
Appendices for Report

DERIVING AND INTERPRETING DIETARY PATTERNS IN THE SCOTTISH DIET: FURTHER ANALYSIS OF THE SCOTTISH HEALTH SURVEY AND EXPENDITURE AND FOOD SURVEY

Project Code S14034

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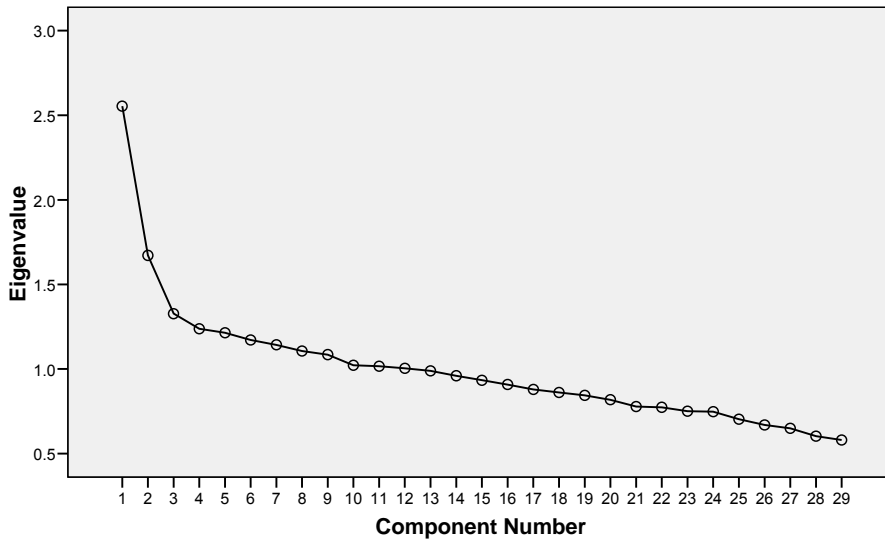
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Appendix 1

Scree plots for the five groups in the Scottish Health Survey (SHS) analysis

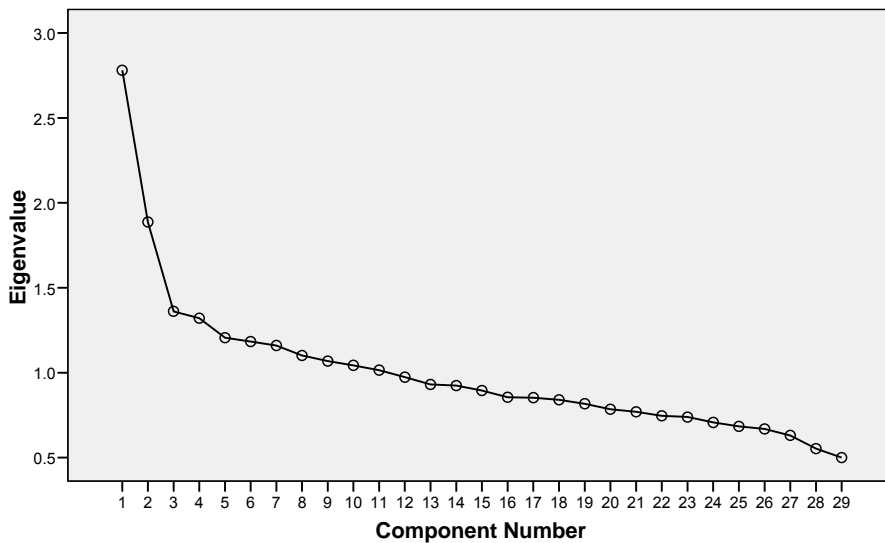
The scree plot is of the eigenvalues for each of the components generated from the PCA (the eigenvalue is the amount of variance that is accounted for by a given component). The importance of a component (pattern) is reflected in its eigenvalues which indicated the components (patterns) which best represent the data. The scree plots for the five groups in the Scottish Health Survey analysis: age groups 5-10, 11-15, 16-24 and >64 years are shown below.

5-10 years



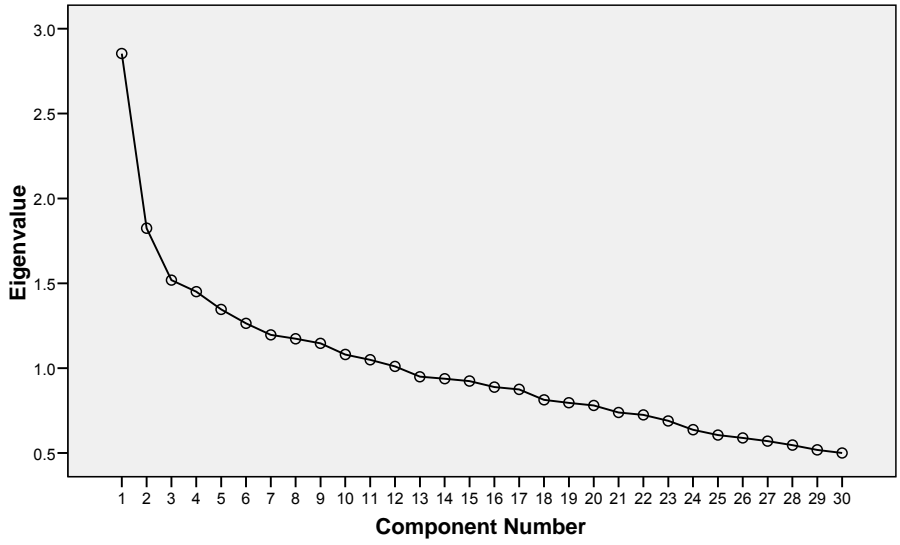
Analysis weighted by Child interview weight

11-15 years



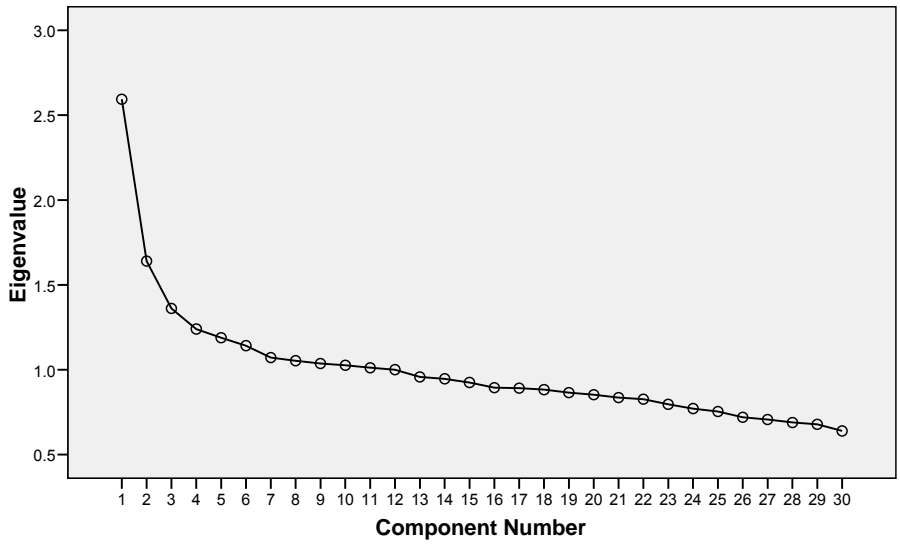
Analysis weighted by Child interview weight

16-24 years



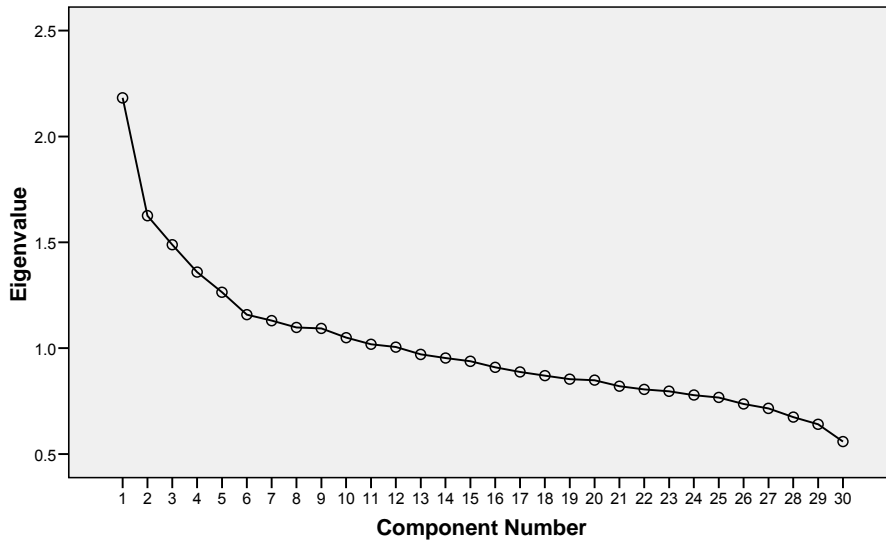
Analysis weighted by SHS Adult interview weight

25-64 years



Analysis weighted by SHS Adult interview weight

> 64 years



Analysis weighted by SHS Adult interview weight

Appendix 2

SHS Foods and their factor loadings for the dietary patterns in each age group

The excel tables are colour coded to enable easy reference to the food factor loadings. The light green colour depicts foods which have highest factors loadings, ≥ 0.3 , with those in light blue being foods with factor loadings between $+0.25$ and $+0.3$. Foods with low factor loadings for the pattern, and therefore less likely to be part of that pattern, are colour coded, pink between -0.25 and -0.3 and red ≤ -0.3 . When describing dietary patterns, the choice of labels for the patterns is often arbitrary and at times contentious. However it is helpful to have a label that indicates the type of dietary pattern when discussing associations with other factors. We have therefore applied labels for ease of discussion of the components and for comparison between age groups and socio-economic groups.

5-10 years, n=639 males and 619 females			
Pattern 1 - Energy Dense/Snacking	FACTOR LOADINGS	Pattern 2 - Healthy with Fish	FACTOR LOADINGS 2
Sweets and chocolates	0.547	Vegetables	0.470
Crisps and savoury snacks	0.536	Fresh fruit	0.468
Meat products	0.524	Potatoes, rice and pasta	0.427
Biscuits	0.497	Oily fish	0.374
Soft drinks	0.442	Tinned tuna	0.367
Ice-cream	0.377	Fruit juice	0.364
Cheese	0.363	Salad	0.360
Cakes, scones, sweet pies and pastries	0.361	High fibre breakfast cereal	0.291
Red meat	0.357	Wholemeal and brown breads	0.290
Chips	0.344	Dried fruit	0.289
Salt	0.285	Red meat	0.267
Pulses	0.219	Cheese	0.248
Frozen and canned fruit	0.193	White fish	0.219
Salad	0.074	Low fat spread	0.205
High fibre breakfast cereal	0.055	Poultry	0.202
Poultry	0.040	Lower fat milks	0.129
Whitefish	0.030	Fruit in dishes	0.128
Potatoes, rice and pasta	0.005	Cakes, scones, sweet pies and pastries	0.114
Fresh fruit	-0.026	Vegetables in dishes	0.113
Fruit juice	-0.029	Pulses	0.103
Tinned tuna	-0.035	Frozen and canned fruit	0.070
Vegetables in dishes	-0.043	Ice-cream	-0.057
Vegetables	-0.052	Meat products	-0.060
Fruit in dishes	-0.068	Biscuits	-0.105
Oily fish	-0.073	Salt	-0.110
Dried fruit	-0.074	Chips	-0.142
Lower fat spread	-0.127	Sweets and chocolates	-0.152
Wholemeal and brown breads	-0.134	Crisps	-0.185
Lower fat milks	-0.245	Soft drinks	-0.348

11-15 year olds, n=595 males and 547 females					
Pattern 1 Energy Dense/Snacking	1	Pattern 2 Healthy with Fish	2	Pattern 3 Healthy	3
Sweets and chocolates	0.627	Whitefish	0.537	Vegetables	0.492
Meat products	0.601	Salad	0.380	Pulses	0.438
Crisps and savoury snacks	0.571	Oily fish	0.380	Chips	0.436
Soft drinks	0.551	Potatoes, rice and pasta	0.376	Frozen and canned fruit	0.423
Biscuits	0.493	Fresh Fruit	0.372	Fruit juice	0.393
Ice-cream	0.441	Wholemeal and brown breads	0.344	Tinned tuna	0.330
Cakes, scones, sweet pies and pastries	0.389	Cheese	0.282	Fresh fruit	0.327
Chips	0.381	Cakes, scones and pastries	0.265	Salad	0.274

Cheese	0.367	High fibre breakfast cereal	0.264	Meat products	0.259
Salt	0.184	Ice-cream	0.255	Fruit in dishes	0.249
High fibre breakfast cereal	0.073	Red meat	0.255	Lower fat milks	0.192
Pulses	0.066	Dried fruit	0.233	Dried fruit	0.188
Tinned tuna	0.048	Tinned tuna	0.214	Poultry	0.178
Red meat	0.037	Vegetables	0.211	Low fat spread	0.146
Whitefish	0.011	Biscuits	0.193	Ice-cream	0.098
Salad	-0.002	Poultry	0.115	Oily fish	0.070
Vegetables in dishes	-0.013	Fruit juice	0.043	Crisps	0.067
Dried fruit	-0.019	Low fat spread	0.037	Wholemeal and brown breads	0.044
Wholemeal and brown breads	-0.027	Vegetables in dishes	0.008	Whitefish	0.040
Fruit in dishes	-0.030	Fruit in dishes	0.004	Cheese	0.037
Frozen and canned fruit	-0.053	Lower fat milks	-0.023	Sweets and chocolates	0.001
Fresh fruit	-0.066	Frozen and canned fruit	-0.038	Salt	-0.020
Vegetables	-0.071	Pulses	-0.060	Potatoes, rice and pasta	-0.033
Potatoes, rice and pasta	-0.129	Sweets and chocolates	-0.154	High fibre breakfast cereal	-0.046
Low fats spreads	-0.159	Salt	-0.203	Vegetables in dishes	-0.050
Oily fish	-0.162	Meat products	-0.223	Red meat	-0.051
Fruit juice	-0.165	Crisps and savoury snacks	-0.231	Soft drinks	-0.065
Poultry	-0.191	Soft drinks	-0.286	Cakes, scones, sweet pies and pastries	-0.087
Lower fat milks	-0.359	Chips	-0.341	Biscuits	-0.102

16-24 years, n= 576 males and 566 females					
Pattern 1 Healthy	1	Pattern 2 Energy Dense/Snacking	2	Pattern 3 Healthy	3
Salad	0.596	Biscuits	0.646	Lower fat milks	0.496
Fresh Fruit	0.545	Cakes, scones, sweet pies and pastries	0.593	Low fat spread	0.390
Vegetables	0.463	Crisps and savoury snacks	0.498	High fibre breakfast cereal	0.343
Fruit juice	0.460	Soft drinks	0.470	Wholemeal and brown breads	0.339
Poultry	0.393	Sweets and chocolates	0.467	Dried fruit	0.258
Oily fish	0.351	Meat products	0.356	Fruit	0.216
Vegetables in dishes	0.348	Ice-cream	0.322	Biscuits	0.206
Potatoes, rice and pasta	0.339	Chips	0.281	Pulses	0.196
Tinned tuna	0.307	Red meat	0.257	Potatoes, rice and pasta	0.186
White fish	0.291	Cheese	0.255	Fruit in dishes	0.182
Wholemeal and brown breads	0.254	Fruit in dishes	0.251	Vegetables	0.125
High fibre breakfast cereal	0.222	Pulses	0.129	Oily fish	0.111
Red meat	0.183	Tinned tuna	0.117	Ice-cream	0.084
Low fat spread	0.169	Whitefish	0.106	Salad	0.072
Alcohol	0.160	Potatoes, rice and pasta	0.095	Fruit juice	0.025
Fruit in dishes	0.144	High fibre breakfast cereal	0.092	Cakes, scones, sweet pies and pastries	0.017
Ice-cream	0.120	Oily fish	0.073	Tinned tuna	0.006
Frozen/canned fruit	0.088	Salt	0.066	Sweets/chocolates	-0.017
Salt	0.085	Low fat spread	0.039	Frozen/canned fruit	-0.040
Cheese	0.058	Vegetables in dishes	0.003	Vegetables in dishes	-0.062
Pulses	0.036	Dried fruit	-0.005	Red meat	-0.085
Lower fat milks	0.007	Lower fat milks	-0.014	Whitefish	-0.103
Cakes, scones sweet pies and pastries	-0.025	Fresh Fruit	-0.040	Cheese	-0.168
Dried fruit	-0.034	Alcohol	-0.044	Poultry	-0.181
Chips	-0.034	Frozen/canned fruit	-0.044	Alcohol	-0.270
Meat products	-0.040	Vegetables	-0.050	Crisps and savoury snacks	-0.322
Crisps	-0.107	Fruit juice	-0.067	Soft drinks	-0.371
Soft drinks	-0.136	Wholemeal and brown breads	-0.082	Meat products	-0.415

Biscuits	-0.149	Salad	-0.103	Salt	-0.449
Sweets and chocolates	-0.178	Poultry	-0.203	Chips	-0.522

25-64 years, n=2594 males and 2756 females					
Pattern 1 Energy Dense	1	Pattern 2 Healthy with Fish	2	Pattern 3 Energy Dense/Snacking	3
Meat products	0.533	Vegetables	0.516	Biscuits	0.650
Chips	0.430	Fresh Fruit	0.464	Cakes, scones, sweet pies and pastries	0.601
Red meat	0.421	Oily fish	0.455	Sweets and chocolates	0.598
Soft drinks	0.332	High fibre breakfast cereal	0.343	Ice-cream	0.416
Alcohol	0.318	Salad	0.328	Crisps and savoury snacks	0.324
Salt	0.304	Whitefish	0.327	Soft drinks	0.250
Cheese	0.252	Dried fruit	0.285	Meat products	0.235
Crisps	0.170	Fruit juice	0.284	Potatoes, rice and pasta	0.202
Whitefish	0.121	Potatoes, rice and pasta	0.259	Cheese	0.202
Pulses	0.087	Wholemeal and brown breads	0.254	Chips	0.172
Cakes, scones, sweet pies and pastries	0.070	Red meat	0.233	Red meat	0.149
Fruit in dishes	0.042	Fruit in dishes	0.215	High fibre breakfast cereal	0.139
Frozen and canned fruits	0.020	Frozen and canned fruit	0.210	Poultry	0.116
Ice-cream	0.006	Pulses	0.186	Fruit in dishes	0.067
Oily fish	-0.014	Vegetables in dishes	0.139	Frozen/canned fruit	0.064
Vegetables	-0.028	Cakes, scones and pastries	0.092	Wholemeal and brown breads	0.052
Biscuits	-0.034	Cheese	0.089	Low fat spread	0.019
Vegetables in dishes	-0.040	Ice-cream	0.084	Lower fat milks	0.014
Sweets and chocolates	-0.061	Tinned tuna	0.069	Fruit juice	0.007
Fruit juice	-0.063	Alcohol	-0.001	Whitefish	-0.007
Dried fruit	-0.077	Lower fat milks	-0.002	Vegetables in dishes	-0.007
Potatoes, rice and pasta	-0.142	Poultry	-0.003	Pulses	-0.016
Salad	-0.161	Biscuits	-0.037	Tinned tuna	-0.021
Tinned tuna	-0.217	Low fat spread	-0.060	Salt	-0.021
High fibre breakfast cereal	-0.232	Meat products	-0.084	Fresh fruit	-0.023
Fresh fruit	-0.269	Salt	-0.154	Dried fruit	-0.023
Poultry	-0.274	Sweets and chocolates	-0.163	Oily fish	-0.063
Wholemeal and brown breads	-0.323	Chips	-0.224	Salad	-0.083
Low fat spread	-0.489	Soft drinks	-0.231	Vegetables	-0.101
Lower fat milks	-0.541	Crisps and savoury snacks	-0.312	Alcohol	-0.180

