OTHER FRIED / ROAST POTATOES INCL HOMEMADE DISHES	236	235	1	214	22	0	23	9.3	0.4	9.7
39A	OTHER POTATO PRODUCTS & DISHES - MANUFACTURED	15	14	1	15	0	0	1	0.0	6.7	6.7
39B	OTHER POTATOES INCLUDING HOMEMADE DISHES	199	198	1	179	20	0	21	10.1	0.5	10.6
40A	APPLES AND PEARS NOT CANNED	194	188	6	42	152	6	152	78.4	3.1	78.4
40B	CITRUS FRUIT NOT CANNED	42	42	0	15	27	0	27	64.3	0.0	64.3
40C	BANANAS	36	35	1	2	34	1	34	94.4	2.8	94.4
40D	CANNED FRUIT IN JUICE	46	46	0	46	0	0	0	0.0	0.0	0.0
40E	CANNED FRUIT IN SYRUP	13	13	0	13	0	0	0	0.0	0.0	0.0
40R	OTHER FRUIT NOT CANNED	95	91	4	63	32	3	33	33.7	4.2	34.7
41A	SUGAR	41	41	0	40	1	0	1	2.4	0.0	2.4
41B	PRESERVES	166	166	0	161	5	0	5	3.0	0.0	3.0
41R	SWEET SPREADS FILLINGS AND ICING	97	97	0	96	1	0	1	1.0	0.0	1.0
42R	CRISPS AND SAVOURY SNACKS	420	416	4	415	5	0	9	1.2	1.0	2.1
43R	SUGAR CONFECTIONERY	34	34	0	34	0	0	0	0.0	0.0	0.0
44R	CHOCOLATE CONFECTIONERY	649	648	1	627	22	0	23	3.4	0.2	3.5
45R	FRUIT JUICE	164	162	2	164	0	0	2	0.0	1.2	1.2
50A	BEVERAGES DRY WEIGHT	126	125	1	120	6	0	7	4.8	0.8	5.6
50C	SOUP MANUFACTURED/ RETAIL	88	88	0	88	0	0	0	0.0	0.0	0.0
50D	SOUP HOMEMADE	110	109	1	110	0	0	1	0.0	0.9	0.9
50R	SAVOURY SAUCES PICKLES GRAVIES & CONDIMENTS	596	596	0	595	1	0	1	0.2	0.0	0.2
51A	COFFEE (MADE-UP WEIGHT)	812	812	0	783	29	0	29	3.6	0.0	3.6
51B	TEA (MADE-UP WEIGHT)	923	923	0	607	316	0	316	34.2	0.0	34.2
51C	HERBAL TEA (MADE-UP WEIGHT)	251	251	0	159	92	0	92	36.7	0.0	36.7

Code	Sub-food group	n	Price n	Price Mis'	Size n	Size Mis'	Both Mis'	Either Mis'	Size % Mis'	Price % Mis'	Either % Mis'
51D	BOTTLED WATER STILL OR CARBONATED	30	30	0	30	0	0	0	0.0	0.0	0.0
51R	TAP WATER ONLY	159	158	1	151	8	0	9	5.0	0.6	5.7
53R	ICE CREAM	76	74	2	75	1	1	2	1.3	2.6	2.6
56R	NUTS AND SEEDS	275	273	2	271	4	0	6	1.5	0.7	2.2
57A	SOFT DRINKS NOT LOW CALORIE CONCENTRATED	179	178	1	172	7	1	7	3.9	0.6	3.9
57B	SOFT DRINKS NOT LOW CALORIE CARBONATED	102	102	0	102	0	0	0	0.0	0.0	0.0
57C	SOFT DRINKS NOT LOW CALORIE RTD STILL	54	54	0	54	0	0	0	0.0	0.0	0.0
58A	SOFT DRINKS LOW CALORIE CONCENTRATED	121	118	3	121	0	0	3	0.0	2.5	2.5
58B	SOFT DRINKS LOW CALORIE CARBONATED	50	50	0	50	0	0	0	0.0	0.0	0.0
58C	SOFT DRINKS LOW CALORIE RTD STILL	72	71	1	72	0	0	1	0.0	1.4	1.4
59R	BROWN GRANARY AND WHEATGERM BREAD	9	9	0	9	0	0	0	0.0	0.0	0.0
60R	1% Fat Milk	15	15	0	15	0	0	0	0.0	0.0	0.0
61R	SMOOTHIES 100% FRUIT AND/OR JUICE	271	271	0	269	2	0	2	0.7	0.0	0.7
	Totals	15421	15325	96	13974	1447	28	1515	9.4%	0.6%	9.8%