>64 years, n=663 males and 959 females					
Pattern 1 Healthy	1	Pattern 2 Energy Dense/Snacking	2	Pattern 3 Traditional	3
Fresh fruit	0.506	Cakes, scones , sweet pies and pastries	0.633	Red meat	0.624
Low fat spread	0.486	Sweets and chocolates	0.600	Potatoes, rice and pasta	0.552
Lower fat milks	0.470	Ice-cream	0.531	Whitefish	0.387
Wholemeal and brown bread	0.454	Biscuits	0.485	High fibre breakfast cereal	0.288
Tinned tuna	0.350	Frozen and canned fruit	0.191	Cheese	0.284
Dried fruit	0.280	Crisps and savoury snacks	0.168	Oily fish	0.270
Poultry	0.273	Dried fruit	0.152	Vegetables	0.267
High fibre breakfast cereal	0.272	Chips	0.134	Vegetables in dishes	0.254
Vegetables	0.247	Cheese	0.125	Alcohol	0.254
Salad	0.235	Fresh fruit	0.117	Fresh Fruit	0.207
Fruit juice	0.200	Soft drinks	0.083	Salad	0.206

Oily fish	0.093	Fruit juice	0.077	Crisps and savoury snacks	0.195
Fruit in dishes	0.075	Red meat	0.072	Fruit juice	0.182
Vegetables in dishes	0.039	Potatoes, rice and pasta	0.043	Meat products	0.153
Pulses	0.034	Low Fat Spread	0.029	Poultry	0.153
Ice-cream	0.024	High fibre breakfast cereal	0.029	Salt	0.126
Potatoes, rice and pasta	0.001	Pulses	0.028	Wholemeal and brown breads	0.110
Frozen and canned fruit	-0.009	Meat products	0.002	Pulses	0.108
Whitefish	-0.043	Fruit in dishes	-0.004	Dried fruit	0.107
Sweets and chocolates	-0.072	Vegetables	-0.022	Fruit in dishes	0.102
Cakes, scones and pastries	-0.075	Vegetables in dishes	-0.028	Frozen/canned fruit	0.047
Biscuits	-0.092	Whitefish	-0.033	Ice-cream	0.027
Cheese	-0.116	Tinned tuna	-0.046	Sweets and chocolates	0.025
Crisps and savoury snacks	-0.204	Oily fish	-0.049	Tinned tuna	0.014
Alcohol	-0.204	Salt	-0.059	Cakes, scones, sweet pies and pastries	0.005
Red meat	-0.245	Poultry	-0.063	Biscuits	-0.010
Chips	-0.249	Wholemeal and brown breads	-0.079	Soft drinks	-0.054
Soft drinks	-0.332	Lower fat milks	-0.124	Low fat spread	-0.054
Salt	-0.401	Salad	-0.152	Chips	-0.064
Meat products	-0.402	Alcohol	-0.350	Lower fat milks	-0.079

Appendix 3

SHS definitions and categories for socio-economic and lifestyle variables used in the analysis

Variables	Definition	Factor level for analysis	Original variable in SPSS	Variable used in analysis
Scottish Index of Multiple Deprivation (SIMD)	Area based measure of deprivation. Derived from the NTILES of SIMD score variable on the SHS database. Quintiles	Least deprived (1) to most deprived (5)	QuintilesSIMD	QuintilesSIMD
National Statistics Socio-Economic Classification (NS-SEC5)	Occupational based classification. Based on the occupation details of the household reference person. Quintiles	<ol style="list-style-type: none"> 1. Managerial and professional occupations. 2. Intermediate occupations 3. Small employers and own account workers. 4. Lower supervisory and technical occupations. 	hpnsec5	hpnsec5
Equivalised income	Adjusted household income to take into account the number of persons in the household.	<ol style="list-style-type: none"> 1. >£32,000 2. >=£21,511<£32,500 3. >=£14, 322<£21511 4. >=£9,100<£14,322 5. <£9,100 	eqv5	eqv5
Smoking status	Current and past smoking status All aged ≥16 years asked	<ol style="list-style-type: none"> 1. Non-smoker 2. Less than 20 a day 3. 20 or more a day 	fagsta <ol style="list-style-type: none"> 1. Non smoker 2. Ex-smoker 3. less than 20/day 4. 20 or more/day 	Rfagsta
Education	Highest educational qualification. Ages ≥25 years	Level 1 - Degree or professional qualification or higher Level 2 - HNC/HND or equivalent Level 3 - 'H' grade/A level or equivalent Level 4 - 'O' Grade or equivalent Level 5 - None of these	Hedqual	RHedqual
Physical Activity	Children 5-10 years and 11-15 years	Low = Lower level of activity Medium = 30-59 minutes on at least 5 days High = 60+ minutes on at least 5 days	derived	ch15sumg
Physical Activity	Adults 16-24 years and 25-64 years	Low = Moderate or vigorous < 30minutes per week Medium = Moderate or vigorous ≥ 30 minutes on 1-4 days High = Moderate or vigorous activity on at least 5 days per week	derived	adt15gp
Screen viewing	Children 5-10 years and 11-15 years	Tertiles : 1 = 0-1.5 hrs/day 2 = 2-2.5 hrs/day 3 = 3+ hrs/day	derived	tv_childq
Screen viewing	Adults: 16-24 years and 25-64 years	Tertiles : 1 = 0-2 hrs/day 2 = 2.5 - 3.5 hrs/day 3 = 4+ hrs/day	derived	tv_adultq

Appendix 4

SHS Tables of results for dietary patterns (PCA analysis) according to gender, socio-economic status and lifestyle

PCA Gender Analysis				
Age 5-10 years	Male	Female	<i>p-value*</i>	<i>R² value</i>
Energy Dense/Snacking				
Mean	-0.06	0.07	0.034	0.4%
Lower 95% confidence limit	-0.16	-0.02		
Upper 95% confidence limit	0.03	0.16		
Healthy with Fish				
Mean	-0.02	0.02	0.0004	0.5%
Lower 95% confidence limit	-0.11	-0.07		
Upper 95% confidence limit	0.07	0.11		
Age 11-15 years	Male	Female	<i>p-value*</i>	<i>Adjusted R² value</i>
Energy Dense/Snacking				
Mean	0.05	-0.06	0.15	0.3%
Lower 95% confidence limit	-0.08	-0.15		
Upper 95% confidence limit	0.18	0.04		
Healthy with Fish				
Mean	0.04	-0.05	0.17	0.2%
Lower 95% confidence limit	-0.05	-0.16		
Upper 95% confidence limit	0.14	0.07		
Healthy				
Mean	0.00	0.00	0.90	0.0%
Lower 95% confidence limit	-0.10	-0.10		
Upper 95% confidence limit	0.01	0.11		
Age 16-24 years	Male	Female	<i>p-value*</i>	<i>R² value</i>
Healthy				
Mean	0.03	-0.03	0.0008	0.51
Lower 95% confidence limit	-0.11	-0.15		
Upper 95% confidence limit	0.16	0.09		
Energy Dense/Snacking				
Mean	0.21	-0.21	<0.0001	4.4%
Lower 95% confidence limit	0.08	-0.35		
Upper 95% confidence limit	0.33	-0.07		
Healthy				
Mean	-0.12	0.12	0.001	1.4%
Lower 95% confidence limit	-0.23	0.01		
Upper 95% confidence limit	0.00	0.22		
Age 24-65 years	Male	Female	<i>p-value*</i>	<i>R² value</i>
Energy Dense				
Mean	0.19	-0.18	<0.0001	3.6%
Lower 95% confidence limit	0.14	-0.22		
Upper 95% confidence limit	0.25	-0.14		
Healthy with Fish				
Mean	0.01	-0.01	0.35	0.0%
Lower 95% confidence limit	-0.04	-0.06		
Upper 95% confidence limit	0.06	0.03		
Energy Dense/Snacking				
Mean	0.08	-0.07	<0.0001	0.6%
Lower 95% confidence limit	0.03	-0.11		
Upper 95% confidence limit	0.13	-0.03		

Age >64 years	Male	Female	<i>p</i> -value*	<i>R</i> ² value
Healthy				
Mean	-0.17	0.12	<0.0001	2.1%
Lower 95% confidence limit	-0.24	0.05		
Upper 95% confidence limit	-0.10	0.19		
Energy Dense/Snacking				
Mean	-0.01	0.01	0.77	0.0%
Lower 95% confidence limit	-0.08	-0.06		
Upper 95% confidence limit	0.07	0.07		
Traditional				
Mean	0.22	-0.15	<0.0001	3.2%
Lower 95% confidence limit	0.14	-0.21		
Upper 95% confidence limit	0.30	-0.08		

Age 5-10 Years

Scottish Index of Multiple Deprivation							
Age 5-10 years	1 st (least deprived)	2 nd	3 rd	4 th	5 th (most deprived)	<i>p</i> -value overall	<i>R</i> ² value
						<i>p</i> -value trend*	
Pattern 1-Energy dense / Snacking							
Mean	-0.22	-0.10	-0.17	0.03	0.39	<0.0001	5.0%
Lower 95% confidence limit	-0.35	-0.25	-0.34	-0.09	0.21	<0.0001*	
Upper 95% confidence limit	-0.09	0.05	0.00	0.16	0.57		
Pattern 2-Healthy with Fish							
Mean	0.24	0.13	0.10	-0.10	-0.34	<0.0001	4.5%
Lower 95% confidence limit	0.12	-0.03	-0.07	-0.26	-0.48	<0.0001*	
Upper 95% confidence limit	0.37	0.29	0.27	0.07	-0.21		

National Statistics Socio-Economic Classification (NS-SECS)							
Age 5-10 years	Managerial and professional occupations	Intermediate occupations	Small employers and own account workers	Lower supervisory and technical occupations	Semi-routine occupations	<i>p</i> -value overall	<i>R</i> ² value
						<i>p</i> -value trend*	
Pattern 1-Energy Dense/Snacking							
Mean	-0.23	-0.02	-0.15	-0.01	0.25	<0.0001	4.3%
Lower 95% confidence limit	-0.32	-0.23	-0.40	-0.18	0.11	<0.0001*	
Upper 95% confidence limit	-0.13	0.10	0.10	0.16	0.39		
Pattern 2-Healthy with Fish							
Mean	0.27	0.13	0.12	-0.25	-0.24	<0.0001	5.7%
Lower 95% confidence limit	0.16	-0.10	-0.14	-0.47	-0.34	<0.0001*	
Upper 95% confidence limit	0.38	0.35	0.38	-0.02	-0.14		

Equivalised Income							
Age 5-10 years	1 st (highest quintile)	2 nd	3 rd	4 th	5 th (lowest quintile)	<i>p</i> -value overall	<i>R</i> ² value
						<i>p</i> -value trend*	
Pattern 1-Energy Dense/Snacking							
Mean	-0.36	-0.24	-0.09	-0.21	0.25	<0.0001	5.7%
Lower 95% confidence limit	-0.47	-0.36	-0.23	0.05	0.06	<0.0001*	
Upper 95% confidence limit	-0.25	-0.12	0.06	0.38	0.44		
Pattern 2-Healthy with Fish							
Mean	0.30	0.11	0.13	-0.19	-0.17	<0.0001	3.3%
Lower 95% confidence limit	0.13	-0.01	-0.04	-0.34	-0.34	<0.0001*	
Upper 95% confidence limit	0.47	0.23	0.30	-0.04	0.01		

Screen Viewing (hours/day)						
Age 5-10 years	0-1.5 hrs/day	2-2.5hrs/day	3+hrs/day	<i>p</i> -value overall	<i>p</i> -value trend*	Adjusted <i>R</i> ² value
Pattern 1-Energy Dense/Snacking						
Mean	-0.05	-0.20	0.26	0.01		1.6%
Lower 95% confidence limit	-0.15	-0.14	0.10	0.0004*		
Upper 95% confidence limit	0.05	0.10	0.42			
Pattern 2-Healthy with Fish						
Mean	0.20	-0.15	-0.40	<0.0001		6.1%
Lower 95% confidence limit	0.10	-0.27	-0.52	<0.0001*		
Upper 95% confidence limit	0.31	-0.02	0.28			

Physical Activity Level						
Age 5-10 years	High 60 mins on at least 5 days	Medium 30-59 mins on at least 5 days	Low less than medium level of activity	<i>p</i> -value overall	<i>p</i> -value trend*	<i>R</i> ² value
Pattern 1-Energy Dense/Snacking						
Mean	0.08	-0.13	-0.32	<0.00001		2.1%
Lower 95% confidence limit	0.00	-0.30	-0.46	<0.00001		
Upper 95% confidence limit	0.16	0.03	-0.19			
Pattern 2- Healthy with Fish						
Mean	0.03	-0.03	-0.12	0.22		0.3%
Lower 95% confidence limit	-0.06	-0.20	-0.27	0.10		
Upper 95% confidence limit	0.11	0.14	0.03			

Age 11-15 years

Scottish Index of Multiple Deprivation							
Age 11-15 years	1 st (least deprived)	2 nd	3 rd	4 th	5 th (most deprived)	<i>p</i> -value overall	<i>R</i> ² value
						<i>p</i> -value trend*	
Pattern 1-Energy Dense/Snacking							
Mean	-0.36	-0.12	-0.12	0.11	0.44	<0.0001	7.8%
Lower 95% confidence limit	-0.46	-0.28	-0.26	-0.02	0.18	<0.0001*	
Upper 95% confidence limit	-0.26	0.03	0.02	0.24	0.70		
Pattern 2-Healthy with Fish							
Mean	0.27	0.12	0.14	-0.13	-0.35	<0.0001	5.3%
Lower 95% confidence limit	0.13	-0.04	0.00	-0.26	-0.58	<0.0001*	
Upper 95% confidence limit	0.41	0.27	0.29	-0.01	-0.12		
Pattern 3-Healthy							
Mean	0.00	-0.01	0.12	-0.05	-0.04	0.71	0.4%
Lower 95% confidence limit	-0.12	-0.16	-0.07	-0.19	-0.22	0.62*	
Upper 95% confidence limit	0.12	0.14	0.32	0.09	0.14		

National Statistics Socio-Economic Classification (NS-SECS)							
Age 11-15 years	Managerial and professional occupations	Intermediate occupations	Small employers and own account workers	Lower supervisory and technical occupations	Semi-routine occupations	<i>p</i> -value overall	<i>R</i> ² value
						<i>p</i> -value trend*	
Pattern 1-Energy Dense/Snacking							
Mean	-0.30	0.12	-0.16	0.14	0.25	<0.001	6.2%
Lower 95% confidence limit	-0.41	-0.16	-0.32	-0.04	0.08	<0.0001*	
Upper 95% confidence limit	-0.20	0.41	0.00	0.31	0.43		
Pattern 2-Healthy with Fish							
Mean	0.17	0.02	0.20	-0.03	-0.24	<0.0001	3.6%
Lower 95% confidence limit	0.05	-0.21	-0.04	-0.22	-0.37	<0.0001*	
Upper 95% confidence limit	0.28	0.25	0.43	0.17	-0.11		
Pattern 2-Healthy							
Mean	0.04	0.04	-0.05	0.13	-0.06	0.45	0.4%
Lower 95% confidence limit	-0.08	-0.20	-0.21	-0.08	-0.19	0.36*	
Upper 95% confidence limit	0.15	0.27	0.10	0.34	0.06		

Equivalised Income							
Age 11-15 years	1 st (highest quintile)	2 nd	3 rd	4 th	5 th (lowest quintile)	<i>p</i> -value overall	<i>R</i> ² value
						<i>p</i> -value trend*	
Pattern 1-Energy Dense/Snacking							
Mean	-0.40	-0.45	-0.02	0.21	0.33	<0.0001	9.6%
Lower 95% confidence limit	-0.51	-0.57	-0.15	0.03	0.07	<0.0001*	
Upper 95% confidence limit	-0.29	-0.34	0.11	0.38	0.58		
Pattern 2-Healthy with Fish							

Mean	0.29	0.06	-0.06	0.06	-0.24	0.0003	2.9%
Lower 95% confidence limit	0.12	-0.09	-0.18	-0.15	-0.40	0.0002*	
Upper 95% confidence limit	0.46	0.20	0.07	0.27	-0.07		
Pattern 3-Healthy							
Mean	0.07	0.14	-0.08	0.06	-0.11	0.12	1.1%
Lower 95% confidence limit	-0.09	-0.03	-0.23	-0.10	-0.24	0.06*	
Upper 95% confidence limit	0.22	0.31	0.07	0.22	0.03		

Screen Viewing						
Age 11-15 years	0-1.5 hrs/day	2-2.5hrs/day	3+hrs/day	<i>p-value overall</i>	<i>R² value</i>	
				<i>p-value trend*</i>		
Pattern 1-Energy Dense/Snacking						
Mean	-0.09	-0.02	0.06	0.19	0.5%	
Lower 95% confidence limit	-0.21	-0.15	-0.07	0.18*		
Upper 95% confidence limit	0.02	0.11	0.20			
Pattern 2-Healthy with Fish						
Mean	0.10	0.15	-0.20	<0.0001	2.6%	
Lower 95% confidence limit	-0.02	-0.02	-0.32	0.0001*		
Upper 95% confidence limit	0.23	0.32	-0.09			
Pattern 3-Healthy						
Mean (Healthy)	0.05	-0.05	0.00	0.51	0.6%	
Lower 95% confidence limit	-0.06	-0.06	-0.13	0.64*		
Upper 95% confidence limit	0.16	0.07	0.12			