Table 2 Changes to amount purchased due to cooking and/or food waste

Sub-food group code	Sub-food group	% unavoidable waste	% cooking changes
60R	1% Fat Milk	1.00	1.00
40A	APPLES AND PEARS NOT CANNED	0.84	1.00
37C	BAKED BEANS	1.00	0.98
40C	BANANAS	0.91	1.00
37I	BEANS AND PULSES INCL READY MEAL & HOMEMADE DISHES	1.00	1.78
50A	BEVERAGES DRY WEIGHT	1.00	20.78
7B	BISCUITS HOMEMADE	1.00	1.00
7A	BISCUITS MANUFACTURED / RETAIL	1.00	1.00
20A	BLOCK MARGARINE	1.00	1.00
51D	BOTTLED WATER STILL OR CARBONATED	1.00	1.00
59R	BROWN GRANARY AND WHEATGERM BREAD	1.00	1.00
8E	BUNS CAKES & PASTRIES HOMEMADE	1.00	1.00
8D	BUNS CAKES & PASTRIES MANUFACTURED	1.00	1.00
29R	BURGERS AND KEBABS PURCHASED	1.00	0.80
17R	BUTTER	1.00	1.00
40D	CANNED FRUIT IN JUICE	0.86	1.00
40E	CANNED FRUIT IN SYRUP	0.83	1.00
37E	CARROTS NOT RAW	1.00	1.00
36A	CARROTS RAW	0.96	1.00
9D	CEREAL BASED MILK PUDDINGS - HOMEMADE	1.00	1.00
9C	CEREAL BASED MILK PUDDINGS - MANUFACTURED	1.00	1.00

Sub-food group code	Sub-food group	% unavoidable waste	% cooking changes
14B	CHEDDAR CHEESE	1.00	1.00
38A	CHIPS PURCHASED INCLUDING TAKEAWAY	1.00	0.90
44R	CHOCOLATE CONFECTIONERY	1.00	1.00
40B	CITRUS FRUIT NOT CANNED	0.74	1.00
51A	COFFEE (MADE-UP WEIGHT)	0.75	70.09
14A	COTTAGE CHEESE	1.00	1.00
13B	CREAM (INCLUDING IMITATION CREAM)	1.00	1.00
42R	CRISPS AND SAVOURY SNACKS	1.00	1.00
15D	DAIRY DESSERTS HOMEMADE	1.00	1.00
15C	FROMAGE FRAIS AND DAIRY DESSERTS MANUFACTURED	1.00	1.00
45R	FRUIT JUICE	1.00	1.00
8C	FRUIT PIES HOMEMADE	1.00	1.00
8B	FRUIT PIES MANUFACTURED	1.00	1.00
37B	GREEN BEANS NOT RAW	1.00	0.98
51C	HERBAL TEA (MADE-UP WEIGHT)	1.00	17.13
31B	HOMEMADE MEAT PIES AND PASTRIES	1.00	0.93
53R	ICE CREAM	1.00	1.00
37D	LEAFY GREEN VEGETABLES NOT RAW	1.00	1.00
28R	LIVER AND DISHES	1.00	0.80
19R	LOW FAT SPREAD NOT POLYUNSATURATED	1.00	1.00
23A	MANUFACTURED BEEF PRODUCTS INCLUDING READY MEALS	1.00	1.00
34G	MANUFACTURED CANNED TUNA PRODUCTS INCL READY MEALS	0.99	0.97
27A	MANUFACTURED CHICKEN PRODUCTS INCL READY MEALS	0.91	0.84
26A	MANUFACTURED COATED CHICKEN / TURKEY PRODUCTS	0.95	0.88
16C	MANUFACTURED EGG PRODUCTS INCLUDING READY MEALS	0.96	1.00
24A	MANUFACTURED LAMB PRODUCTS INCLUDING READY MEALS	0.96	0.85
31A	MANUFACTURED MEAT PIES AND PASTRIES	1.00	0.90
35A	MANUFACTURED OILY FISH PRODUCTS INCL READY MEALS	0.99	0.94
25A	MANUFACTURED PORK PRODUCTS INCLUDING READY MEALS	0.99	0.81
34E	MANUFACTURED SHELLFISH PRODUCTS INCL READY MEALS	0.99	0.92
34C	MANUFACTURED WHITE FISH PRODUCTS INCL READY MEALS	1.00	0.93
37K	MEAT ALTERNATIVES INCL READY MEALS & HOMEMADE DISH	1.00	1.00
56R	NUTS AND SEEDS	1.00	1.00
22B	OTHER BACON AND HAM INCLUDING HOMEMADE DISHES	0.94	0.88
23B	OTHER BEEF & VEAL INCLUDING HOMEMADE RECIPE DISHES	1.00	0.79
4R	OTHER BREAD	1.00	1.00
6R	OTHER BREAKFAST CEREALS (NOT HIGH FIBRE)	1.00	1.00
34H	OTHER CANNED TUNA INCLUDING HOMEMADE DISHES	0.99	0.97
9H	OTHER CEREAL BASED PUDDINGS - HOMEMADE	1.00	1.00
9G	OTHER CEREAL BASED PUDDINGS - MANUFACTURED	1.00	1.00
1R	OTHER CEREALS	1.00	1.57
14R	OTHER CHEESE	1.00	1.00
27B	OTHER CHICKEN / TURKEY INCL HOMEMADE RECIPE DISHES	0.86	0.79
20C	OTHER COOKING FATS AND OILS NOT PUFA	1.00	1.00
16D	OTHER EGGS AND EGG DISHES INCLUDING HOMEMADE	0.96	1.00
38D	OTHER FRIED / ROAST POTATOES INCL HOMEMADE DISHES	1.00	0.95
40R	OTHER FRUIT NOT CANNED	0.77	1.00
24B	OTHER LAMB INCLUDING HOMEMADE RECIPE DISHES	0.97	0.79