Physical Activity						
Age 11-15 years	High 60 mins on at least 5 days	Medium 30-59 mins on at least 5 days	Low Less than medium	<i>p-value overall</i>	<i>R² value</i>	
				<i>p-value trend*</i>		
Pattern 1-Energy Dense/Snacking						
Mean	0.07	-0.14	-0.05	0.07	0.6%	
Lower 95% confidence limit	-0.06	-0.27	-0.17	0.12*		
Upper 95% confidence limit	0.19	0.01	0.07			
Pattern 2-Healthy with Fish						
Mean	0.06	0.07	-0.19	0.001	1.1%	
Lower 95% confidence limit	-0.05	-0.07	-0.29	0.003*		
Upper 95% confidence limit	0.17	0.21	-0.08			
Pattern 3-Healthy						
Mean	0.08	-0.02	-0.13	0.01	0.8%	
Lower 95% confidence limit	-0.02	-0.13	-0.23	0.003*		
Upper 95% confidence limit	0.18	0.10	-0.02			

Age 16-24 Years

Scottish Index of Multiple Deprivation							
Age 16-24 years	1 st (least deprived)	2 nd	3 rd	4 th	5 th (most deprived)	<i>p</i> -value overall	<i>R</i> ² value
						<i>p</i> -value trend*	
Pattern 1-Healthy							
Mean	0.16	0.10	0.15	-0.18	-0.18	0.01	2.5%
Lower 95% confidence limit	-0.09	-0.17	-0.05	-0.35	-0.35	0.004*	
Upper 95% confidence limit	0.41	0.36	0.36	-0.01	0.00		
Pattern 2-Energy dense/Snacking							
Mean	-0.17	-0.01	0.05	0.05	0.04	0.57	0.7%
Lower 95% confidence limit	-0.39	-0.22	-0.25	-0.14	-0.14	0.14*	
Upper 95% confidence limit	0.05	0.19	0.35	0.25	0.22		
Pattern 3-Healthy							
Mean	0.29	0.05	0.20	-0.10	-0.35	<0.0001	5.4%
Lower 95% confidence limit	0.02	-0.12	0.00	-0.30	-0.50	<0.0001*	
Upper 95% confidence limit	0.55	0.23	0.40	0.09	-0.20		

National Statistics Socio-Economic Classification (NS-SECS)							
Age 16-24 years	Managerial and professional	Intermediate occupations	Small employers and own account workers	Lower supervisory and technical occupations	Semi-routine occupations	<i>p</i> -value overall	<i>R</i> ² value
						<i>p</i> -value trend*	
Pattern 1-Healthy							
Mean	0.21	0.09	0.19	-0.13	-0.21	0.0003	3.7%
Lower 95% confidence limit	0.04	-0.21	-0.05	-0.37	-0.35	<0.0001*	
Upper 95% confidence limit	0.38	0.39	0.43	0.11	-0.06		
Pattern 2-Energy dense/Snacking							
Mean	-0.05	-0.17	-0.07	0.43	-0.01	0.27	2.4%
Lower 95% confidence limit	-0.22	-0.45	-0.30	-0.03	-0.15	0.23*	
Upper 95% confidence limit	0.12	0.11	0.15	0.89	0.13		
Pattern 3-Healthy							
Mean	0.27	-0.09	0.09	0.05	-0.22	<0.0001	4.3%
Lower 95% confidence limit	0.12	-0.48	-0.22	-0.16	-0.36	<0.0001*	
Upper 95% confidence limit	0.42	0.31	0.40	0.25	0.08		

Equivalent Income							
Age 16-24 years	1 st (highest quintile)	2 nd	3 rd	4 th	5 th (lowest quintile)	<i>p</i> -value overall	<i>R</i> ² value
						<i>p</i> -value trend*	
Pattern 1-Healthy							
Mean	0.31	0.04	-0.17	-0.19	-0.01	0.01	2.8%
Lower 95% confidence limit	0.04	-0.18	-0.34	-0.35	-0.25	0.07*	
Upper 95% confidence limit	0.58	0.27	0.01	-0.03	0.23		

Pattern 2-Energy dense/Snacking							
Mean	-0.01	-0.03	-0.10	0.09	0.23	0.23	1.3%
Lower 95% confidence limit	-0.30	-0.23	-0.25	-0.29	0.00	0.10*	
Upper 95% confidence limit	0.28	0.17	0.04	0.46	0.46		
Pattern 3-Healthy							
Mean	0.47	0.10	-0.06	-0.12	-0.31	<0.0001	5.7%
Lower 95% confidence limit	0.28	-0.12	-0.25	-0.33	-0.53	<0.0001*	
Upper 95% confidence limit	0.67	0.32	0.13	0.10	-0.08		

Screen Viewing						
Age 16-24years	0-2 hrs/day	2.5-3.5 hrs/day	4+ hrs/day	<i>p-value overall</i>	<i>R² value</i>	
Pattern 1-Healthy						
Mean	0.15	0.03	-0.24	0.001	2.7%	
Lower 95% confidence limit	0.00	-0.12	-0.39	0.0004*		
Upper 95% confidence limit	0.31	0.19	-0.09			
Pattern 2-Energy dense/Snacking						
Mean	-0.14	-0.04	0.25	0.004	2.7%	
Lower 95% confidence limit	-0.28	-0.21	0.06	0.001*		
Upper 95% confidence limit	0.01	0.12	0.43			
Pattern 3-Healthy						
Mean	0.19	0.03	-0.22	0.001	3.0%	
Lower 95% confidence limit	0.06	-0.11	-0.39	0.0008*		
Upper 95% confidence limit	0.32	0.18	-0.06			

Physical Activity						
Age 16-24 years	High	Medium	Low	<i>p-value overall</i>	<i>R² value</i>	
				<i>p-value trend*</i>		
Pattern 1-Healthy						
Mean	0.21	-0.08	-0.34	<0.0001	4.9%	
Lower 95% confidence limit	0.06	-0.23	-0.45	<0.0001*		
Upper 95% confidence limit	0.36	0.07	-0.23			
Pattern 2-Energy dense/Snacking						
Mean	-0.02	-0.04	0.09	0.70	0.2%	
Lower 95% confidence limit	-0.13	-0.20	-0.18	0.47*		
Upper 95% confidence limit	0.10	0.12	0.35			
Pattern 3-Healthy						
Mean	0.07	0.03	-0.19	0.04	1.1%	
Lower 95% confidence limit	-0.03	-0.13	-0.36	0.02*		
Upper 95% confidence limit	0.18	0.18	-0.01			
<i>Low = moderate or vigorous <30 min per week</i> <i>Medium = moderate or vigorous ≥ 30 min on 1-4 days</i> <i>High = moderate or vigorous on at least 5 days per week</i>						

Smoking						
Age 16 -24 years	Non Smoker	<20 /day	>=20/day	<i>p-value overall</i>	<i>R</i> ² value	
				<i>p-value trend*</i>		
Pattern 1-Healthy						
Mean	0.02	0.03	-0.42	0.01	0.7%	
Lower 95% confidence limit	-0.09	-0.14	-0.68	0.21*		
Upper 95% confidence limit	0.12	0.20	-0.15			
Pattern 2-Energy dense/Snacking						
Mean	0.01	-0.05	-0.01	0.85	0.0%	
Lower 95% confidence limit	-0.12	-0.23	-0.46	0.65*		
Upper 95% confidence limit	0.13	0.12	0.44			
Pattern 3-Healthy						
Mean	0.15	-0.33	-0.62	<0.0001	5.8%	
Lower 95% confidence limit	0.05	-0.47	-0.96	<0.0001*		
Upper 95% confidence limit	0.25	-0.19	-0.27			

Age 25-64 Years

Scottish Index of Multiple Deprivation							
Age 25 -64years	1 st	2 nd	3 rd	4 th	5 th	<i>p-value overall</i>	<i>R</i> ² value
	(least deprived)				(most deprived)	<i>p-value trend*</i>	
Pattern 1 Energy dense							
Mean	-0.24	-0.16	0.00	0.12	0.36	<0.0001	4.5%
Lower 95% confidence limit	-0.30	-0.23	-0.08	0.04	0.28	<0.0001*	
Upper 95% confidence limit	-0.18	-0.09	0.08	0.21	0.45		
Pattern 2 Healthy with Fish							
Mean	0.21	0.10	0.01	-0.11	-0.28	<0.0001	2.8%
Lower 95% confidence limit	0.15	0.02	-0.08	-0.20	-0.36	<0.0001*	
Upper 95% confidence limit	0.28	0.18	0.09	-0.02	-0.20		
Pattern 3 -Energy dense/snacking							
Mean	-0.01	0.04	-0.01	-0.01	-0.02	0.86	0.1%
Lower 95% confidence limit	-0.07	-0.04	-0.10	-0.08	-0.08	0.60*	
Upper 95% confidence limit	0.06	0.12	0.07	0.06	0.06		

National Statistics Socio-Economic Classification (NS-SECS)							
Age 25-64 years	Managerial and professional	Intermediate occupations	Small employers and own account workers	Lower supervisory and technical occupations	Semi-routine occupations	<i>p-value overall</i>	<i>R</i> ² value
						<i>p-value trend*</i>	
Pattern 1-Energy Dense							
Mean	-0.24	-0.06	0.00	0.12	0.27	<0.0001	4.8%
Lower 95% confidence limit	-0.29	-0.17	-0.10	0.02	0.20	<0.0001*	
Upper 95% confidence limit	-0.20	0.05	0.11	0.21	0.34		

Pattern 2 –Healthy with Fish							
Mean	0.19	0.04	0.12	-0.12	-0.25	<0.0001	3.6%
Lower 95% confidence limit	0.13	-0.09	0.01	-0.23	-0.30	<0.0001*	
Upper 95% confidence limit	0.25	0.18	0.24	-0.01	-0.19		
Pattern 3-Energy dense/Snacking							
Mean	-0.10	-0.05	0.04	0.08	0.10	<0.0001	0.8%
Lower 95% confidence limit	-0.14	-0.16	-0.07	-0.02	0.03	<0.0001*	
Upper 95% confidence limit	-0.05	0.05	0.15	0.17	0.17		

Equivalised Income							
Age 25-64 years	1 st (highest quintile)	2 nd	3 rd	4 th	5 th (lowest quintile)	<i>p-value overall</i>	<i>R² value</i>
						<i>p-value trend*</i>	
Pattern 1-Energy Dense							
Mean	-0.28	-0.10	0.09	0.23	0.40	<0.0001	5.9%
Lower 95% confidence limit	-0.34	-0.18	0.00	0.13	0.29	<0.0001*	
Upper 95% confidence limit	-0.23	-0.02	0.17	0.33	0.50		
Pattern 2 –Healthy with Fish							
Mean	0.18	0.04	-0.07	-0.14	-0.24	<0.0001	2.3%
Lower 95% confidence limit	0.11	-0.04	-0.16	-0.23	-0.33	<0.0001*	
Upper 95% confidence limit	0.26	0.12	0.03	-0.05	-0.16		
Pattern 3 -Energy Dense/snacking							
Mean	-0.11	0.00	0.01	0.08	0.02	0.003	0.45%
Lower 95% confidence limit	-0.17	-0.07	-0.07	-0.01	-0.09	0.002*	
Upper 95% confidence limit	-0.06	0.07	0.10	0.16	0.12		

Education							
Age 25-64 years	Degree or professional qualification or higher	HNC/HND or equivalent	H grade/A level or equivalent	O Grade or equivalent	None of these	<i>p-value overall</i>	<i>R² value</i>
						<i>p-value trend*</i>	
Pattern 1-Energy Dense							
Mean	-0.31	-0.09	-0.01	0.09	0.28	<0.0001	5.1%
Lower 95% confidence limit	-0.36	-0.19	-0.08	0.02	0.21	<0.0001*	
Upper 95% confidence limit	-0.26	0.02	0.07	0.17	0.34		
Pattern 2 –Healthy with Fish							
Mean	0.38	0.03	-0.01	-0.27	-0.20	<0.0001	6.4%
Lower 95% confidence limit	0.31	-0.07	-0.10	-0.34	-0.25	<0.0001*	
Upper 95% confidence limit	0.44	0.13	0.08	-0.20	-0.15		
Pattern 3-Energy Dense/Snacking							
Mean	-0.12	0.06	0.03	0.06	0.04	<0.0001	0.6%
Lower 95% confidence limit	-0.17	-0.04	-0.04	-0.01	-0.02	0.0001*	
Upper 95% confidence limit	-0.07	0.17	0.10	0.13	0.11		

Screen Viewing					
Age 25-64years	0-2 hrs /day	2.5-3.5 hrs/day	4+ hrs/day	<i>p-value overall</i>	<i>R² value</i>
				<i>p-value trend*</i>	
Pattern 1-Energy Dense					
Mean	-0.12	-0.03	0.31	<0.0001	2.9%
Lower 95% confidence limit	-0.18	-0.09	0.23	<0.0001*	
Upper 95% confidence limit	-0.07	0.02	0.39		
Pattern 2 –Healthy with Fish					
Mean	0.18	-0.10	-0.24	<0.0001	3.1%
Lower 95% confidence limit	0.12	-0.16	-0.30	<0.0001*	
Upper 95% confidence limit	0.25	-0.05	-0.17		
Pattern 3-Energy Dense/Snacking					
Mean	-0.05	0.03	0.11	0.001	0.4%
Lower 95% confidence limit	-0.10	-0.03	0.03	0.001*	
Upper 95% confidence limit	0.00	0.08	0.19		

Physical Activity					
Age 25-64 years	High	Medium	Low	<i>p-value overall</i>	<i>R² value</i>
				<i>p-value trend*</i>	
Pattern 1-Energy Dense					
Mean	-0.04	-0.07	0.15	<0.0001	0.7%
Lower 95% confidence limit	-0.09	-0.12	0.08	<0.0001*	
Upper 95% confidence limit	0.02	-0.01	0.21		
Pattern 2 –Healthy with Fish					
Mean	0.13	-0.02	-0.17	<0.0001	1.4%
Lower 95% confidence limit	0.06	-0.08	-0.22	<0.0001*	
Upper 95% confidence limit	0.20	0.03	-0.11		
Pattern 3-Energy Dense/Snacking					
Mean	0.00	0.02	-0.02	0.52	0.0%
Lower 95% confidence limit	-0.05	-0.04	-0.08	0.54*	
Upper 95% confidence limit	0.05	0.07	0.04		
<i>#Low = moderate or vigorous <30 min per week</i> <i>Medium = moderate or vigorous ≥ 30 min on 1-4 days</i> <i>High = moderate or vigorous on at least 5 days per week</i>					

Smoking					
Age 25-64 years	Non Smoker	<20 /day	≥20/day	<i>p-value overall</i>	<i>Adjusted R² value</i>
				<i>p-value trend*</i>	
Pattern 1-Energy Dense					
Mean	-0.21	0.26	0.69	<0.0001	10.0%
Lower 95% confidence limit	-0.24	0.19	0.58	<0.0001*	
Upper 95% confidence limit	-0.17	0.32	0.79		
Pattern 2 –Healthy with Fish					

Mean	0.14	-0.28	-0.35	<i><0.0001</i>	4.2%
Lower 95% confidence limit	0.09	-0.34	-0.44	<i><0.0001*</i>	
Upper 95% confidence limit	0.19	-0.21	-0.26		
Pattern 3-Energy Dense/Snacking					
Mean	0.03	-0.05	-0.11	0.01	0.3%
Lower 95% confidence limit	-0.01	-0.13	-0.21	0.003*	
Upper 95% confidence limit	0.08	0.03	0.00		

Age >64 years

Scottish Index of Multiple Deprivation							
Age >64 years	1 st (least deprived)	2 nd	3 rd	4 th	5 th (most deprived)	<i>p-value overall</i>	<i>R² value</i>
						<i>p-value trend*</i>	
Pattern 1- Healthy							
Mean	0.38	0.06	0.06	-0.18	-0.29	<i><0.0001</i>	5.1%
Lower 95% confidence limit	0.26	-0.05	-0.05	-0.29	-0.42	<i><0.0001*</i>	
Upper 95% confidence limit	0.49	0.17	0.17	-0.07	-0.15		
Pattern 2-Energy Dense/Snacking							
Mean	0.02	0.01	0.07	0.04	-0.13	0.11	0.5%
Lower 95% confidence limit	-0.09	-0.11	-0.05	-0.08	-0.25	0.14*	
Upper 95% confidence limit	0.14	0.12	0.18	0.15	-0.02		
Pattern 3-Traditional							
Mean	0.06	0.12	-0.03	0.07	-0.21	0.01	1.3%
Lower 95% confidence limit	-0.05	0.00	-0.13	-0.09	-0.33	0.004*	
Upper 95% confidence limit	0.16	0.24	0.06	0.24	-0.08		

National Statistics Socio-Economic Classification (NS-SECS)							
Age >64 years	Managerial and professional	Intermediate occupations	Small employers and own account workers	Lower supervisory and technical occupations	Semi-routine occupations	<i>p-value overall</i>	<i>R² value</i>
						<i>p-value trend*</i>	
Pattern 1- Healthy							
Mean	0.20	0.36	0.00	-0.04	-0.21	<i><0.0001</i>	4.0%
Lower 95% confidence limit	0.10	0.20	-0.15	-0.18	-0.30	<i><0.0001*</i>	
Upper 95% confidence limit	0.30	0.52	0.15	0.10	-0.11		
Pattern 2-Energy Dense/Snacking							
Mean	-0.04	0.06	0.02	0.07	-0.04	0.60	0.2%
Lower 95% confidence limit	-0.15	-0.10	-0.17	-0.07	-0.12	0.92*	
Upper 95% confidence limit	0.07	0.23	0.21	0.21	0.03		
Pattern 3-Traditional							
Mean	0.19	-0.01	0.30	-0.02	-0.20	<i><0.0001</i>	3.6%
Lower 95% confidence limit	0.09	-0.21	0.09	-0.17	-0.28	<i><0.0001*</i>	
Upper 95% confidence limit	0.29	0.18	0.52	0.12	-0.12		

Equivalised Income							
Age >64 years	1 st (highest quintile)	2 nd	3 rd	4 th	5 th (lowest quintile)	<i>p-value overall</i> <i>p-value trend*</i>	<i>R² value</i>
Pattern 1- Healthy							
Mean	0.41	0.29	0.01	-0.07	-0.20	<0.0001	3.2%
Lower 95% confidence limit	0.21	0.11	-0.11	-0.17	-0.35	<0.0001*	
Upper 95% confidence limit	0.60	0.46	0.14	0.03	-0.06		
Pattern 2-Energy Dense/Snacking							
Mean	-0.15	-0.01	-0.01	0.02	-0.11	0.41	0.3%
Lower 95% confidence limit	-0.34	-0.18	-0.15	-0.07	-0.25	0.80*	
Upper 95% confidence limit	0.05	0.15	0.12	0.11	0.04		
Pattern 3-Traditional							
Mean	0.26	0.25	-0.04	-0.05	-0.11	<0.0001	1.5%
Lower 95% confidence limit	0.10	0.06	-0.17	-0.15	-0.29	0.0003*	
Upper 95% confidence limit	0.41	0.43	0.09	0.04	0.06		

Education							
Age >64 years	Degree or Professional qualification or higher	HNC/HND or equivalent	H grade/A level or equivalent	O Grade or equivalent	None of these	<i>p-value overall</i> <i>p-value trend*</i>	<i>R² value</i>
Pattern 1- Healthy							
Mean	0.39	0.27	0.20	0.26	-0.11	<0.0001	3.7%
Lower 95% confidence limit	0.27	-0.12	0.03	0.04	-0.18	<0.0001*	
Upper 95% confidence limit	0.51	0.65	0.37	0.47	-0.05		
Pattern 2-Energy Dense/Snacking							
Mean	-0.17	0.34	0.03	-0.22	0.04	0.002	0.9%
Lower 95% confidence limit	-0.29	-0.69	-0.15	-0.40	-0.02	0.02*	
Upper 95% confidence limit	-0.05	1.37	0.21	-0.03	0.10		
Pattern 3-Traditional							
Mean	0.18	0.50	0.28	0.11	-0.08	<0.0001	1.9%
Lower 95% confidence limit	0.04	0.22	0.10	-0.05	-0.14	<0.0001*	
Upper 95% confidence limit	0.32	0.78	0.46	0.26	-0.01		

Screen Viewing					
Age >64 years	0-2 hrs /day	2.5-3.5 hrs/day	4+ hrs/day	<i>p-value overall</i> <i>p-value trend*</i>	<i>Adjusted R² value</i>
Pattern 1- Healthy					
Mean	0.19	0.01	-0.15	<0.0001	1.8%
Lower 95% confidence limit	0.10	-0.10	-0.24	<0.0001*	
Upper 95% confidence limit	0.28	0.09	-0.06		
Pattern 2-Energy Dense/Snacking					
Mean	0.03	-0.02	0.02	0.72	0.0%

Lower 95% confidence limit	-0.07	-0.12	-0.06	0.49*	
Upper 95% confidence limit	0.13	0.07	0.11		
Pattern 3-Traditional					
Mean	0.06	0.08	-0.12	0.002	0.8%
Lower 95% confidence limit	-0.05	-0.02	-0.20	0.008*	
Upper 95% confidence limit	0.16	0.18	-0.04		
* screen viewing categories for children: lowest tertile 0-1.5 hours, middle tertile 2-2.25 hours, highest tertile ≥ 3 hours * screen viewing categories for adults: lowest tertile 0-2 hours, middle tertile 2.5-3.5 hours, highest tertile ≥ 4 hour					

Physical Activity						
Age >64 years	High	Medium	Low	<i>p-value overall</i>	<i>p-value trend*</i>	R ² value
Pattern 1- Healthy						
Mean	0.22	0.07	-0.09	<0.0001		1.4%
Lower 95% confidence limit	0.10	-0.03	-0.16	<0.0001*		
Upper 95% confidence limit	0.35	0.17	-0.03			
Pattern 2-Energy Dense/Snacking						
Mean	0.01	0.01	0.00	0.99		<0.0001
Lower 95% confidence limit	-0.14	-0.08	-0.06	0.89*		
Upper 95% confidence limit	0.16	0.10	0.06			
Pattern 3-Traditional						
Mean	0.18	0.17	-0.11	<0.0001		2.0%
Lower 95% confidence limit	0.05	0.08	-0.19	<0.0001*		
Upper 95% confidence limit	0.30	0.27	-0.04			
#Low = moderate or vigorous <30 min per week Medium = moderate or vigorous ≥ 30 min on 1-4 days High = moderate or vigorous on at least 5 days per week						

Smoking						
Age >64 years	Non Smoker	<20 /day	≥20/day	<i>p-value overall</i>	<i>p-value trend*</i>	R ² value
Pattern 1- Healthy						
Mean	0.12	-0.46	-0.71	<0.0001		6.7%
Lower 95% confidence limit	0.06	-0.60	-0.88	<0.0001*		
Upper 95% confidence limit	0.18	-0.31	-0.55			
Pattern 2-Energy Dense/Snacking						
Mean	0.02	-0.11	-0.13	0.09		0.3%
Lower 95% confidence limit	-0.04	-0.24	-0.34	0.05*		
Upper 95% confidence limit	0.08	0.03	0.08			
Pattern 3-Traditional						
Mean	0.03	-0.16	-0.13	0.01		0.5%
Lower 95% confidence limit	-0.04	-0.28	-0.29	0.007*		
Upper 95% confidence limit	0.10	-0.03	0.02			

Appendix 5

SHS Dietary patterns relationship to health outcomes

OBESITY					
Principal Component Analysis					
	Prevalence %	(n)	Unadjusted odds ratio (95% CI's)	Adjusted odds ratio for socio-economic status (95% CI's)	Adjusted odds ratio (95% CI's)
				Adjusted for SIMD, equivalised income	Adjusted for SIMD, equivalised income, physical activity
Age 5-10					
Pattern 1 Energy Dense/Snacking					
	19.3%	204/1058			
Quintile 1 of Factor Score	22.0%	44/200	1.00	1.00	1.00
Quintile 2	19.7%	41/208	0.93 (0.49, 1.76)	1.01 (0.50, 2.01)	0.99 (0.50, 1.99)
Quintile 3	18.2%	40/220	0.89 (0.48, 1.63)	0.97 (0.50, 1.89)	0.96 (0.49, 1.86)
Quintile 4	16.4%	36/219	1.05 (0.56, 1.96)	1.11 (0.57, 2.13)	1.09 (0.56, 2.10)
Quintile 5	20.4%	40/211	1.09 (0.60, 1.98)	1.17 (0.61, 2.27)	1.13 (0.58, 2.19)
p value overall			0.97	0.98	0.99
p value linear trend					0.57
Age 5-10					
Pattern 2 Healthy with Fish					
	19.3%	204/1058			
Quintile 1 of Factor Score	19.6%	43/220	1.00	1.00	1.00
Quintile 2	22.9%	47/205	1.14 (0.67, 1.93)	1.16 (0.64, 2.10)	1.16 (0.64, 2.10)
Quintile 3	17.6%	37/210	0.82 (0.45, 1.47)	0.81 (0.43, 1.53)	0.77 (0.41, 1.45)
Quintile 4	20.7%	44/213	0.87 (0.47, 1.64)	0.90 (0.45, 1.80)	0.89 (0.44, 1.77)
Quintile 5	15.7%	33/210	0.78 (0.40, 1.53)	0.80 (0.38, 1.71)	0.79 (0.37, 1.69)
p value overall			0.71	0.75	0.66
p value linear trend					0.44
Age 11-15					
Pattern 1 Energy Dense/Snacking					
	19.3%	178/923			
Quintile 1 of Factor Score	20.4%	38/186	1.00	1.00	1.00
Quintile 2	22.0%	40/182	0.81 (0.46, 1.43)	0.93 (0.50, 1.73)	0.92 (0.49, 1.71)
Quintile 3	17.4%	33/190	0.56 (0.30, 1.05)	0.60 (0.31, 1.16)	0.60 (0.30, 1.18)
Quintile 4	21.7%	40/184	0.93 (0.53, 1.64)	0.96 (0.53, 1.73)	0.96 (0.52, 1.75)
Quintile 5	14.9%	27/181	0.47 (0.24, 0.93)	0.46 (0.22, 0.96)	0.46 (0.22, 0.98)
p value overall			0.17	0.21	0.23
p value linear trend					0.06
Age 11-15					
Pattern 2 Healthy with Fish					
	19.3%	178/923			
Quintile 1 of Factor Score	21.0%	38/181	1.00	1.00	1.00
Quintile 2	18.7%	34/182	0.51 (0.28, 0.95)	0.42 (0.21, 0.83)	0.44 (0.22, 0.88)
Quintile 3	21.1%	39/185	0.75 (0.40, 1.38)	0.80 (0.41, 1.56)	0.84 (0.42, 1.66)
Quintile 4	18.7%	36/193	0.79 (0.42, 1.47)	0.82 (0.41, 1.66)	0.83 (0.41, 1.68)
Quintile 5	17.0%	31/182	0.47 (0.25, 0.89)	0.55 (0.27, 1.14)	0.57 (0.27, 1.18)
p value overall			0.10	0.12	0.16
p value linear trend					0.46
Age 11-15					
Pattern 3 Healthy					
	19.3%	178/923			
Quintile 1 of Factor Score	11.7%	22/188	1.00	1.00	1.00
Quintile 2	18.6%	34/183	1.96 (0.95, 4.03)	1.76 (0.82, 3.82)	1.86 (0.85, 4.06)
Quintile 3	24.3%	45/185	3.47 (1.63, 7.40)	3.41 (1.51, 7.71)	3.42 (1.50, 7.77)
Quintile 4	18.6%	35/188	1.98 (0.94, 4.17)	1.88 (0.84, 4.22)	1.88 (0.83, 4.23)
Quintile 5	23.5%	42/179	3.50 (1.69, 7.25)	3.33 (1.54, 7.18)	3.30 (1.52, 7.17)
p value overall			0.01	0.02	0.02

p value linear trend				0.008		
Age 16-24						
Pattern 1 Healthy	11.6%	72/622				
Quintile 1 of Factor Score	8.2%	10/122	1.00	1.00	1.00	
Quintile 2	10.8%	13/120	2.37 (0.56, 10.04)	2.59 (0.52, 12.74)	3.48 (0.57, 21.20)	
Quintile 3	15.1%	19/126	3.92 (1.02, 15.05)	2.84 (0.62, 12.98)	3.55 (0.68, 18.51)	
Quintile 4	7.3%	9/123	0.58 (0.11, 2.97)	0.73 (0.12, 4.43)	0.90 (0.13, 5.97)	
Quintile 5	16.0%	22/131	3.10 (0.79, 12.08)	3.18 (0.72, 13.93)	4.25 (0.84, 21.57)	
p value overall			0.03	0.15	0.14	
p value linear trend						0.49
Age 16-24						
Pattern 2 Energy Dense/Snacking	11.6%	72/622				
Quintile 1 of Factor Score	13.6%	16/118	1.00	1.00	1.00	
Quintile 2	14.2%	18/127	0.92 (0.30, 2.81)	0.90 (0.27, 3.01)	0.97 (0.29, 3.30)	
Quintile 3	11.9%	16/134	1.37 (0.47, 4.01)	0.96 (0.30, 3.02)	1.06 (0.31, 3.54)	
Quintile 4	9.2%	11/119	0.35 (0.11, 1.08)	0.22 (0.05, 0.92)	0.18 (0.04, 0.78)	
Quintile 5	8.9%	11/124	0.57 (0.22, 1.48)	0.40 (0.13, 1.23)	0.33 (0.09, 1.16)	
p value overall			0.24	0.16	0.08	
p value linear trend						0.02
Age 16-24						
Pattern 3 Healthy	11.6%	72/622				
Quintile 1 of Factor Score	10.4%	14/135	1.00	1.00	1.00	
Quintile 2	11.2%	14/125	0.85 (0.28, 2.57)	0.52 (0.16, 1.74)	0.48 (0.13, 1.78)	
Quintile 3	11.5%	14/122	0.95 (0.34, 2.67)	0.74 (0.21, 2.58)	0.66 (0.18, 2.41)	
Quintile 4	13.4%	17/127	0.96 (0.35, 2.66)	0.84 (0.25, 2.86)	0.79 (0.23, 2.64)	
Quintile 5	11.5%	13/113	1.42 (0.49, 4.17)	1.20 (0.40, 3.59)	1.19 (0.42, 3.42)	
p value overall			0.94	0.80	0.71	
p value linear trend						0.57
Age 25-64						
Pattern 1 Energy Dense	25.9%	207/4654				
Quintile 1 of Factor Score	25.3%	233/920	1.00	1.00	1.00	
Quintile 2	26.8%	247/921	1.08 (0.84, 1.39)	1.00 (0.76, 1.30)	1.03 (0.79, 1.35)	
Quintile 3	27.4%	259/944	1.08 (0.82, 1.41)	1.09 (0.84, 1.42)	1.15 (0.88, 1.51)	
Quintile 4	25.5%	241/944	1.09 (0.83, 1.43)	0.94 (0.70, 1.26)	1.09 (0.80, 1.47)	
Quintile 5	24.5%	227/925	1.08 (0.82, 1.41)	0.85 (0.63, 1.16)	1.07 (0.78, 1.47)	
p value overall			0.97	0.65	0.89	
p value linear trend						0.31
Age 25-64						
Pattern 2 Healthy with Fish	25.9%	207/4654				
Quintile 1 of Factor Score	28.5%	262/920	1.00	1.00	1.00	
Quintile 2	28.0%	261/932	1.05 (0.79, 1.40)	1.13 (0.84, 1.53)	1.07 (0.79, 1.44)	
Quintile 3	25.5%	235/923	0.79 (0.60, 1.06)	0.88 (0.64, 1.20)	0.81 (0.59, 1.11)	
Quintile 4	24.7%	229/929	0.93 (0.69, 1.24)	1.07 (0.77, 1.48)	0.97 (0.70, 1.36)	
Quintile 5	23.2%	220/950	0.76 (0.57, 1.00)	1.01 (0.75, 1.37)	0.99 (0.72, 1.35)	
p value overall			0.07	0.44	0.43	
p value linear trend						0.93
Age 25-64						
Pattern 3 Energy Dense/Snacking	25.9%	207/4654				
Quintile 1 of Factor Score	27.3%	247/906	1.00	1.00	1.00	
Quintile 2	25.2%	232/922	0.87 (0.68, 1.13)	0.96 (0.73, 1.26)	0.93 (0.70, 1.23)	
Quintile 3	26.0%	241/928	1.02 (0.78, 1.34)	1.03 (0.77, 1.38)	0.99 (0.73, 1.35)	
Quintile 4	25.3%	238/941	0.98 (0.73, 1.30)	1.01 (0.74, 1.38)	0.95 (0.68, 1.31)	
Quintile 5	26.0%	249/957	1.00 (0.76, 1.30)	1.04 (0.78, 1.38)	0.96 (0.71, 1.29)	
p value overall			0.74	0.98	0.98	
p value linear trend						0.70

Age >64	30.1%	428/1423			
Pattern 1 Healthy					
Quintile 1 of Factor Score	25.7%	68/265	1.00	1.00	1.00
Quintile 2	32.2%	91/283	1.50 (0.93, 2.40)	1.66 (1.00, 2.74)	1.63 (0.96, 2.75)
Quintile 3	26.2%	75/286	1.06 (0.63, 1.78)	1.26 (0.72, 2.21)	1.18 (0.65, 2.17)
Quintile 4	34.8%	102/293	1.42 (0.90, 2.25)	1.82 (1.09, 3.03)	1.74 (1.00, 3.01)
Quintile 5	31.1%	92/296	1.32 (0.80, 2.19)	1.64 (0.95, 2.81)	1.55 (0.86, 2.80)
p value overall			0.28	0.11	0.16
p value linear trend					0.10
Age >64	30.1%	428/1423			
Pattern 2 Energy Dense/Snacking					
Quintile 1 of Factor Score	30.6%	89/291	1.00	1.00	1.00
Quintile 2	35.0%	102/300	1.12 (0.71, 1.76)	1.21 (0.74, 1.96)	1.23 (0.75, 2.02)
Quintile 3	31.4%	82/261	1.06 (0.66, 1.71)	1.12 (0.67, 1.87)	1.12 (0.66, 1.88)
Quintile 4	27.6%	81/294	0.91 (0.59, 1.39)	0.86 (0.53, 1.41)	0.81 (0.50, 1.33)
Quintile 5	25.6%	71/277	0.69 (0.43, 1.12)	0.78 (0.45, 1.34)	0.77 (0.44, 1.33)
p value overall			0.32	0.42	0.30
p value linear trend					0.16
Age >64	30.1%	428/1423			
Pattern 3 Traditional					
Quintile 1 of Factor Score	31.8%	80/252	1.00	1.00	1.00
Quintile 2	33.7%	92/273	1.01 (0.66, 1.56)	1.00 (0.63, 1.59)	1.01 (0.63, 1.63)
Quintile 3	29.9%	88/294	0.94 (0.62, 1.40)	0.90 (0.58, 1.40)	0.96 (0.62, 1.48)
Quintile 4	28.5%	82/288	0.83 (0.54, 1.27)	0.74 (0.46, 1.19)	0.76 (0.47, 1.23)
Quintile 5	27.2%	86/316	0.91 (0.58, 1.44)	0.89 (0.55, 1.46)	0.90 (0.55, 1.48)
p value overall			0.89	0.72	0.77
p value linear trend					0.36

Diabetes					
Principal Component Analysis					
	Prevalence		Unadjusted odds ratio (95% CI's)	Adjusted odds ratio for socio-economic status (95% CI's)	Adjusted odds ratio (95% CI's)
	%	(n)		Adjusted for SIMD, equivalised income	Adjusted for SIMD, equivalised income, physical activity
Age 25-64	2.7%	147/5473			
Pattern 1 Energy Dense					
Quintile 1 of Factor Score	3.6%	39/1095	1.00	1.00	1.00
Quintile 2	2.7%	29/1095	0.67 (0.38, 1.20)	0.67 (0.35, 1.26)	0.69 (0.36, 1.32)
Quintile 3	2.9%	32/1094	0.93 (0.53, 1.63)	0.89 (0.47, 1.69)	0.99 (0.52, 1.90)
Quintile 4	2.8%	31/1095	0.61 (0.31, 1.17)	0.42 (0.20, 0.90)	0.47 (0.22, 1.02)
Quintile 5	1.5%	16/1094	0.37 (0.18, 0.76)	0.17 (0.07, 0.40)	0.21 (0.08, 0.53)
p value overall			0.05	0.0007	0.007
p value linear trend					0.0008
Age 25-64	2.7%	147/5473			
Pattern 2 Healthy with Fish					
Quintile 1 of Factor Score	2.3%	25/1095	1.00	1.00	1.00
Quintile 2	2.6%	28/1094	0.99 (0.45, 2.18)	1.01 (0.44, 2.34)	0.92 (0.40, 2.09)
Quintile 3	2.3%	25/1095	1.12 (0.58, 2.19)	1.33 (0.64, 2.79)	1.19 (0.56, 2.54)
Quintile 4	2.9%	32/1095	1.40 (0.68, 2.87)	1.98 (0.93, 4.19)	1.77 (0.84, 3.71)
Quintile 5	3.4%	37/1094	1.67 (0.83, 3.35)	2.38 (1.18, 4.81)	2.30 (1.14, 4.65)
p value overall			0.43	0.03	0.03
p value linear trend					0.004