Sub-food group code	Sub-food group	% unavoidable waste	% cooking changes
38C	OTHER MANUFACTURED POTATO PRODUCTS FRIED/BAKED	1.00	0.93
37L	OTHER MANUFACTURED VEGETABLE PRODUCTS INCL RM	1.00	1.06
32B	OTHER MEAT INCLUDING HOMEMADE RECIPE DISHES	0.95	0.68
32A	OTHER MEAT PRODUCTS MANUFACTURED INCL READY MEALS	0.95	0.81
13R	OTHER MILK	1.00	1.00
35B	OTHER OILY FISH INCLUDING HOMEMADE DISHES	0.99	0.90
1E	OTHER PASTA INCLUDING HOMEMADE DISHES	1.00	1.34
25B	OTHER PORK INCLUDING HOMEMADE RECIPE DISHES	0.99	0.70
39A	OTHER POTATO PRODUCTS & DISHES - MANUFACTURED	1.00	0.98
39B	OTHER POTATOES INCLUDING HOMEMADE DISHES	1.00	0.95
1G	OTHER RICE INCLUDING HOMEMADE DISHES	1.00	1.77
30B	OTHER SAUSAGES INCLUDING HOMEMADE DISHES	1.00	1.00
34F	OTHER SHELLFISH INCLUDING HOMEMADE DISHES	0.99	0.87
37M	OTHER VEGETABLES INCLUDING HOMEMADE DISHES	1.00	1.06
34D	OTHER WHITE FISH INCLUDING HOMEMADE DISHES	0.99	0.92
1D	PASTA MANUFACTURED PRODUCTS & READY MEALS	1.00	1.15
37A	PEAS NOT RAW	1.00	0.98
1C	PIZZA	1.00	0.90
19A	POLYUNSATURATED LOW FAT SPREAD	1.00	1.00
18A	POLYUNSATURATED MARGARINE	1.00	1.00
18B	POLYUNSATURATED OILS	1.00	1.00
41B	PRESERVES	1.00	1.00
22A	READY MEALS / MEAL CENTRES BASED ON BACON AND HAM	0.94	0.78
30A	READY MEALS BASED ON SAUSAGES	1.00	0.90
21B	REDUCED FAT SPREAD (NOT POLYUNSATURATED)	0.95	0.86
21A	REDUCED FAT SPREAD (POLYUNSATURATED)	0.99	0.90
1F	RICE MANUFACTURED PRODUCTS & READY MEALS	1.00	1.55
36B	SALAD AND OTHER RAW VEGETABLES	0.97	1.00
50R	SAVOURY SAUCES PICKLES GRAVIES & CONDIMENTS	1.00	3.15
11R	SEMI SKIMMED MILK	1.00	1.00
12R	SKIMMED MILK	1.00	1.00
61R	SMOOTHIES 100% FRUIT AND/OR JUICE	1.00	1.00
58B	SOFT DRINKS LOW CALORIE CARBONATED	1.00	1.00
58A	SOFT DRINKS LOW CALORIE CONCENTRATED	1.00	1.00
58C	SOFT DRINKS LOW CALORIE RTD STILL	1.00	18.28
57B	SOFT DRINKS NOT LOW CALORIE CARBONATED	1.00	2.00
57A	SOFT DRINKS NOT LOW CALORIE CONCENTRATED	1.00	2.00
57C	SOFT DRINKS NOT LOW CALORIE RTD STILL	1.00	1.00
20B	SOFT MARGARINE NOT POLYUNSATURATED	1.00	1.00
50D	SOUP HOMEMADE	1.00	3.88
50C	SOUP MANUFACTURED/ RETAIL	1.00	7.35
9F	SPONGE PUDDINGS - HOMEMADE	1.00	1.00
9E	SPONGE PUDDINGS - MANUFACTURED	1.00	1.00
41A	SUGAR	1.00	1.00
43R	SUGAR CONFECTIONERY	1.00	1.00
41R	SWEET SPREADS FILLINGS AND ICING	1.00	1.00
51R	TAP WATER ONLY	1.00	2.00
51B	TEA (MADE-UP WEIGHT)	1.00	33.26

Sub-food group code	Sub-food group	% unavoidable waste	% cooking changes
37F	TOMATOES NOT RAW	1.00	1.10
36C	TOMATOES RAW	0.95	1.00
2R	WHITE BREAD (NOT HIGH FIBRE; NOT MULTISEED BREAD)	1.00	0.96
33R	WHITE FISH COATED OR FRIED	1.00	0.99
10R	WHOLE MILK	1.00	1.00
5R	WHOLEGRAIN & HIGH FIBRE BR'FAST CEREALS	1.00	1.00
3R	WHOLEMEAL BREAD	1.00	0.96
15B	YOGURT	1.00	1.00

Table 3 Eatwell Guide cost estimates (per person, per day) by sub-food group

(n: number of matched foods, EWG: Eatwell Guide)

Main food group code	Main food group	Sub-food group code	Sub-food group	n	Current consumption (g)	Current diet cost (£)	EWG consumption (g)	EWG cost (£)	"Budget" Current diet cost (£)	"Budget" EWG cost (£)	"Premium" Current diet cost (£)	"Premium" EWG cost (£)
1	PASTA RICE AND OTHER CEREALS	1C	PIZZA	375	11.79	0.09	11.34	0.09	0.06	0.06	0.13	0.13
1	PASTA RICE AND OTHER CEREALS	1D	PASTA MANUFACTURED PRODUCTS & READY MEALS	92	5.94	0.02	5.46	0.01	0.01	0.01	0.04	0.04
1	PASTA RICE AND OTHER CEREALS	1E	OTHER PASTA INCLUDING HOMEMADE DISHES	9	19.29	0.03	29.72	0.04	0.02	0.02	0.23	0.35
1	PASTA RICE AND OTHER CEREALS	1F	RICE MANUFACTURED PRODUCTS & READY MEALS	40	2.43	0.01	2.42	0.01	0.01	0.01	0.01	0.01
1	PASTA RICE AND OTHER CEREALS	1G	OTHER RICE INCLUDING HOMEMADE DISHES	11	24.66	0.03	25.56	0.03	0.02	0.02	0.06	0.06
1	PASTA RICE AND OTHER CEREALS	1R	OTHER CEREALS	31	8.31	0.01	10.69	0.01	0.01	0.01	0.01	0.02
2	WHITE BREAD	2R	WHITE BREAD (NOT HIGH FIBRE; NOT MULTISEED BREAD)	26	49.47	0.11	67.55	0.15	0.07	0.10	0.16	0.22
3	WHOLEMEAL BREAD	3R	WHOLEMEAL BREAD	48	18.25	0.04	53.75	0.11	0.03	0.08	0.04	0.13
4	OTHER BREAD	4R	OTHER BREAD	9	2.92	0.01	3.35	0.01	0.01	0.01	0.02	0.02
5	HIGH FIBRE BREAKFAST CEREALS	5R	WHOLEGRAIN & HIGH FIBRE BR'FAST CEREALS	257	19.42	0.16	49.71	0.40	0.09	0.22	0.25	0.63
6	OTHER BREAKFAST CEREALS	6R	OTHER BREAKFAST CEREALS (NOT HIGH FIBRE)	45	5.63	0.04	5.10	0.03	0.02	0.02	0.05	0.04
7	BISCUITS	7A	BISCUITS MANUFACTURED / RETAIL	56	12.33	0.07	6.31	0.04	0.05	0.02	0.10	0.05
7	BISCUITS	7B	BISCUITS HOMEMADE	85	0.13	0.00	0.13	0.00	0.00	0.00	0.00	0.00
8	BUNS CAKES PASTRIES & FRUIT PIES	8B	FRUIT PIES MANUFACTURED	18	1.29	0.01	1.28	0.01	0.01	0.01	0.02	0.02
8	BUNS CAKES PASTRIES & FRUIT PIES	8C	FRUIT PIES HOMEMADE	36	0.37	0.00	0.37	0.00	0.00	0.00	0.00	0.00
8	BUNS CAKES PASTRIES & FRUIT PIES	8D	BUNS CAKES & PASTRIES MANUFACTURED	16	13.05	0.09	3.07	0.02	0.08	0.02	0.10	0.02
8	BUNS CAKES PASTRIES & FRUIT PIES	8E	BUNS CAKES & PASTRIES HOMEMADE	23	3.07	0.02	2.40	0.02	0.01	0.01	0.03	0.02
9	PUDDINGS	9C	CEREAL BASED MILK PUDDINGS - MANUFACTURED	46	5.64	0.02	4.68	0.02	0.01	0.01	0.03	0.02