Age 25-64						
Pattern 3 Energy Dense/Snacking	2.7%	147/5473				
Quintile 1 of Factor Score	3.0%	33/1094	1.00	1.00	1.00	
Quintile 2	2.6%	28/1095	0.93 (0.50, 1.71)	1.20 (0.61, 2.35)	1.15 (0.59, 2.25)	
Quintile 3	2.4%	26/1095	0.65 (0.33, 1.25)	0.67 (0.33, 1.38)	0.70 (0.33, 1.44)	
Quintile 4	3.1%	34/1095	0.76 (0.42, 1.37)	0.90 (0.46, 1.75)	0.89 (0.45, 1.78)	
Quintile 5	2.4%	26/1094	0.76 (0.39, 1.48)	0.54 (0.25, 1.16)	0.51 (0.24, 1.10)	
p value overall			0.71	0.24	0.24	
p value linear trend					0.06	
Age >64						
Pattern 1 Healthy	10.1%	192/1904				
Quintile 1 of Factor Score	6.3%	24/381	1.00	1.00	1.00	
Quintile 2	9.5%	36/381	1.83 (0.96, 3.51)	1.80 (0.92, 3.54)	1.98 (1.01, 3.89)	
Quintile 3	12.3%	47/381	2.15 (1.10, 4.20)	2.38 (1.16, 4.89)	2.69 (1.30, 5.53)	
Quintile 4	10.0%	38/381	1.55 (0.78, 3.06)	1.49 (0.71, 3.10)	1.61 (0.77, 3.40)	
Quintile 5	12.4%	47/380	2.51 (1.36, 4.62)	2.95 (1.51, 5.75)	3.67 (1.81, 7.42)	
p value overall			0.04	0.02	0.004	
p value linear trend					0.002	
Age >64						
Pattern 2 Energy Dense/Snacking	10.1%	192/1094				
Quintile 1 of Factor Score	12.9%	49/381	1.00	1.00	1.00	
Quintile 2	15.0%	57/381	1.00 (0.60, 1.69)	0.92 (0.53, 1.59)	0.92 (0.52, 1.62)	
Quintile 3	8.7%	33/381	0.64 (0.36, 1.14)	0.66 (0.37, 1.18)	0.68 (0.38, 1.23)	
Quintile 4	9.7%	37/381	0.72 (0.43, 1.19)	0.66 (0.38, 1.16)	0.68 (0.39, 1.20)	
Quintile 5	4.2%	16/380	0.29 (0.15, 0.57)	0.24 (0.11, 0.54)	0.25 (0.11, 0.56)	
p value overall			0.004	0.01	0.02	
p value linear trend					0.0007	
Age >64						
Pattern 3 Traditional	10.1%	92/1904				
Quintile 1 of Factor Score	11.0%	42/381	1.00	1.00	1.00	
Quintile 2	8.7%	33/381	0.57 (0.31, 1.05)	0.60 (0.31, 1.17)	0.65 (0.33, 1.29)	
Quintile 3	10.8%	41/381	0.77 (0.44, 1.34)	0.76 (0.41, 1.40)	0.93 (0.49, 1.73)	
Quintile 4	8.1%	31/381	0.70 (0.40, 1.23)	0.75 (0.40, 1.42)	0.89 (0.45, 1.76)	
Quintile 5	8.1%	31/381	1.06 (0.62, 1.81)	1.25 (0.69, 2.25)	1.53 (0.82, 2.84)	
p value overall			0.23	0.21	0.16	
p value linear trend					0.14	

Total Cholesterol Ratio						
Principal Component Analysis						
	Prevalence		Unadjusted odds ratio (95% CI's)	Adjusted odds ratio for socio-economic status (95% CI's)	Adjusted odds ratio (95% CI's)	
	%	(n)				
				Adjusted for SIMD, equivalised income	Adjusted for SIMD, equivalised income, physical activity	
Age 25-64						
Pattern 1 Energy Dense	18.1%	491/2714				
Quintile 1 of Factor Score	14.5%	81/557	1.00	1.00	1.00	
Quintile 2	15.2%	83/548	1.19 (0.79, 1.78)	0.19 (0.78, 1.82)	1.15 (0.75, 1.77)	
Quintile 3	19.1%	110/576	1.34 (0.94, 1.91)	1.32 (0.91, 1.92)	1.28 (0.88, 1.87)	
Quintile 4	21.3%	117/549	1.72 (1.22, 2.42)	1.52 (1.07, 2.16)	1.44 (1.00, 2.08)	
Quintile 5	20.7%	100/484	1.52 (1.05, 2.19)	1.32 (0.88, 1.99)	1.12 (0.73, 1.72)	
p value overall			0.02	0.21	0.34	
p value linear trend					0.30	
Age 25-64	18.1%	491/2714				

Pattern 2 Healthy with Fish						
Quintile 1 of Factor Score	22.5%	117/519	1.00	1.00	1.00	
Quintile 2	17.1%	87/510	0.73 (0.52, 1.01)	0.78 (0.55, 1.10)	0.80 (0.56, 1.13)	
Quintile 3	20.8%	114/548	0.90 (0.64, 1.27)	0.96 (0.66, 1.39)	0.99 (0.68, 1.44)	
Quintile 4	16.8%	94/559	0.72 (0.50, 1.02)	0.72 (0.49, 1.06)	0.78 (0.53, 1.15)	
Quintile 5	13.7%	79/578	0.55 (0.38, 0.79)	0.64 (0.43, 0.94)	0.73 (0.49, 1.07)	
p value overall			0.01	0.07	0.26	
p value linear trend					0.16	
Age 25-64						
Pattern 3 Energy Dense/Snacking						
Quintile 1 of Factor Score	12.4%	58/467	1.00	1.00	1.00	
Quintile 2	17.7%	95/536	1.63 (1.11, 2.38)	1.64 (1.07, 2.50)	1.69 (1.10, 2.61)	
Quintile 3	18.8%	106/565	1.68 (1.16, 2.44)	1.72 (1.16, 2.53)	1.83 (1.21, 2.77)	
Quintile 4	18.5%	103/557	1.50 (0.99, 2.25)	1.62 (1.08, 2.45)	1.68 (1.10, 2.56)	
Quintile 5	21.9%	129/589	1.93 (1.31, 2.83)	1.96 (1.31, 2.93)	2.13 (1.40, 3.23)	
p value overall			0.02	0.02	0.01	
p value linear trend					0.002	
Age >64						
Pattern 1 Healthy						
Quintile 1 of Factor Score	17.1%	29/170	1.00	1.00	1.00	
Quintile 2	21.1%	32/152	1.10 (0.60, 2.04)	1.06 (0.54, 2.10)	1.09 (0.55, 2.16)	
Quintile 3	16.0%	24/150	0.74 (0.40, 1.36)	0.89 (0.45, 1.78)	0.89 (0.44, 1.81)	
Quintile 4	17.0%	25/147	0.99 (0.54, 1.83)	1.03 (0.52, 2.07)	1.04 (0.50, 2.13)	
Quintile 5	10.8%	17/157	0.54 (0.28, 1.04)	0.65 (0.32, 1.32)	0.63 (0.31, 1.29)	
p value overall			0.25	0.70	0.64	
p value linear trend					0.28	
Age >64 Pattern 2 Energy Dense/ Snacking						
Quintile 1 of Factor Score	9.1%	14/154	1.00	1.00	1.00	
Quintile 2	18.8%	28/149	2.48 (1.24, 4.96)	2.62 (1.25, 5.50)	2.55 (1.19, 5.45)	
Quintile 3	19.1%	28/147	2.39 (1.07, 5.37)	2.61 (1.13, 6.06)	2.61 (1.12, 6.04)	
Quintile 4	17.0%	28/165	1.99 (0.92, 4.33)	1.64 (0.71, 3.81)	1.55 (0.64, 3.76)	
Quintile 5	18.0%	29/161	1.80 (0.86, 3.78)	1.55 (0.69, 3.50)	1.57 (0.69, 3.57)	
p value overall			0.14	0.08	0.09	
p value linear trend					0.83	
Age >64						
Pattern 3 Traditional						
Quintile 1 of Factor Score	16.7%	21/126	1.00	1.00	1.00	
Quintile 2	15.3%	24/157	0.90 (0.47, 1.73)	0.81 (0.39, 1.67)	0.82 (0.39, 1.72)	
Quintile 3	19.8%	32/162	1.10 (0.58, 2.09)	1.14 (0.55, 2.36)	1.11 (0.54, 2.31)	
Quintile 4	16.4%	27/165	0.75 (0.39, 1.42)	0.67 (0.32, 1.44)	0.59 (0.26, 1.34)	
Quintile 5	13.9%	23/166	0.76 (0.39, 1.47)	0.74 (0.35, 1.55)	0.67 (0.31, 1.41)	
p value overall			0.68	0.48	0.36	
p value linear trend					0.22	

Diastolic Blood Pressure			
Principal Component Analysis			
	Mean DBP unadjusted (95% CI's)	DBP adjusted for SES (95% CI's)	DBP adjusted Multivariable (95% CI's)
		Adjusted for age, gender, height, SIMD, equivalised income	Adjusted for age, gender, height, SIMD, equivalised income, physical activity

Age 5-10			
Pattern 1 Energy Dense/Snacking			
Quintile 1 of Factor Score	63.1 (61.1, 65.1)		
Quintile 2	63.3 (61.3, 65.4)		
Quintile 3	64.4 (62.7, 66.1)		
Quintile 4	65.1 (63.4, 66.8)		
Quintile 5	64.4 (62.4, 66.5)		
p value overall	0.78	0.62	0.66
p value linear trend			0.51
Age 5-10			
Pattern 2 Healthy with Fish			
Quintile 1 of Factor Score	65.5 (63.5, 67.6)		
Quintile 2	65.5 (63.3, 67.8)		
Quintile 3	63.4 (61.8, 65.1)		
Quintile 4	63.2 (61.4, 64.9)		
Quintile 5	63.2 (61.4, 65.0)		
p value overall	0.18	0.25	0.25
p value linear trend			0.03
Age 11-15			
Pattern 1 Energy Dense/Snacking			
Quintile 1 of Factor Score	62.7 (60.8, 64.6)		
Quintile 2	61.5 (59.9, 63.1)		
Quintile 3	61.2 (59.6, 62.7)		
Quintile 4	62.8 (61.2, 64.5)		
Quintile 5	62.7 (60.5, 64.8)		
p value overall	0.48	0.62	0.54
p value linear trend			0.50
Age 11-15			
Pattern 2 Healthy with Fish			
Quintile 1 of Factor Score	63.6 (61.6, 65.6)		
Quintile 2	63.2 (61.7, 64.7)		
Quintile 3	60.9 (59.1, 62.6)		
Quintile 4	61.6 (59.6, 63.5)		
Quintile 5	61.6 (59.7, 63.5)		
p value overall	0.32	0.39	0.58
p value linear trend			0.21
Age 11-15			
Pattern 3 Healthy			
Quintile 1 of Factor Score	62.0 (60.4, 63.6)		
Quintile 2	63.5 (61.6, 65.4)		
Quintile 3	61.4 (59.9, 62.9)		
Quintile 4	63.1 (61.0, 65.1)		
Quintile 5	61.1 (59.1, 63.1)		
p value overall	0.47	0.40	0.45
p value linear trend			0.81
Age 16-24			
Pattern 1 Healthy			
Quintile 1 of Factor Score	68.2 (65.8, 70.6)		
Quintile 2	65.4 (63.3, 67.6)		
Quintile 3	66.3 (63.3, 69.4)		
Quintile 4	65.4 (62.7, 68.1)		
Quintile 5	68.5 (66.1, 70.9)		
p value overall	0.12	0.11	0.17
p value linear trend			0.64
Age 16-24 Pattern 2 Energy Dense/Snacking			
Quintile 1 of Factor Score	68.7 (66.6, 70.9)		

Quintile 2	68.0 (66.0, 70.0)		
Quintile 3	68.6 (66.4, 70.7)		
Quintile 4	66.1 (63.7, 68.5)		
Quintile 5	62.8 (59.5, 66.1)		
p value overall	0.11	0.31	0.18
p value linear trend			0.03
Age 16-24			
Pattern 3 Healthy			
Quintile 1 of Factor Score	66.8 (64.2, 69.4)		
Quintile 2	66.3 (64.0, 68.6)		
Quintile 3	66.0 (64.1, 67.9)		
Quintile 4	67.2 (64.2, 70.2)		
Quintile 5	67.2 (64.8, 69.7)		
p value overall	0.91	0.85	0.67
p value linear trend			0.88
Age 25-64			
Pattern 1 Energy Dense			
Quintile 1 of Factor Score	75.2 (74.2, 76.2)		
Quintile 2	75.2 (74.2, 76.2)		
Quintile 3	75.8 (74.8, 76.8)		
Quintile 4	76.1 (75.0, 77.2)		
Quintile 5	76.4 (75.4, 77.5)		
p value overall	0.58	0.63	0.55
p value linear trend			0.23
Age 25-64			
Pattern 2 Healthy with Fish			
Quintile 1 of Factor Score	75.1 (74.0, 76.2)		
Quintile 2	75.9 (74.8, 77.0)		
Quintile 3	75.1 (74.2, 76.1)		
Quintile 4	76.4 (75.5, 77.4)		
Quintile 5	75.9 (74.8, 77.0)		
p value overall	0.50	0.62	0.56
p value linear trend			0.65
Age 25-64			
Pattern 3 Energy Dense/Snacking			
Quintile 1 of Factor Score	77.0 (75.8, 78.3)		
Quintile 2	76.0 (74.8, 77.2)		
Quintile 3	75.4 (74.5, 76.3)		
Quintile 4	75.2 (74.2, 76.1)		
Quintile 5	75.2 (74.3, 76.1)		
p value overall	0.14	0.24	0.23
p value linear trend			0.03
Age >64			
Pattern 1 Healthy			
Quintile 1 of Factor Score	74.9 (73.2, 76.6)		
Quintile 2	74.1 (72.4, 75.8)		
Quintile 3	73.9 (72.3, 75.5)		
Quintile 4	75.3 (73.8, 76.8)		
Quintile 5	73.5 (72.1, 74.8)		
p value overall	0.32	0.51	0.35
p value linear trend			0.14
Age >64			
Pattern 2 Energy Dense/Snacking			
Quintile 1 of Factor Score	76.0 (74.4, 77.6)		
Quintile 2	74.6 (73.0, 76.3)		
Quintile 3	74.1 (72.5, 75.7)		
Quintile 4	72.7 (71.1, 74.4)		

Quintile 5	74.3 (72.8, 75.7)		
p value overall	0.21	0.20	0.19
p value linear trend			0.68
Age >64			
Pattern 3 Traditional			
Quintile 1 of Factor Score	75.0 (73.3, 76.7)		
Quintile 2	73.3 (71.7, 74.9)		
Quintile 3	74.8 (73.3, 76.3)		
Quintile 4	74.9 (73.4, 76.4)		
Quintile 5	73.5 (71.9, 75.0)		
p value overall	0.31	0.26	0.25
p value linear trend			0.24

Systolic Blood Pressure			
Principal Component Analysis			
	Mean DBP unadjusted (95% CI's)	DBP adjusted for SES (95% CI's)	DBP adjusted Multivariable (95% CI's)
		Adjusted for age, gender, height, SIMD, equivalised income	Adjusted for age, gender, height, SIMD, equivalised income, physical activity
Age 5-10			
Pattern 1 Energy Dense/Snacking			
Quintile 1 of Factor Score	104.6 (102.7, 106.4)		
Quintile 2	105.1 (102.9, 107.4)		
Quintile 3	104.5 (102.5, 106.5)		
Quintile 4	104.8 (102.7, 106.8)		
Quintile 5	104.4 (102.7, 106.2)		
p value overall	0.97	0.93	0.95
p value linear trend			0.55
Age 5-10			
Pattern 2 Healthy with Fish			
Quintile 1 of Factor Score	107.4 (105.4, 109.5)		
Quintile 2	105.2 (103.3, 107.1)		
Quintile 3	103.2 (101.3, 105.2)		
Quintile 4	104.0 (102.0, 106.1)		
Quintile 5	104.0 (102.3, 105.6)		
p value overall	0.07	0.05	0.04
p value linear trend			0.02
Age 11-15			
Pattern 1 Energy Dense/Snacking			
Quintile 1 of Factor Score	111.0 (109.0, 113.0)		
Quintile 2	110.3 (107.9, 113.0)		
Quintile 3	110.7 (108.7, 112.8)		
Quintile 4	110.3 (108.6, 112.0)		
Quintile 5	111.6 (109.5, 113.6)		
p value overall	0.90	0.85	0.93
p value linear trend			0.66
Age 11-15			
Pattern 2 Healthy with Fish			
Quintile 1 of Factor Score	110.9 (109.1, 112.7)		
Quintile 2	112.5 (110.5, 114.5)		
Quintile 3	110.4 (108.1, 112.7)		
Quintile 4	110.3 (108.2, 112.3)		

Quintile 5	110.0 (108.1, 111.8)		
p value overall	0.23	0.40	0.72
p value linear trend			0.38
Age 11-15			
Pattern 3 Healthy			
Quintile 1 of Factor Score	109.9 (107.8, 111.9)		
Quintile 2	111.0 (108.7, 113.4)		
Quintile 3	112.0 (110.2, 113.9)		
Quintile 4	111.2 (109.1, 113.3)		
Quintile 5	109.8 (107.9, 111.7)		
p value overall	0.24	0.44	0.56
p value linear trend			0.88
Age 16-24			
Pattern 1 Healthy			
Quintile 1 of Factor Score	120.8 (117.6, 124.1)		
Quintile 2	118.5 (115.6, 121.5)		
Quintile 3	116.3 (112.6, 120.0)		
Quintile 4	121.5 (118.7, 124.3)		
Quintile 5	123.0 (119.6, 126.3)		
p value overall	0.07	0.05	0.09
p value linear trend			0.19
Age 16-24			
Pattern 2 Energy Dense/Snacking			
Quintile 1 of Factor Score	117.5 (113.2, 121.8)		
Quintile 2	121.4 (118.8, 124.0)		
Quintile 3	121.2 (117.5, 124.8)		
Quintile 4	119.8 (117.1, 122.5)		
Quintile 5	119.3 (115.3, 123.3)		
p value overall	0.07	0.25	0.55
p value linear trend			0.80
Age 16-24			
Pattern 3 Healthy			
Quintile 1 of Factor Score	119.2 (115.9, 122.5)		
Quintile 2	120.5 (116.3, 124.6)		
Quintile 3	119.4 (116.5, 122.3)		
Quintile 4	119.8 (116.1, 123.6)		
Quintile 5	120.9 (118.0, 123.7)		
p value overall	0.47	0.77	0.65
p value linear trend			0.14
Age 25-64			
Pattern 1 Energy Dense			
Quintile 1 of Factor Score	125.8 (124.5, 127.1)		
Quintile 2	126.0 (124.5, 127.5)		
Quintile 3	126.8 (125.4, 128.2)		
Quintile 4	127.4 (125.9, 129.0)		
Quintile 5	129.3 (127.7, 130.8)		
p value overall	0.32	0.38	0.26
p value linear trend			0.05
Age 25-64			
Pattern 2 Healthy with Fish			
Quintile 1 of Factor Score	125.3 (123.8, 126.7)		
Quintile 2	127.1 (125.5, 128.8)		
Quintile 3	126.8 (125.4, 128.2)		
Quintile 4	128.1 (126.7, 129.5)		
Quintile 5	127.3 (125.8, 128.9)		
p value overall	0.66	0.94	0.97

p value linear trend		0.68		
Age 25-64				
Pattern 3 Energy Dense/Snacking				
Quintile 1 of Factor Score	128.8 (127.2, 130.5)			
Quintile 2	127.1 (125.5, 128.7)			
Quintile 3	126.2 (124.9, 127.5)			
Quintile 4	126.6 (125.1, 128.0)			
Quintile 5	126.3 (125.0, 127.6)			
p value overall	0.05	0.06	0.05	0.05
p value linear trend				0.01
Age >64				
Pattern 1 Healthy				
Quintile 1 of Factor Score	142.2 (139.4, 145.0)			
Quintile 2	144.0 (140.8, 147.3)			
Quintile 3	144.8 (141.7, 147.8)			
Quintile 4	146.1 (143.2, 149.1)			
Quintile 5	145.0 (142.0, 148.0)			
p value overall	0.43	0.11	0.16	0.16
p value linear trend				0.05
Age >64				
Pattern 2 Energy Dense/Snacking				
Quintile 1 of Factor Score	146.6 (143.6, 149.7)			
Quintile 2	144.9 (141.6, 148.1)			
Quintile 3	143.3 (140.4, 146.2)			
Quintile 4	143.1 (140.0, 146.2)			
Quintile 5	144.8 (141.8, 147.8)			
p value overall	0.21	0.55	0.50	0.50
p value linear trend				0.27
Age >64				
Pattern 3 Traditional				
Quintile 1 of Factor Score	147.6 (144.0, 151.1)			
Quintile 2	144.3 (141.2, 147.5)			
Quintile 3	143.4 (140.3, 146.5)			
Quintile 4	144.5 (141.7, 147.3)			
Quintile 5	142.8 (139.6, 146.1)			
p value overall	0.53	0.51	0.57	0.57
p value linear trend				0.30