Main food group code	Main food group	Sub-food group code	Sub-food group	n	Current consumption (g)	Current diet cost (£)	EWG consumption (g)	EWG cost (£)	"Budget" Current diet cost (£)	"Budget" EWG cost (£)	"Premium" Current diet cost (£)	"Premium" EWG cost (£)
9	PUDDINGS	9D	CEREAL BASED MILK PUDDINGS - HOMEMADE	51	0.55	0.00	0.54	0.00	0.00	0.00	0.00	0.00
9	PUDDINGS	9E	SPONGE PUDDINGS - MANUFACTURED	20	0.30	0.00	0.29	0.00	0.00	0.00	0.00	0.00
9	PUDDINGS	9F	SPONGE PUDDINGS - HOMEMADE	11	0.63	0.00	0.61	0.00	0.00	0.00	0.00	0.00
9	PUDDINGS	9G	OTHER CEREAL BASED PUDDINGS - MANUFACTURED	203	2.24	0.02	2.09	0.01	0.01	0.01	0.03	0.03
9	PUDDINGS	9H	OTHER CEREAL BASED PUDDINGS - HOMEMADE	189	2.89	0.01	2.63	0.01	0.01	0.01	0.02	0.02
10	WHOLE MILK	10R	WHOLE MILK	65	31.27	0.03	13.74	0.01	0.02	0.01	0.03	0.01
11	SEMI SKIMMED MILK	11R	SEMI SKIMMED MILK	80	100.50	0.09	111.42	0.10	0.07	0.08	0.11	0.12
12	SKIMMED MILK	12R	SKIMMED MILK	54	19.94	0.02	15.49	0.01	0.01	0.01	0.02	0.02
13	OTHER MILK AND CREAM	13B	CREAM (INCLUDING IMITATION CREAM)	59	2.77	0.01	1.94	0.01	0.01	0.01	0.01	0.01
13	OTHER MILK AND CREAM	13R	OTHER MILK	54	10.25	0.03	6.93	0.02	0.02	0.01	0.04	0.03
14	CHEESE	14A	COTTAGE CHEESE	31	0.47	0.00	0.46	0.00	0.00	0.00	0.00	0.00
14	CHEESE	14B	CHEDDAR CHEESE	281	3.19	0.03	1.23	0.01	0.02	0.01	0.03	0.01
14	CHEESE	14R	OTHER CHEESE	279	12.61	0.10	0.00	0.00	0.09	0.00	0.14	0.00
15	YOGURT FROMAGE FRAIS AND DAIRY DESSERTS	15B	YOGURT	70	27.30	0.10	12.09	0.04	0.06	0.03	0.14	0.06
15	YOGURT FROMAGE FRAIS AND DAIRY DESSERTS	15C	FROMAGE FRAIS AND DAIRY DESSERTS MANUFACTURED	7	1.74	0.00	1.61	0.00	0.00	0.00	0.01	0.01
15	YOGURT FROMAGE FRAIS AND DAIRY DESSERTS	15D	DAIRY DESSERTS HOMEMADE	4	0.19	0.00	0.18	0.00	0.00	0.00	0.00	0.00
16	EGGS AND EGG DISHES	16C	MANUFACTURED EGG PRODUCTS INCLUDING READY MEALS	83	2.64	0.02	2.33	0.02	0.02	0.01	0.03	0.02
16	EGGS AND EGG DISHES	16D	OTHER EGGS AND EGG DISHES INCLUDING HOMEMADE	14	16.08	0.14	0.00	0.00	0.09	0.00	0.20	0.00
17	BUTTER	17R	BUTTER	66	4.07	0.03	0.17	0.00	0.03	0.00	0.03	0.00
18	PUFA MARGARINE & OILS	18A	POLYUNSATURATED MARGARINE	22	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00
18	PUFA MARGARINE & OILS	18B	POLYUNSATURATED OILS	62	0.43	0.00	0.40	0.00	0.00	0.00	0.00	0.00
19	LOW FAT SPREAD	19A	POLYUNSATURATED LOW FAT SPREAD	43	1.17	0.01	1.04	0.01	0.00	0.00	0.01	0.01

Main food group code	Main food group	Sub-food group code	Sub-food group	n	Current consumption (g)	Current diet cost (£)	EWG consumption (g)	EWG cost (£)	"Budget" Current diet cost (£)	"Budget" EWG cost (£)	"Premium" Current diet cost (£)	"Premium" EWG cost (£)
19	LOW FAT SPREAD	19R	LOW FAT SPREAD NOT POLYUNSATURATED	47	0.35	0.00	0.34	0.00	0.00	0.00	0.00	0.00
20	OTHER MARGARINE FATS AND OILS	20A	BLOCK MARGARINE	4	0.13	0.00	0.13	0.00	0.00	0.00	0.00	0.00
20	OTHER MARGARINE FATS AND OILS	20B	SOFT MARGARINE NOT POLYUNSATURATED	22	0.03	0.00	0.03	0.00	0.00	0.00	0.00	0.00
20	OTHER MARGARINE FATS AND OILS	20C	OTHER COOKING FATS AND OILS NOT PUFA	394	1.28	0.01	0.99	0.01	0.01	0.01	0.02	0.01
21	REDUCED FAT SPREAD	21A	REDUCED FAT SPREAD (POLYUNSATURATED)	18	1.58	0.01	1.23	0.01	0.01	0.01	0.01	0.01
21	REDUCED FAT SPREAD	21B	REDUCED FAT SPREAD (NOT POLYUNSATURATED)	74	4.97	0.04	1.13	0.01	0.03	0.01	0.05	0.01
22	BACON AND HAM	22A	READY MEALS / MEAL CENTRES BASED ON BACON AND HAM	12	0.04	0.00	0.04	0.00	0.00	0.00	0.00	0.00
22	BACON AND HAM	22B	OTHER BACON AND HAM INCLUDING HOMEMADE DISHES	366	14.42	0.29	0.00	0.00	0.17	0.00	0.43	0.00
23	BEEF VEAL AND DISHES	23A	MANUFACTURED BEEF PRODUCTS INCLUDING READY MEALS	168	5.75	0.04	5.58	0.04	0.03	0.03	0.05	0.05
23	BEEF VEAL AND DISHES	23B	OTHER BEEF & VEAL INCLUDING HOMEMADE RECIPE DISHES	91	20.52	0.19	0.00	0.00	0.13	0.00	0.29	0.00
24	LAMB AND DISHES	24A	MANUFACTURED LAMB PRODUCTS INCLUDING READY MEALS	27	1.31	0.01	1.31	0.01	0.01	0.01	0.01	0.01
24	LAMB AND DISHES	24B	OTHER LAMB INCLUDING HOMEMADE RECIPE DISHES	87	7.39	0.13	2.43	0.04	0.10	0.03	0.17	0.06
25	PORK AND DISHES	25A	MANUFACTURED PORK PRODUCTS INCLUDING READY MEALS	65	0.52	0.01	0.50	0.01	0.00	0.00	0.01	0.01
25	PORK AND DISHES	25B	OTHER PORK INCLUDING HOMEMADE RECIPE DISHES	25	7.25	0.10	2.12	0.03	0.07	0.02	0.12	0.03
26	COATED CHICKEN	26A	MANUFACTURED COATED CHICKEN / TURKEY PRODUCTS	89	5.52	0.04	3.55	0.03	0.03	0.02	0.06	0.04
27	CHICKEN AND TURKEY DISHES	27A	MANUFACTURED CHICKEN PRODUCTS INCL READY MEALS	52	7.79	0.07	5.59	0.05	0.06	0.04	0.09	0.06
27	CHICKEN AND TURKEY DISHES	27B	OTHER CHICKEN / TURKEY INCL HOMEMADE RECIPE DISHES	316	32.73	0.58	0.00	0.00	0.39	0.00	0.76	0.00

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28	LIVER & DISHES	28R	LIVER AND DISHES	10	1.54	0.03	1.29	0.02	0.02	0.02	0.05	0.04
29	BURGERS AND KEBABS	29R	BURGERS AND KEBABS PURCHASED	124	5.74	0.05	3.56	0.03	0.04	0.02	0.06	0.04
30	SAUSAGES	30A	READY MEALS BASED ON SAUSAGES	22	0.09	0.00	0.09	0.00	0.00	0.00	0.00	0.00
30	SAUSAGES	30B	OTHER SAUSAGES INCLUDING HOMEMADE DISHES	214	11.54	0.06	2.36	0.01	0.04	0.01	0.08	0.02
31	MEAT PIES AND PASTRIES	31A	MANUFACTURED MEAT PIES AND PASTRIES	70	7.44	0.06	5.45	0.05	0.04	0.03	0.10	0.07
31	MEAT PIES AND PASTRIES	31B	HOMEMADE MEAT PIES AND PASTRIES	103	1.61	0.01	1.47	0.01	0.01	0.01	0.02	0.02
32	OTHER MEAT AND MEAT PRODUCTS	32A	OTHER MEAT PRODUCTS MANUFACTURED Â INCL READY MEALS	42	3.26	0.04	1.91	0.02	0.03	0.01	0.05	0.03
32	OTHER MEAT AND MEAT PRODUCTS	32B	OTHER MEAT Â INCLUDING HOMEMADE RECIPE DISHES	66	1.86	0.02	1.56	0.02	0.01	0.01	0.03	0.03
33	WHITE FISH COATED OR FRIED	33R	WHITE FISH COATED OR FRIED	37	9.27	0.09	14.12	0.13	0.07	0.10	0.11	0.16
34	OTHER WHITE FISH SHELLFISH & FISH DISHES	34C	MANUFACTURED WHITE FISH PRODUCTS INCL READY MEALS	84	0.80	0.01	0.83	0.01	0.01	0.01	0.01	0.01
34	OTHER WHITE FISH SHELLFISH & FISH DISHES	34D	OTHER WHITE FISH INCLUDING HOMEMADE DISHES	131	5.15	0.06	8.13	0.10	0.05	0.07	0.09	0.13
34	OTHER WHITE FISH SHELLFISH & FISH DISHES	34E	MANUFACTURED SHELLFISH PRODUCTS INCL READY MEALS	34	0.65	0.00	0.65	0.00	0.00	0.00	0.01	0.01
34	OTHER WHITE FISH SHELLFISH & FISH DISHES	34F	OTHER SHELLFISH INCLUDING HOMEMADE DISHES	249	3.32	0.06	4.19	0.08	0.04	0.05	0.09	0.11
34	OTHER WHITE FISH SHELLFISH & FISH DISHES	34G	MANUFACTURED CANNED TUNA PRODUCTS INCL READY MEALS	45	2.83	0.03	3.40	0.03	0.02	0.02	0.04	0.05
34	OTHER WHITE FISH SHELLFISH & FISH DISHES	34H	OTHER CANNED TUNA INCLUDING HOMEMADE DISHES	45	1.68	0.02	1.91	0.02	0.01	0.01	0.02	0.03
35	OILY FISH	35A	MANUFACTURED OILY FISH PRODUCTS INCL READY MEALS	28	3.59	0.04	9.20	0.09	0.03	0.08	0.05	0.13
35	OILY FISH	35B	OTHER OILY FISH INCLUDING HOMEMADE DISHES	117	6.36	0.15	32.26	0.75	0.12	0.61	0.18	0.90
36	SALAD AND OTHER RAW VEGETABLES	36A	CARROTS RAW	84	2.13	0.01	2.61	0.01	0.00	0.00	0.01	0.01