Appendix 6

SHS Distribution of DQI scores for each age group

Figure 1: The distribution of the DQI scores for all 5-10 years olds

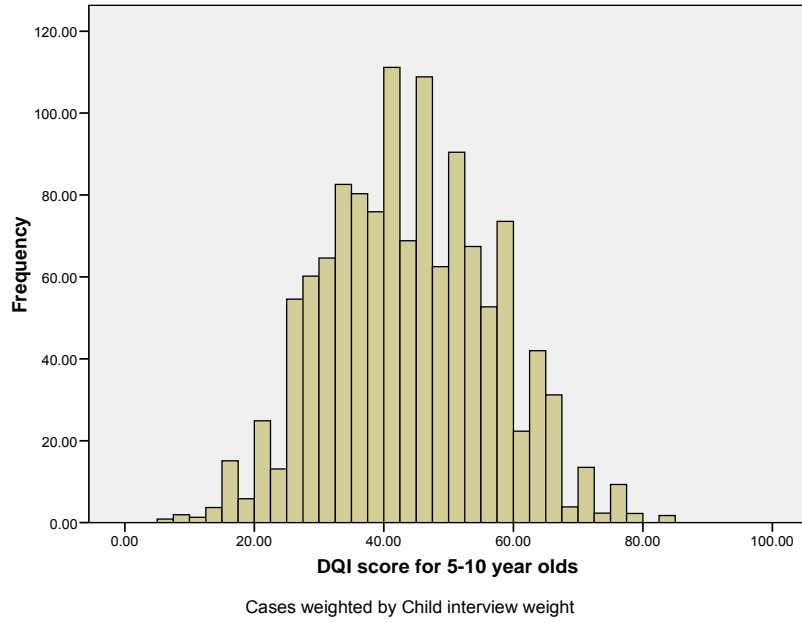


Figure 2: The distribution of the DQI scores for all 11-15 years olds

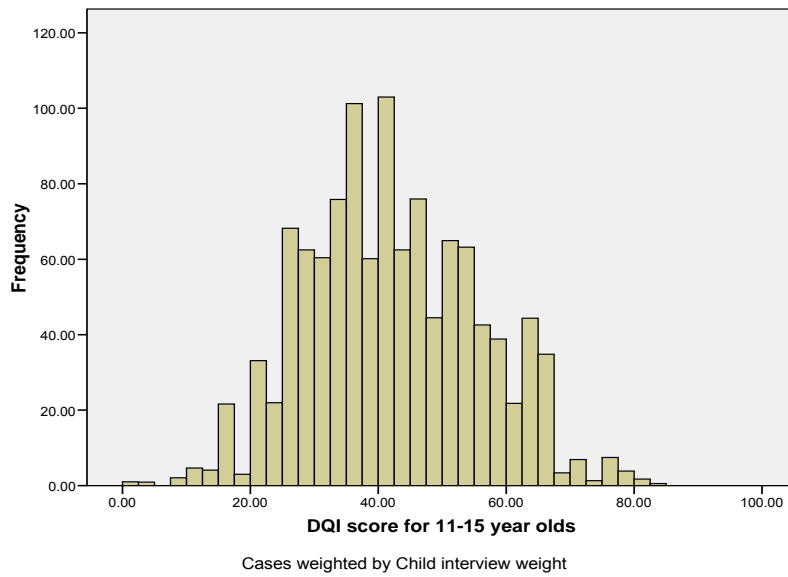


Figure 3: The distribution of the DQI scores for all 16-24 years olds

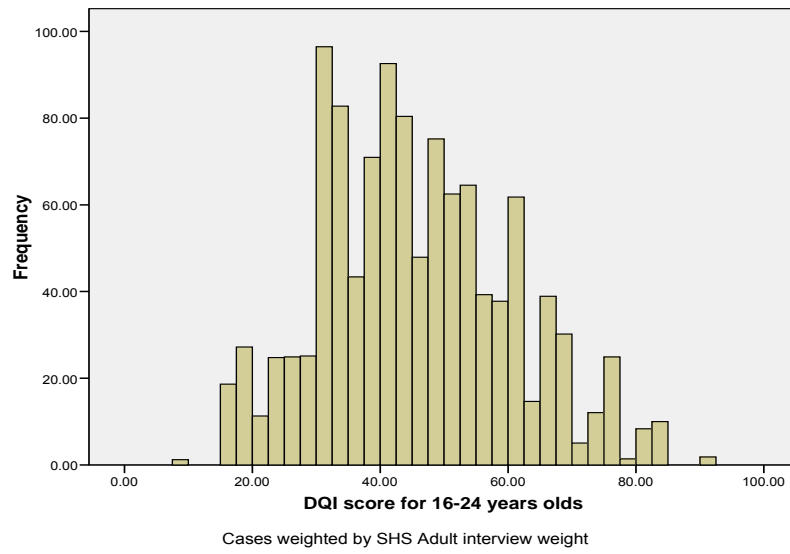


Figure 4: The distribution of the DQI scores for all 25-64 years olds

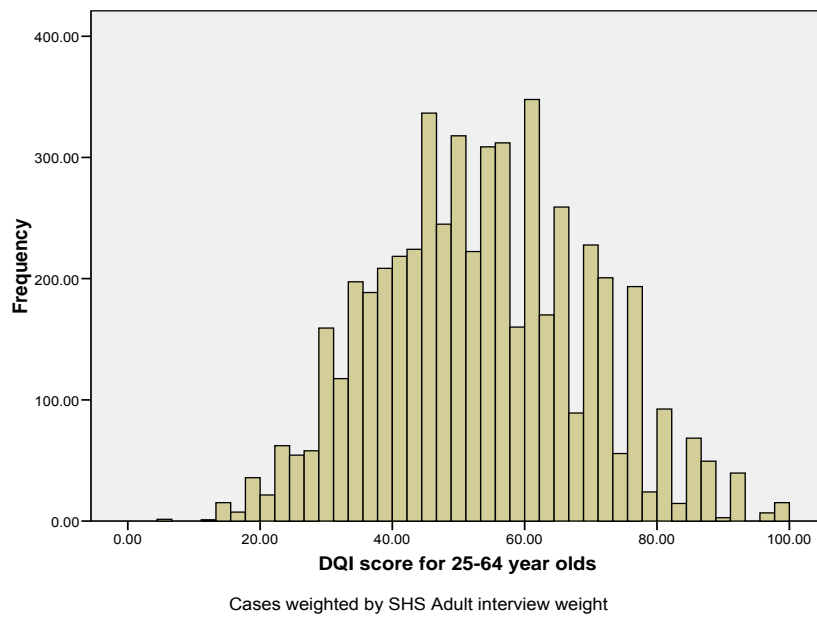
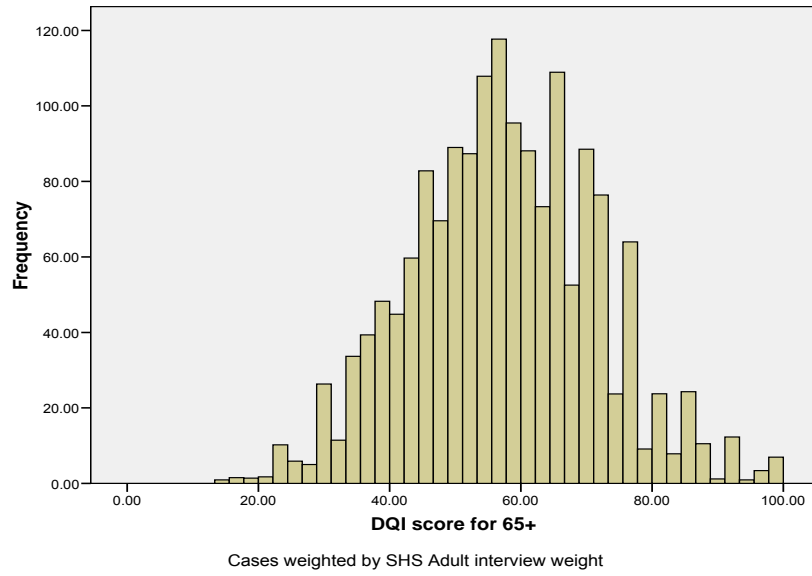


Figure 5: The distribution of the DQI scores for all ≥ 65 years olds



Appendix 7

Dietary Quality Index from the SHS and health outcomes

Obesity					
Dietary Quality Index					
	Prevalence		Unadjusted odds ratio	Adjusted odds ratio for	Adjusted odds ratio
	%	(n)	(95% CI's)	socio-economic status	(95% CI's)
				Adjusted for SIMD, equivalised income	Adjusted for SIMD, equivalised income, physical activity
Age 5-10	20.8%	204/1058			
Quintile 1 of DQI	21%	46/220	1.00	1.00	1.00
Quintile 2	20.4%	47/230	0.93 (0.54, 1.62)	0.88 (0.49, 1.56)	0.89 (0.50, 1.57)
Quintile 3	19.2%	39/203	0.95 (0.51, 1.77)	0.89 (0.46, 1.73)	0.85 (0.43, 1.66)
Quintile 4	22.1%	47/213	1.02 (0.56, 1.87)	1.01 (0.53, 1.95)	1.02 (0.53, 1.95)
Quintile 5	13.0%	25/192	0.47 (0.23, 0.97)	0.42 (0.19, 0.91)	0.41 (0.19, 0.89)
Total (n)	1058				
p value overall			0.21	0.18	0.16
p value linear trend					0.09
Age 11-15	19.3%	178/923			
Quintile 1 of DQI	14.2%	28/197	1.00	1.00	1.00
Quintile 2	20.3%	36/177	1.64 (0.82, 3.30)	1.58 (0.78, 3.19)	1.70 (0.83, 3.44)
Quintile 3	20.9%	38/182	1.51 (0.81, 2.81)	1.49 (0.76, 2.90)	1.55 (0.78, 3.07)
Quintile 4	22.0%	44/200	1.48 (0.80, 2.73)	1.47 (0.75, 2.86)	1.57 (0.78, 3.16)
Quintile 5	19.2%	32/167	1.32 (0.67, 2.60)	1.31 (0.61, 2.81)	1.38 (0.63, 3.00)
Total (n)	923				
p value overall			0.58	0.67	0.58
p value linear trend					0.49
Age 16-24	11.6%	72/620			
Quintile 1 of DQI	13.4%	18/134	1.00	1.00	1.00
Quintile 2	9.8%	12/122	1.26 (0.40, 3.95)	1.12 (0.32, 3.96)	1.17 (0.31, 4.37)
Quintile 3	8.9%	11/123	0.59 (0.18, 2.02)	0.53 (0.11, 2.47)	0.49 (0.10, 2.39)
Quintile 4	13.1%	17/130	1.13 (0.38, 3.31)	0.79 (0.23, 2.72)	0.96 (0.25, 3.64)
Quintile 5	12.6%	14/111	0.81 (0.25, 2.64)	0.55 (0.16, 1.97)	0.65 (0.19, 2.23)
Total (n)	620				
p value overall			0.74	0.78	0.75
p value linear trend					0.45
Age 25-64	26.0%	1206/4636			
Quintile 1 of DQI	26.1%	248/952	1.00	1.00	1.00
Quintile 2	27.4%	252/919	0.96 (0.74, 1.24)	1.03 (0.78, 1.35)	0.99 (0.75, 1.32)
Quintile 3	27.1%	251/928	1.00 (0.77, 1.29)	1.18 (0.90, 1.56)	1.06 (0.81, 1.40)
Quintile 4	27.0%	251/930	0.96 (0.75, 1.25)	1.17 (0.88, 1.55)	1.04 (0.77, 1.40)
Quintile 5	22.5%	204/907	0.71 (0.53, 0.94)	0.91 (0.67, 1.24)	0.80 (0.58, 1.11)
Total (n)	4636				
p value overall			0.10	0.36	0.42
p value linear trend					0.35
Age >64	30.1%	426/1417			
Quintile 1 of DQI	31.1%	85/273	1.00	1.00	1.00
Quintile 2	31.3%	87/278	0.97 (0.62, 1.52)	1.05 (0.64, 1.72)	1.02 (0.60, 1.72)
Quintile 3	29.3%	91/311	0.75 (0.48, 1.19)	0.90 (0.54, 1.49)	0.86 (0.50, 1.47)
Quintile 4	27.6%	74/268	0.90 (0.57, 1.40)	1.14 (0.70, 1.86)	1.03 (0.60, 1.75)
Quintile 5	31.0%	89/287	0.90 (0.57, 1.42)	1.07 (0.65, 1.76)	1.03 (0.59, 1.79)
Total (n)	1417				
p value overall			0.76	0.92	0.94

p value linear trend	0.92
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Diabetes					
Dietary Quality Index					
	Prevalence		Unadjusted odds ratio	Adjusted odds ratio	Adjusted odds ratio
	%	(n)	(95% CI's)	socio-economic status	(95% CI's)
				Adjusted for SIMD,	Adjusted for SIMD,
				equivalised income	equivalised income,
					physical activity
Age 25-64	2.7%	147/5452			
Quintile 1 of DQI	1.6%	18/1123	1.00	1.00	1.00
Quintile 2	2.1%	23/1076	2.19 (1.05, 4.57)	2.86 (1.21, 6.78)	2.66 (1.11, 6.34)
Quintile 3	2.7%	29/1089	2.60 (1.14, 5.91)	3.70 (1.52, 9.00)	3.28 (1.32, 8.14)
Quintile 4	3.7%	40/1081	3.75 (1.73, 8.14)	5.76 (2.44, 13.61)	5.39 (2.28, 12.74)
Quintile 5	3.4%	37/1083	3.49 (1.59, 7.63)	6.43 (2.73, 15.18)	5.60 (2.24, 13.96)
Total (n)	5453				
p value overall			0.01	0.0004	0.0016
p value linear trend					<0.0001
Age >64	10.0%	189/1897			
Quintile 1 of DQI	8.4%	32/382	1.00	1.00	1.00
Quintile 2	9.3%	35/377	1.36 (0.70, 2.62)	1.15 (0.56, 2.33)	1.16 (0.56, 2.40)
Quintile 3	9.9%	41/415	1.33 (0.70, 2.54)	1.60 (0.82, 3.15)	1.82 (0.92, 3.60)
Quintile 4	10.5%	38/361	1.46 (0.77, 2.77)	1.38 (0.68, 2.81)	1.57 (0.75, 3.27)
Quintile 5	11.9%	43/362	1.76 (0.91, 3.39)	2.05 (1.01, 4.16)	2.47 (1.18, 5.18)
Total (n)	1897				
p value overall			0.57	0.25	0.08
p value linear trend					0.01

Total Cholesterol: HDL Ratio					
Dietary Quality Index					
	Prevalence		Unadjusted odds ratio	Adjusted odds ratio	Adjusted odds ratio
	%	(n)	(95% CI's)	Socio-economic status(95% CI's)	(95% CI's)
				Adjusted for SIMD,	Adjusted for SIMD,
				equivalised income	equivalised income,
					physical activity
Age 25-64	18.2%	491/2704			
Quintile 1 of DQI	24.2%	126/520	1.00	1.00	1.00
Quintile 2	18.29%	96/525	0.75 (0.54,1.05)	0.77 (0.55,1.08)	0.84 (0.59,1.19)
Quintile 3	18.6%	100/538	0.79 (0.57,1.08)	0.87 (0.62,1.21)	0.96 (0.69,1.35)
Quintile 4	17.5%	100/572	0.65 (0.47,0.88)	0.68 (0.48,0.94)	0.75 (0.53,1.06)
Quintile 5	12.6%	69/549	0.44 (0.31,0.62)	0.48 (0.33,0.72)	0.56 (0.38,0.84)
Total (n)	5453				
p value overall			<0.001	0.006	0.05
p value linear trend					0.007
Age >64	16.5%	127/772			
Quintile 1 of DQI	19.7%	26/132	1.00	1.00	1.00
Quintile 2	21.6%	35/162	0.84 (0.47,1.51)	0.97 (0.50,1.87)	0.98 (0.50,1.91)
Quintile 3	13.7%	24/175	0.62 (0.33,1.14)	0.80 (0.42,1.55)	0.80 (0.42,1.52)
Quintile 4	15.9%	23/145	0.58 (0.31,1.08)	0.58 (0.29,1.18)	0.56 (0.28,1.15)
Quintile 5	12.0%	19/158	0.46 (0.23,0.93)	0.61 (0.28,1.36)	0.60 (0.28,1.31)
Total (n)	1897				

p value overall	0.17	0.51	0.42
p value linear trend			0.07

Systolic Blood Pressure			
Dietary Quality Index			
	Mean SBP unadjusted (95% CI's)	SBP adjusted for SES (95% CI's)	SBP adjusted Multivariable (95% CI's)
		Adjusted for age, gender, height, SIMD, equivalised income	Adjusted for age, gender, height SIMD, equivalised income, physical activity
Age 5-10 years			
Quintile 1 of DQI	105.7 (103.5, 107.9)		
Quintile 2	105.6 (103.7, 107.5)		
Quintile 3	102.5 (100.5, 104.6)		
Quintile 4	104.7 (102.5, 106.7)		
Quintile 5	104.9 (103.3, 106.5)		
p value overall	0.24	0.17	0.16
p value linear trend			0.51
Age 11-15 years			
Quintile 1 of DQI	109.6 (107.9, 111.3)		
Quintile 2	113.0 (110.7, 115.4)		
Quintile 3	110.7 (108.5, 113.0)		
Quintile 4	110.8 (108.6, 112.9)		
Quintile 5	110.0 (108.2, 111.8)		
p value overall	0.28	0.28	0.29
p value linear trend			0.33
Age 16-24 years			
Quintile 1 of DQI	118.3 (115.3, 121.3)		
Quintile 2	115.8 (112.6, 119.1)		
Quintile 3	121.1 (117.3, 124.8)		
Quintile 4	122.5 (119.7, 125.3)		
Quintile 5	121.4 (118.0, 124.8)		
p value overall	0.00	0.03	0.03
p value linear trend			0.06
Age 25-64 years			
Quintile 1 of DQI	126.3 (124.8, 127.9)		
Quintile 2	126.0 (124.5, 127.5)		
Quintile 3	127.5 (126.1, 128.8)		
Quintile 4	127.4 (126.0, 128.7)		
Quintile 5	127.5 (126.0, 128.9)		
p value overall	0.96	0.82	0.88
p value linear trend			0.47
Age >64 years			
Quintile 1 of DQI	144.3 (141.0, 147.6)		
Quintile 2	143.5 (140.6, 146.5)		
Quintile 3	143.4 (140.3, 146.6)		
Quintile 4	145.9 (143.0, 148.8)		
Quintile 5	145.4 (142.4, 148.5)		
p value overall	0.64	0.45	0.51
p value linear trend			0.08