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36	SALAD AND OTHER RAW VEGETABLES	36B	SALAD AND OTHER RAW VEGETABLES	19	23.93	0.19	46.16	0.37	0.13	0.26	0.39	0.75
36	SALAD AND OTHER RAW VEGETABLES	36C	TOMATOES RAW	333	18.51	0.08	30.04	0.13	0.05	0.08	0.16	0.26
37	VEGETABLES NOT RAW	37A	PEAS NOT RAW	91	9.03	0.03	18.36	0.06	0.02	0.05	0.06	0.13
37	VEGETABLES NOT RAW	37B	GREEN BEANS NOT RAW	56	3.65	0.02	5.09	0.03	0.01	0.01	0.03	0.04
37	VEGETABLES NOT RAW	37C	BAKED BEANS	153	15.78	0.03	34.95	0.06	0.02	0.04	0.04	0.10
37	VEGETABLES NOT RAW	37D	LEAFY GREEN VEGETABLES NOT RAW	73	13.74	0.09	24.93	0.16	0.04	0.06	0.13	0.24
37	VEGETABLES NOT RAW	37E	CARROTS NOT RAW	80	13.16	0.03	26.11	0.07	0.02	0.03	0.06	0.11
37	VEGETABLES NOT RAW	37F	TOMATOES NOT RAW	42	12.69	0.12	16.47	0.16	0.03	0.03	0.18	0.23
37	VEGETABLES NOT RAW	37I	BEANS AND PULSES INCL READY MEAL & HOMEMADE DISHES	147	5.32	0.01	8.50	0.01	0.01	0.01	0.02	0.03
37	VEGETABLES NOT RAW	37K	MEAT ALTERNATIVES INCL READY MEALS & HOMEMADE DISH	305	1.98	0.02	2.08	0.02	0.01	0.01	0.03	0.03
37	VEGETABLES NOT RAW	37L	OTHER MANUFACTURED VEGETABLE PRODUCTS INCL RM	28	2.26	0.02	2.36	0.02	0.01	0.01	0.02	0.03
37	VEGETABLES NOT RAW	37M	OTHER VEGETABLES INCLUDING HOMEMADE DISHES	211	45.84	0.20	93.55	0.40	0.13	0.26	0.39	0.80
38	CHIPS FRIED & ROAST POTATOES AND POTATO PRODUCTS	38A	CHIPS PURCHASED INCLUDING TAKEAWAY	47	17.51	0.04	32.71	0.07	0.03	0.05	0.06	0.11
38	CHIPS FRIED & ROAST POTATOES AND POTATO PRODUCTS	38C	OTHER MANUFACTURED POTATO PRODUCTS FRIED/BAKED	30	3.71	0.02	4.00	0.02	0.01	0.01	0.02	0.03
38	CHIPS FRIED & ROAST POTATOES AND POTATO PRODUCTS	38D	OTHER FRIED / ROAST POTATOES INCL HOMEMADE DISHES	213	19.39	0.05	33.45	0.08	0.03	0.05	0.10	0.18
39	OTHER POTATOES POTATO SALADS & DISHES	39A	OTHER POTATO PRODUCTS & Å DISHES - MANUFACTURED	14	1.94	0.01	1.95	0.01	0.00	0.00	0.01	0.01
39	OTHER POTATOES POTATO SALADS & DISHES	39B	OTHER POTATOES INCLUDING Å HOMEMADE DISHES	178	50.16	0.09	104.34	0.18	0.05	0.11	0.17	0.35

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40	FRUIT	40A	APPLES AND PEARS NOT CANNED	42	30.50	0.13	70.44	0.29	0.07	0.15	0.43	0.99
40	FRUIT	40B	CITRUS FRUIT NOT CANNED	15	12.40	0.05	18.88	0.07	0.04	0.06	0.07	0.11
40	FRUIT	40C	BANANAS	2	24.84	0.10	48.13	0.19	0.06	0.12	0.14	0.26
40	FRUIT	40D	CANNED FRUIT IN JUICE	46	2.56	0.01	2.79	0.01	0.01	0.01	0.01	0.01
40	FRUIT	40E	CANNED FRUIT IN SYRUP	13	0.76	0.00	0.78	0.00	0.00	0.00	0.00	0.00
40	FRUIT	40R	OTHER FRUIT NOT CANNED	62	28.47	0.25	68.44	0.60	0.19	0.47	0.35	0.84
41	SUGARS PRESERVES AND SWEET SPREADS	41A	SUGAR	40	8.76	0.01	0.00	0.00	0.01	0.00	0.02	0.00
41	SUGARS PRESERVES AND SWEET SPREADS	41B	PRESERVES	161	3.64	0.02	1.43	0.01	0.02	0.01	0.03	0.01
41	SUGARS PRESERVES AND SWEET SPREADS	41R	SWEET SPREADS FILLINGS AND ICING	96	0.30	0.00	0.28	0.00	0.00	0.00	0.00	0.00
42	CRISPS AND SAVOURY SNACKS	42R	CRISPS AND SAVOURY SNACKS	411	6.13	0.07	6.03	0.07	0.05	0.05	0.09	0.09
43	SUGAR CONFECTIONERY	43R	SUGAR CONFECTIONERY	34	1.62	0.03	1.25	0.02	0.02	0.01	0.04	0.03
44	CHOCOLATE CONFECTIONERY	44R	CHOCOLATE CONFECTIONERY	626	8.15	0.12	0.00	0.00	0.08	0.00	0.17	0.00
45	FRUIT JUICE	45R	FRUIT JUICE	162	53.12	0.12	24.38	0.05	0.07	0.03	0.15	0.07
50	MISCELLANEOUS	50A	BEVERAGES DRY WEIGHT	119	2.52	0.00	1.70	0.00	0.00	0.00	0.00	0.00
50	MISCELLANEOUS	50C	SOUP MANUFACTURED/ RETAIL	88	22.60	0.01	18.52	0.01	0.01	0.01	0.01	0.01
50	MISCELLANEOUS	50D	SOUP HOMEMADE	109	3.80	0.00	3.94	0.00	0.00	0.00	0.00	0.00
50	MISCELLANEOUS	50R	SAVOURY SAUCES PICKLES GRAVIES & CONDIMENTS	595	28.92	0.05	3.72	0.01	0.03	0.00	0.08	0.01
51	TEA COFFEE AND WATER	51A	COFFEE (MADE-UP WEIGHT)	783	255.94	0.10	252.36	0.10	0.08	0.07	0.16	0.15
51	TEA COFFEE AND WATER	51B	TEA (MADE-UP WEIGHT)	607	411.84	0.25	415.59	0.25	0.13	0.13	0.64	0.64
51	TEA COFFEE AND WATER	51C	HERBAL TEA (MADE-UP WEIGHT)	159	22.10	0.06	22.10	0.06	0.03	0.03	0.10	0.10
51	TEA COFFEE AND WATER	51D	BOTTLED WATER STILL OR CARBONATED	36	80.55	0.04	80.49	0.04	0.03	0.03	0.06	0.06
51	TEA COFFEE AND WATER	51R	TAP WATER ONLY	150	347.28	0.00	347.28	0.00	0.00	0.00	0.00	0.00
53	ICE CREAM	53R	ICE CREAM	74	5.42	0.02	2.85	0.01	0.01	0.01	0.03	0.02
56	NUTS AND SEEDS	56R	NUTS AND SEEDS	269	2.86	0.03	3.03	0.03	0.02	0.02	0.04	0.04
57	SOFT DRINKS NOT LOW CALORIE	57A	SOFT DRINKS NOT LOW CALORIE CONCENTRATED	172	33.94	0.06	17.39	0.03	0.03	0.01	0.08	0.04

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57	SOFT DRINKS NOT LOW CALORIE	57B	SOFT DRINKS NOT LOW CALORIE CARBONATED	102	68.09	0.08	31.56	0.04	0.04	0.02	0.11	0.05
57	SOFT DRINKS NOT LOW CALORIE	57C	SOFT DRINKS NOT LOW CALORIE RTD STILL	54	17.91	0.03	10.14	0.02	0.02	0.01	0.04	0.02
58	SOFT DRINKS LOW CALORIE	58A	SOFT DRINKS LOW CALORIE CONCENTRATED	118	36.13	0.04	35.02	0.04	0.02	0.02	0.06	0.05
58	SOFT DRINKS LOW CALORIE	58B	SOFT DRINKS LOW CALORIE CARBONATED	50	46.83	0.06	46.59	0.05	0.04	0.04	0.07	0.07
58	SOFT DRINKS LOW CALORIE	58C	SOFT DRINKS LOW CALORIE RTD STILL	71	1.67	0.00	1.67	0.00	0.00	0.00	0.00	0.00
59	BROWN GRANARY AND WHEATGERM BREAD	59R	BROWN GRANARY AND WHEATGERM BREAD	9	14.53	0.03	29.09	0.06	0.03	0.06	0.04	0.08
60	1% Fat Milk	60R	1% Fat Milk	15	1.63	0.00	1.59	0.00	0.00	0.00	0.00	0.00
61	SMOOTHIES 100% FRUIT AND/OR JUICE	61R	SMOOTHIES 100% FRUIT AND/OR JUICE	269	0.81	0.00	0.82	0.00	0.00	0.00	0.01	0.01
.	.	.	Totals	13912	2470.92	6.44	2631.38	6.82	4.26	4.55	10.14	11.46

Table 4 Missing data by retailer

Retailer	Number of sub-food groups without any matches
Morrisons	9
Ocado	5
Sainsbury's	2
Tesco	7
Tesco Ireland	21
Waitrose	5