Diastolic Blood Pressure			
Dietary Quality Index			
	Mean DBP unadjusted (95% CI's)	DBP adjusted for SES (95% CI's)	DBP adjusted Multivariable (95% CI's)
		Adjusted for age, gender, height, SIMD, equivalised income	Adjusted for age, gender, height SIMD, equivalised income, physical activity
Age 5-10 years			
Quintile 1 of DQI	66.0 (64.1, 67.8)		
Quintile 2	63.8 (62.0, 65.6)		
Quintile 3	63.5 (61.8, 65.1)		
Quintile 4	63.3 (61.1, 65.4)		
Quintile 5	64.3 (62.4, 66.1)		
p value overall	0.30	0.37	0.29
p value linear trend			0.22
Age 11-15 years			
Quintile 1 of DQI	61.7 (60.2, 63.2)		
Quintile 2	64.1 (62.0, 66.2)		
Quintile 3	61.9 (60.0, 63.8)		
Quintile 4	61.3 (59.4, 63.1)		
Quintile 5	62.2 (60.3, 64.1)		
p value overall	0.22	0.19	0.38
p value linear trend			0.91
Age 16-24 years			
Quintile 1 of DQI	68.1 (66.0, 70.3)		
Quintile 2	65.0 (62.5, 67.4)		
Quintile 3	66.2 (63.4, 68.9)		
Quintile 4	67.0 (65.1, 68.9)		
Quintile 5	67.3 (64.5, 70.1)		
p value overall	0.22	0.65	0.70
p value linear trend			0.65
Age 25-64 years			
Quintile 1 of DQI	75.3 (74.2, 76.4)		
Quintile 2	75.3 (74.3, 76.4)		
Quintile 3	75.8 (74.8, 76.8)		
Quintile 4	76.0 (75.1, 77.0)		
Quintile 5	76.0 (75.0, 77.0)		
p value overall	0.98	0.96	0.86
p value linear trend			0.30
Age >64 years			
Quintile 1 of DQI	74.9 (73.2, 76.5)		
Quintile 2	74.2 (72.6, 75.8)		
Quintile 3	73.6 (72.1, 75.1)		
Quintile 4	74.2 (72.5, 75.8)		
Quintile 5	74.9 (73.3, 76.4)		
p value overall	0.83	0.94	0.90
p value linear trend			0.85

Appendix 8

Coding frame for EFS PCA analysis

Food Grouping	Food Group Code	Maff Code	Household/ Household Takeaway/ Eaten Out	Description	n HHs per food code	n HHs per food grouping
Milk Whole						797
	1	402	HH	UHT milk	12	
	1	403	HH	Sterilised	10	
	1	404	HH	Pasteurised/ homogenised	792	
Milk Semi-Skimmed						1129
	2	1503	HH	Semi-skimmed milk	1132	
Milk Skimmed						189
	3	1502	HH	Fully skimmed milk	189	
Unspecified Milk						439
	4	501	HH	school milk	0	
	4	601	HH	welfare milk	40	
	4	1102	HH	Infant or baby milks - ready to drink	5	
	4	1103	HH	Infant or baby milks - dried	36	
	4	1201	HH	Instant dried milk	11	
	4	1605	HH	Dried milk products	16	
	4	1606	HH	Milk drinks & other milks	137	
	4	260301	EO	Milk as a drink	161	
	4	260302	EO	Milk on cereal	13	
	4	260303	EO	Milkshake and flavoured milk	100	
	4	260304	EO	Free school milk	29	
Yoghurt / Fromage Frais						994
	5	1301	HH	Yoghurt	892	
	5	1302	HH	Fromage Frais	227	
	5	210101	EO	Yoghurt and Fromage Frais	70	
Dairy Desserts						526
	6	1603	HH	Dairy desserts - not frozen	526	
Cream						505
	7	901	HH	Condensed or evaporated milk	81	
	7	1701	HH	Cream	360	
	7	14807	HH	Imitation cream	101	
	7	240403	EO	Cream - single, double, sour etc	58	
Cheese						1268
	8	2201	HH	Hard cheese - Cheddar type	954	
	8	2202	HH	Hard cheese - Other UK or foreign equivalent	186	
	8	2203	HH	Hard cheese - Edam or other foreign	188	
	8	2206	HH	Soft natural cheese	257	
	8	2301	HH	Processed cheese	447	
	8	130102	EO	Soft/ continental/ processed cheese eg Brie	32	
	8	130103	EO	Cheddar/ blue/ other hard cheese & 'cheese'	78	

				type not specified		
Red Meat						1152
	10	3102	HH	Beef joints - incl on the bone	11	
	10	3103	HH	Beef joints - boned	168	
	10	3104	HH	Beef steak - less expensive	178	
	10	3105	HH	Beef steak - more expensive	363	
	10	3106	HH	Minced beef	675	
	10	3107	HH	All other beef and veal	29	
	10	3601	HH	Mutton	0	
	10	3602	HH	Lamb joints	78	
	10	3603	HH	Lamb chops	123	
	10	3604	HH	All other lamb	43	
	10	4101	HH	Pork joints	88	
	10	4102	HH	Pork chops	180	
	10	4103	HH	Pork fillets & steaks	193	
	10	4104	HH	All other pork	47	
	10	4603	HH	Ox liver	16	
	10	4604	HH	Lambs liver	45	
	10	4605	HH	Pigs liver	13	
	10	4607	HH	All other liver	8	
	10	5101	HH	All offal other than liver	22	
	10	7801	HH	Other fresh/chilled/frozen meat	10	
Poultry						1161
	11	5903	HH	Cooked chicken & turkey	686	
	11	7401	HH	Chicken - whole or part	767	
	11	7703	HH	Turkey - whole or part	188	
	11	7704	HH	Poultry other than chicken or turkey	22	
Household Processed Meat Products						1534
	12	5502	HH	Bacon and ham joints, uncooked	228	
	12	5505	HH	Bacon and ham rashers, uncooked	815	
	12	5801	HH	Ham and bacon	969	
	12	6201	HH	Corned beef - canned or sliced	330	
	12	6601	HH	Other cooked meat	365	
	12	7102	HH	Other canned meat & canned meat products	403	
	12	7901	HH	Sausages, uncooked - pork	631	
	12	8001	HH	Sausages, uncooked - beef	265	
	12	8501	HH	Burgers - frozen or not frozen	300	
	12	9301	HH	Pate	146	
	12	9302	HH	Delicatessen type sausages	323	
	12	9403	HH	Meat pastes & spreads	98	
Meat Based Ready Meals						723
	13	8901	HH	Complete meat-based ready meals - frozen of not frozen	723	
Convenience Meat Products						755
	14	8902	HH	Other convenience meat products - frozen of not frozen	757	

Processed Meat Products Takeaway / Eaten Out						998
	16	5904	HHTA	Takeaway chicken	99	
	16	9502	HHTA	Takeaway burger & bun	129	
	16	9503	HHTA	Takeaway kebabs	82	
	16	9504	HHTA	Takeaway sausages & saveloys	103	
	16	9506	HHTA	Takeaway miscellaneous meats	51	
	16	12304	HHTA	Takeaway fish products	19	
	16	110106	EO	Bacon	154	
	16	110107	EO	Gammon/ ham	71	
	16	110301	EO	Small or single burgers	346	
	16	110302	EO	Large or double burgers	201	
	16	110303	EO	Chicken burger	167	
	16	110401	EO	Kebabs - all types including chicken	34	
	16	110402	EO	Plain sausages e.g. beef, pork	213	
	16	110403	EO	Other sausages	24	
	16	110404	EO	Hot Dogs and sausage sandwiches	210	
	16	110701	EO	All pates	17	
	16	120602	EO	Fish burgers [in bun]	1	
Meat Dishes Traditional Eaten Out						512
	17	110101	EO	Steak - without sauce e.g. braised, sirloin	88	
	17	110102	EO	Roast beef/pork/lamb/veal - with sauce/gravy	70	
	17	110103	EO	Pork chops with gravy/sauce	8	
	17	110104	EO	Lamb chops with gravy sauce	16	
	17	110105	EO	Spare ribs	15	
	17	110108	EO	All offal, including liver, kidney, tongue	8	
	17	110201	EO	Chicken/ turkey with gravy/sauce	153	
	17	110202	EO	Chicken/turkey in breadcrumbs or batter	149	
	17	110203	EO	Duck with sauce/gravy	11	
	17	110204	EO	Game with sauce/gravy	9	
	17	110601	EO	Meat & veg stews, casseroles or hotpots	39	
	17	110602	EO	Chicken or turkey stews, casseroles or hotpots	19	
	17	110603	EO	meat lasagne, cannelloni, moussaka and other meat-based oven baked dishes	77	
	17	110801	EO	Other meat products or dishes	139	
Ethnic Main Meal Dishes Takeaway / Eaten Out						571
	18	9505	HHTA	Takeaway meat based meals	419	
	18	12305	HHTA	Takeaway fish based meals	46	
	18	100101	EO	Meat or fish based curry with sauce	125	
	18	100102	EO	Meat curry, no sauce	13	
	18	100103	EO	Vegetable or fruit based curry	5	
	18	100104	EO	Dhal & Dhal dishes	2	

	18	100106	EO	Other Indian dishes	6	
	18	100108	EO	Indian buffet/shared meal/Indian meal not specified	11	
	18	100201	EO	Chinese or Thai beef/pork/ chicken/ seafood dishes not curry	86	
	18	100202	EO	Chop Suey and Fu Yung dishes	2	
	18	100203	EO	Chinese or Thai vegetable based main course dishes	13	
	18	100204	EO	Chinese or Thai curry	10	
	18	100206	EO	Other Chinese or Thai dishes	17	
	18	100207	EO	Chinese/Thai buffet, shared meal or meal not specified	16	
	18	100301	EO	All other ethnic meals	6	
White Fish						497
	20	10201	HH	White fish, fresh or chilled	313	
	20	10202	HH	White fish, frozen	171	
	20	11401	HH	White fish, dried or salted or smoked	98	
Oil Rich Fish						363
	21	10601	HH	Herrings & other blue fish, fresh or chilled	95	
	21	10602	HH	Herrings & other blue fish, frozen	8	
	21	10701	HH	Salmon, fresh or chilled	105	
	21	10702	HH	Salmon, frozen	9	
	21	10801	HH	Blue fish, dried or salted or smoked	121	
	21	11901	HH	Tinned salmon	105	
Shellfish						158
	22	11702	HH	Shellfish, fresh or chilled	69	
	22	11703	HH	Shellfish, frozen	99	
Tinned / Bottled Fish						430
	23	12001	HH	Other tinned or bottled fish	430	
Fish Based Ready Meals / Convenience Products						548
	24	12103	HH	Ready meals & other fish products - frozen or not frozen	474	
	24	120601	EO	Fish, processed, in breadcrumbs (fish fingers, fish cakes, scampi) - without sauce/dressing	71	
	24	120603	EO	Fish based pie or other dish e.g. paella, kedgeree, tuna pasta bake	25	
Takeaway Fish						231
	25	11801	HHTA	Takeaway fish	231	
White Fish Dishes Eaten Out						263
	26	120101	EO	White fish - grilled, steamed, baked or boiled - no sauce	35	
	26	120102	EO	White fish - fried (incl in	241	

				batter/breadcrumbs) - no sauce		
Oily Fish Dishes Eaten Out						93
	27	120201	EO	Trout, tuna and salmon only - fresh - without sauce/dressing	43	
	27	120202	EO	Other fatty fish - without sauce/dressing e.g. herring, mackerel, sardines	2	
	27	120301	EO	Shellfish - without sauce/dressing e.g. prawns, shrimps, oysters, crab	56	
	27	120401	EO	Kippers and other smoked fish e.g. smoked salmon	6	
Eggs						1157
	28	12901	HH	Eggs	1083	
	28	130301	EO	Eggs - boiled or poached	19	
	28	130302	EO	Eggs - scrambled/fried/omelette s & 'egg' type not specified	178	
	28	130303	EO	Other egg dishes e.g. egg mayonnaise	8	
Butter						558
	29	13501	HH	Butter	558	
Margarine						147
	30	13801	HH	Soft margarine	138	
	30	13802	HH	Other margarine	10	
Butter / Margarine Eaten Out						200
	31	240401	EO	Butter & margarine	200	
Reduced Fat Spread						728
	32	14802	HH	Reduced fat spreads	585	
	32	14803	HH	Low fat spreads	192	
Cooking Oil						293
	34	14304	HH	Olive Oil	87	
	34	14305	HH	Other vegetable & salad oils	215	
Sugar and Preserves						970
	35	15001	HH	Sugar	559	
	35	15101	HH	Jams & fruit curds	263	
	35	15201	HH	Marmalade	167	
	35	15301	HH	Syrup, treacle	43	
	35	15401	HH	Honey	58	
	35	32303	HH	Other spreads & dressings	72	
	35	32901	HH	Jelly squares or crystals	131	
	35	240106	EO	Sweet sauce e.g. syrup, treacle, chocolate sauce	16	
	35	240402	EO	Jam, marmalade & honey	69	
	35	240405	EO	Sugar (as an addition to tea, coffee etc)	59	
	35	290212	EO	Jelly	18	
Vegetables Green						751
	37	16201	HH	Cabbages, fresh	277	
	37	16301	HH	Brussels sprouts, fresh	129	

	37	16401	HH	Cauliflower, fresh	499	
	37	17101	HH	Other fresh green vegetables	58	
	37	150102	EO	Other green vegetables e.g. spinach, cabbage, sprouts	80	
Vegetables Lettuce and Cucumber						914
	38	16701	HH	Lettuce & leafy salads	581	
	38	16702	HH	Prepared lettuce salads	240	
	38	17601	HH	Cucumbers, fresh	393	
	38	150101	EO	Lettuce & cress	12	
	38	160102	EO	Mixed salad, side dish - without dressing; incl 'salad' type not specified	177	
	38	160103	EO	Green salad - without dressing	39	
Vegetables Peas						568
	39	16801	HH	Peas, fresh	88	
	39	18501	HH	Peas, canned	397	
	39	20301	HH	Peas, frozen	125	
Vegetables Root Fresh						900
	40	17201	HH	Carrots, fresh	747	
	40	17301	HH	Turnips & swede, fresh	301	
	40	17401	HH	Other root vegetable, fresh	162	
	40	150301	EO	Carrots	95	
	40	150304	EO	Other root vegetables/ tubers eg turnip, parsnip, radish, beetroot	23	
Onions						987
	41	17501	HH	Onions, leeks, shallots, fresh	977	
	41	150302	EO	Onions - raw or cooked incl 'onions' type not specified	22	
	41	150303	EO	Onions - fried	27	
Tomatoes						1126
	42	17801	HH	Tomatoes, fresh	997	
	42	18401	HH	Tomatoes, canned or bottled	297	
	42	19602	HH	Tomato puree and vegetable purees	99	
	42	150205	EO	Tomato - fresh, raw	32	
	42	150206	EO	Tomato - cooked or processed	56	
Vegetables Other Fresh and Frozen						1116
	43	16901	HH	Beans, fresh	129	
	43	17701	HH	Mushrooms, fresh	572	
	43	18301	HH	Stewpack, stir-fry pack, pack of mixed vegetables	205	
	43	18302	HH	Stem vegetables	249	
	43	18303	HH	Marrow, courgettes, aubergine, pumpkin and other fresh vegetables	446	
	43	20401	HH	Beans, frozen	25	
	43	20801	HH	Other frozen vegetables	232	
	43	150201	EO	Peppers - raw/cooked	1	
	43	150202	EO	Courgettes, marrow, aubergine, pumpkin, plantain, cucumbers	7	
	43	150203	EO	Peas & sweetcorn	180	

	43	150401	EO	Mushrooms - raw or cooked	96	
	43	150501	EO	Mixed vegetables and 'veg' type not specified.	124	
	43	150502	EO	Other vegetables e.g. artichoke, asparagus	2	
Vegetables Pulses						227
	44	18803	HH	Other canned beans & pulses	138	
	44	19201	HH	Dried pulses other than air-dried	99	
Vegetables Baked Beans						726
	45	18802	HH	Baked beans in sauce	632	
	45	150204	EO	Baked Beans and other beans (not green beans) & pulses	149	
Vegetables Other Canned						357
	46	19101	HH	Other canned vegetables	357	
Fresh Herbs						214
	47	18304	HH	Fresh herbs	218	
Vegetable Based Ready Meals						705
	48	20601	HH	Ready meals & other vegetable products - frozen or not frozen	705	
Takeaway Vegetable Dishes and Products						168
	49	20604	HHTA	All vegetable takeaway products	168	
Salad Main Meal Eaten Out						130
	51	160101	EO	Mixed salad, main course - without dressing	18	
	51	160301	EO	Meat salad e.g. beef, lamb salads	34	
	51	160302	EO	Chicken or turkey salad	36	
	51	160303	EO	Fish salad e.g. tuna, salmon salads	34	
	51	160401	EO	Cheese salad incl ploughman's	13	
	51	160402	EO	Egg salad	0	
	51	160501	EO	Other salads e.g. Greek, Florida, Russian	9	
	51	160601	EO	Salad buffet/buffet meal where items not specified	7	
Salad Not Meal Sized Eaten Out						96
	52	160201	EO	Vegetable/ fruit and nut salad - with dressing	9	
	52	160202	EO	Pasta/ rice/ mixed bean or cereal-based salads - with dressing	27	
	52	240203	EO	Coleslaw	66	
Sauces Eaten Out						270
	53	240101	EO	Cheese or cream-based sauce e.g. carbonara, cauliflower cheese etc.	87	
	53	240102	EO	Meat-based sauce e.g. Bolognese, chilli con carne	78	
	53	240103	EO	Fish/seafood-based sauce	22	

	53	240104	EO	Tomato-based sauce containing vegetables, incl ratatouille	14	
	53	240105	EO	Other savoury sauce & sauce not specified	115	
Fresh Potatoes						1310
	55	15501	HH	Potatoes - bought Jan-Aug, previous years crop	555	
	55	15502	HH	Potatoes - bought Jan-Aug, this years crop	444	
	55	15503	HH	Potatoes - bought Sep-Dec, this years crop or new imported	422	
	55	140103	EO	Potatoes - boiled & type not specified	164	
	55	140104	EO	Potatoes - mashed	36	
	55	140107	EO	Baked/ jacket potatoes - no filling	175	
Processed Potato						982
	56	19702	HH	Chips - frozen or not frozen	590	
	56	19801	HH	Instant potato	45	
	56	19901	HH	Canned potatoes	31	
	56	20101	HH	Other potato products - frozen or not frozen	513	
	56	140105	EO	Potatoes - roast	72	
	56	140106	EO	Sautéed potatoes/ potato croquettes/ hash browns	75	
	56	140108	EO	Other potato dishes (e.g. wedges, potato salad) & not specified	76	
Takeaway and Eaten Out Chips						954
	57	19703	HHTA	Takeaway chips	534	
	57	140102	EO	Chips - served with meal e.g. from restaurant, CHIP SHOP	733	
Eaten Out Chips Fast Food Outlet						355
	58	140101	EO	Chips & French fries - from fast food outlet e.g. McDonalds	355	
Fruit Citrus Fresh						707
	59	21001	HH	Fresh oranges	286	
	59	21401	HH	Other fresh citrus fruits	539	
	59	200101	EO	All citrus fruit, fresh e.g. orange, grapefruit	25	
Fruit Other Fresh						1366
	60	21701	HH	Fresh apples	856	
	60	21801	HH	Fresh pears	283	
	60	22101	HH	Fresh stone fruit	343	
	60	22201	HH	Fresh grapes	481	
	60	22801	HH	Fresh bananas	1070	
	60	22901	HH	Fresh melons	252	
	60	23101	HH	Other fresh fruit	236	
	60	200102	EO	Banana, fresh	65	
	60	200103	EO	Apples, fresh	80	
	60	200104	EO	Pears, fresh	8	
	60	200105	EO	Stone fruit, fresh e.g. apricot, plum, peach, cherry, avocado	15	
	60	200106	EO	Grapes, fresh	17	

	60	200108	EO	Melon, fresh	16	
	60	200109	EO	Pineapple, fresh	8	
	60	200110	EO	Fresh fruit salad, without cream/ice cream	21	
	60	200111	EO	Other fresh fruit (kiwi, passion) & 'fruit', type not specified	10	
	60	200112	EO	Free school fruit	32	
Fruit Canned and Bottled						397
	61	23301	HH	Tinned peaches, pears & pineapples	239	
	61	23601	HH	All other tinned or bottled fruit	251	
	61	200301	EO	Tinned, stewed/baked or processed fruit - without cream/ice cream	14	
Fruit Dried						200
	62	24001	HH	Dried fruit	195	
	62	200201	EO	Dried fruit e.g. sultanas, raisins	5	
Fruit Berries and Frozen						299
	63	22701	HH	Other fresh soft fruit	283	
	63	24101	HH	Frozen strawberries, apple slices, peach halves, oranges and other frozen fruits	16	
	63	200107	EO	Soft fruit/berries, fresh e.g. strawberries, blackberries - NO cream/ice cream	16	
Fruit and Vegetable Juice						890
	64	19603	HH	Vegetable juices e.g. tomato juice, carrot juice	38	
	64	24801	HH	Pure fruit juices	750	
	64	260204	EO	PURE fruit juices	311	
	64	260205	EO	Vegetable juices e.g. tomato juice, carrot juice	10	
Bread White						1441
	65	25102	HH	White bread, standard, unsliced	209	
	65	25202	HH	White bread, standard, sliced	1283	
	65	25701	HH	White bread, premium, sliced and unsliced	125	
	65	25801	HH	White bread, soft grain, sliced and unsliced	27	
	65	220101	EO	White bread, with or without butter/margarine (toasted or untoasted)	172	
	65	220103	EO	White, without butter/marg (or butter/marg not spec)	287	
Bread Brown / Wholemeal						732
	66	25901	HH	Brown bread, sliced and unsliced	293	
	66	26001	HH	Wholemeal & granary bread, sliced and unsliced	532	
	66	220102	EO	Brown or wholemeal bread, with or without butter/margarine (toasted or untoasted)	23	
	66	220104	EO	Brown/ wholemeal , without butter/marg (or butter/marg not spec)	40	

Bread and Rolls Type Unspecified						1240
	67	26302	HH	Rolls - white, brown or wholemeal	1103	
	67	26304	HH	Vienna & French bread	354	
	67	26305	HH	Starch reduced bread & rolls	104	
Other Bread						594
	68	26308	HH	Other breads	481	
	68	26311	HHTA	Takeaway breads	83	
	68	100107	EO	Indian breads	25	
	68	220105	EO	Garlic bread	44	
	68	220106	EO	Croissant	21	
	68	220107	EO	Continental breads e.g. pitta, ciabatta, focaccio	24	
Malt Bread / Fruit Loaf						113
	69	26303	HH	Malt bread and fruit loaves	113	
Flour						133
	70	26401	HH	Flour	133	
Ready Prepared Sandwiches/ Filled Rolls						964
	71	26309	HH	Sandwiches	194	
	71	26310	HHTA	Sandwiches from takeaway	70	
	71	230101	EO	Meat-based, white bread/roll	444	
	71	230102	EO	Meat-based, brown bread/roll	84	
	71	230103	EO	Meat-based, bread not specified	9	
	71	230104	EO	Chicken/turkey-based, white bread/roll	266	
	71	230105	EO	Chicken/turkey-based, brown bread/roll	67	
	71	230106	EO	Chicken/turkey-based, bread not specified	2	
	71	230107	EO	Bacon and egg, white bread/roll; incl Bacon & Egg McMuffin	36	
	71	230108	EO	Bacon and egg, brown bread/roll	1	
	71	230109	EO	Bacon and egg, bread not specified	0	
	71	230110	EO	Fish-based, white bread/roll	200	
	71	230111	EO	Fish-based, brown bread/roll	72	
	71	230112	EO	Fish-based, bread not specified	7	
	71	230201	EO	Cheese-based, white bread/roll	273	
	71	230202	EO	Cheese-based, brown bread/roll	65	
	71	230203	EO	Cheese-based, bread not specified	4	
	71	230204	EO	Egg-based, white bread/roll incl Egg McMuffin	151	
	71	230205	EO	Egg-based, brown bread/roll	36	
	71	230206	EO	Egg-based, bread not specified	0	
	71	230207	EO	Vegetarian-based, white	98	

				bread/roll		
	71	230208	EO	Vegetarian-based, brown bread/roll	15	
	71	230209	EO	Vegetarian-based, bread not specified	3	
	71	230210	EO	Sweet-filled sandwich	1	
	71	230211	EO	Sandwiches & rolls not specified	126	
Buns, Scones, Teacakes and Muffins/Crumpets						732
	72	26701	HH	Buns, scones & teacakes	555	
	72	220108	EO	Muffins/ crumpets	27	
	72	290301	EO	Waffles & pancakes	48	
	72	290401	EO	Teacakes, scones, currant bun, iced bun	237	
Cakes and Pastries						1238
	73	27001	HH	Cakes & pastries , not frozen	1080	
	73	27002	HHTA	Takeaway pastries	48	
	73	29402	HH	Cakes & pastries - frozen	167	
	73	290201	EO	Doughnut	114	
	73	290202	EO	Cream pastries e.g. chocolate éclairs, profiteroles	57	
	73	290203	EO	Cream sponge/ gateau (not chocolate) e.g. Victoria sandwich	10	
	73	290204	EO	Rich chocolate cake & chocolate gateau e.g. Death by Chocolate	38	
	73	290205	EO	Fruit and other pies/pastries	162	
	73	290206	EO	Fruit cake	59	
	73	300103	EO	Cereal bars and cereal based cakes	68	
Savoury Biscuits						456
	74	27101	HH	Crispbread	154	
	74	27403	HH	Cream crackers & other unsweetened biscuits	333	
	74	300104	EO	Savoury biscuits	25	
Sweet Biscuits						1030
	75	27402	HH	Sweet biscuits (not chocolate) & cereal bars	966	
	75	300102	EO	Sweet biscuits incl half-coated chocolate biscuits	210	
Chocolate Biscuits						1031
	76	27702	HH	Chocolate biscuits	986	
	76	300101	EO	Fully-coated chocolate biscuits/ wafers	142	
Breakfast Cereals Wholegrain / High Fibre						672
	77	28101	HH	Oatmeal and oat products	230	
	77	28202	HH	Muesli	107	
	77	28203	HH	High fibre breakfast cereals	450	
	77	190101	EO	Muesli and Oat Crunch Cereals	4	
	77	190102	EO	Other high fibre breakfast cereals e.g. Allbran, Weetabix	2	
	77	190104	EO	Hot breakfast cereals e.g. porridge, Ready	4	

				Brek		
Breakfast Cereals Low in Fibre NMES>30%						379
	78	28204	HH	Sweetened breakfast cereals	375	
	78	190103	EO	Sweetened breakfast cereals e.g. Frosties, Sugar Puffs	5	
Breakfast Cereals Low in Fibre NMES<30%						363
	79	28205	HH	Other breakfast cereals	353	
	79	190105	EO	Other breakfast cereals and type not specified e.g. Cornflakes, Rice Krispies, Special K	11	
Puddings						759
	80	28502	HH	Canned or fresh carton custard	165	
	80	28503	HH	All canned milk puddings	151	
	80	28601	HH	Puddings	146	
	80	29907	HH	Cake, pudding & dessert mixes	177	
	80	240404	EO	Custard	41	
	80	290207	EO	Other sponge cakes/desserts (NOT cream cakes)	263	
	80	290208	EO	Custard desserts/sweet soufflé	10	
	80	290209	EO	Meringue desserts incl Pavlova	21	
	80	290210	EO	Cheesecake	27	
	80	290211	EO	Fool, trifle and mousse desserts	35	
	80	290213	EO	Milk and rice puddings incl tapioca, semolina	12	
	80	290214	EO	Other cakes and desserts incl not specified	110	
Rice						714
	81	28702	HH	Dried rice	300	
	81	28703	HH	Cooked rice	68	
	81	28704	HHTA	Takeaway rice	364	
	81	170101	EO	Fried rice and risotto	67	
	81	170102	EO	All cooked rice, NOT fried e.g. boiled, pilau, savoury	147	
Pizza						706
	82	29601	HH	Pizzas - frozen and not frozen	512	
	82	29602	HHTA	Takeaway pizza	188	
	82	130201	EO	Pizza - cheese & tomato, vegetable; incl Pizza, type not specified	168	
	82	130202	EO	Pizza - meat, fish or poultry	43	
Pasta, canned						343
	83	29501	HH	Canned pasta	343	
Pasta						794
	84	29502	HH	Dried and fresh pasta	681	
	84	29503	HHTA	Takeaway pasta & noodles	25	
	84	170103	EO	Pasta - NOT FILLED and plain noodles (incl pot noodle) -without sauce	199	

	84	170104	EO	Pasta - FILLED e.g. ravioli, tortellini - without sauce	15	
	84	170105	EO	Noodles with meat, vegetables etc	6	
Quiche						246
	85	29915	HH	Quiches & flans - frozen and not frozen	196	
	85	130104	EO	Quiche and cheese pies/pasties	62	
Soup						1027
	86	31801	HH	Soups - canned or cartons	723	
	86	31901	HH	Soups - dehydrated or powdered	198	
	86	32001	HHTA	Soups - from takeaway	20	
	86	180101	EO	Meat & fish soups	62	
	86	180102	EO	Vegetable-based soups	195	
	86	180103	EO	Chinese soups/ consommé (meat, fish or veg)	13	
	86	180104	EO	Soups, other; incl SOUP NOT SPECIFIED	215	
Salad Dressings, Sauces, Pickles and Mayonnaise						1201
	87	32302	HH	Salad dressings	490	
	87	32702	HH	Pickles	258	
	87	32703	HH	Sauces	893	
	87	32704	HHTA	Takeaway sauces and mayonnaise	97	
	87	240107	EO	Fruit/ vegetable-based condiments	74	
	87	240108	EO	Other condiments/sauces	54	
	87	240201	EO	Salad dressings and dips	29	
	87	240202	EO	Mayonnaise	178	
Flour / Pastry Food Items						693
	88	29919	HH	Other cereal foods-frozen and not frozen	693	
Ice Cream						748
	89	33203	HH	Ice cream tub or block	353	
	89	33302	HH	Ice cream cornets, choc-ices, lollies with ice cream	278	
	89	33304	HHTA	Takeaway ice cream, ice cream products, milkshakes	51	
	89	290101	EO	Ice cream in a cone/cornet/wafer and ice cream desserts	239	
	89	290103	EO	Ice cream scoop/tub incl served with dessert	146	
Ice Lollies						211
	90	33303	HH	Ice lollies, sorbet, frozen mousse, frozen yoghurt	148	
	90	290104	EO	Iced lollies and sorbets	84	
Chocolate Confectionery						1245
	91	35001	HH	Chocolate bars - solid	714	
	91	35101	HH	Chocolate bars - filled	907	
	91	280101	EO	Chocolate bars & sweets - SOLID, UNFILLED incl 'chocolate', type not specified	378	
	91	280102	EO	Chocolate-coated bar &	472	

				sweets - FILLED e.g. Mars, Snickers, Minstrels		
Sugar Confectionery						973
	92	35301	HH	Mints	215	
	92	35302	HH	Boiled sweets	699	
	92	35401	HH	Fudges, toffees, caramels	154	
	92	280105	EO	Mints e.g. Polo, Extra Strong	127	
	92	280106	EO	Boiled sweets, jellies e.g. fruit gums; incl 'sweets', type not specified	336	
	92	280107	EO	Toffee/fudge, uncoated e.g. Toffos, Choc Eclairs, caramels	59	
	92	280108	EO	Pick n mix, nougat, liquorice and other sweets	167	
Chewing Gum						406
	93	35202	HH	Chewing gum	283	
	93	280104	EO	Chewing gum & bubble gum	194	
Crisps and Savoury Snacks						1283
	94	20002	HH	Crisps & potato snacks	1047	
	94	29909	HH	Cereal snacks	501	
	94	29916	HHTA	Takeaway crisps, savoury snacks, popcorn, popadums, prawn crackers	97	
	94	310102	EO	Potato crisps/snacks incl 'crisps', prawn crackers	637	
	94	310103	EO	Corn snacks, based on maize	105	
	94	310104	EO	Wheat-based savoury snack	19	
	94	310201	EO	Popcorn	68	
Nuts and Edible Seeds						297
	95	24502	HH	Nuts & edible seeds	263	
	95	310101	EO	Nuts, nut products and seeds	48	
Soft Drinks Not Low Calorie						1401
	96	34001	HH	Soft drinks, concentrated, not low calorie	403	
	96	34101	HH	Soft drinks, not concentrated, not low calorie	1170	
	96	260203	EO	Soft drink (incl carbonates & still), not low calorie; incl low calorie/ not low cal not specified	987	
	96	260206	EO	Soft drink where pure juice/juice drink not specified	0	
Soft Drinks Low Calorie						858
	97	34301	HH	Soft drinks, concentrated, low calorie	127	
	97	34401	HH	Soft drinks, not concentrated, low calorie	701	
	97	260202	EO	Soft drink (incl carbonates & still) , LOW CALORIE	441	

Tea						885
	98	30401	HH	Tea	558	
	98	31001	HHTA	Tea and coffee from takeaway	6	
	98	250104	EO	Tea, white incl BLACK/WHITE NOT SPECIFIED	519	
	98	250105	EO	Tea, black incl Chinese tea, herbal tea, fruit tea	33	
Coffee						936
	99	30701	HH	Coffee beans and ground coffee	82	
	99	30801	HH	Instant coffee	453	
	99	30901	HH	Coffee essences	2	
	99	250101	EO	Coffee, black incl espresso	71	
	99	250102	EO	Coffee, white incl cappuccino, latte	319	
	99	250103	EO	Coffee, black/ white not specified	457	
Hot Milky Drinks - Dry Weight						197
	100	31201	HH	Cocoa and chocolate drinks	84	
	100	31301	HH	Malt drinks & chocolate versions of malted drinks	22	
	100	250106	EO	Hot chocolate/cocoa, with milk or water	102	
Mineral Water						574
	101	31401	HH	Mineral or spring waters	379	
	101	260201	EO	Mineral water	311	
Lager / Beer / Cider						471
	102	38102	HH	Beers	160	
	102	38202	HH	Lagers & continental beers	339	
	102	38302	HH	Ciders & Perry	73	
Lager / Beer / Cider Consumed Outside the Home						646
	103	270204	EO	Cider/Perry - half pint/bottle	22	
	103	270205	EO	Cider - pint/can/size not specified	35	
	103	270301	EO	Bitter - half pint/bottle	38	
	103	270302	EO	Bitter - pint/can/size not specified	169	
	103	270303	EO	Lager/ other beers/ 'beer' not specified - half pint/bottle	181	
	103	270304	EO	Lager/ other beers/ 'beer' not specified - pint/can/size not specified	504	
Wine						578
	104	38402	HH	Champagne, sparkling wines & wine with mixer	60	
	104	38403	HH	Table wine	528	
	104	38601	HH	Fortified wines	62	
Wine Consumed Outside the Home						260
	105	270201	EO	Wine (not sparkling) incl wine not specified	242	
	105	270202	EO	Sparkling wines (e.g.	13	

				Champagne); Wine with mixer (e.g. Bucks Fizz)		
	105	270203	EO	Fortified wine e.g. sherry, port, vermouth	17	
Spirits and Liqueurs						339
	106	38701	HH	Spirits	320	
	106	38801	HH	Liqueurs & cocktails	36	
Spirits and Liqueurs not Diluted Consumed Outside the Home						216
	107	270101	EO	Spirits	195	
	107	270102	EO	Liqueurs	29	
Cocktails / Spirits / Liqueurs with Mixers consumed Outside the Home						264
	108	270103	EO	Cocktails	16	
	108	270104	EO	Spirits/liqueurs with mixer e.g. gin & tonic, Bacardi & coke	261	
Alcopops Consumed outside the Home						114
	110	270206	EO	Alcoholic soft drinks (alco pops), and ready-mixed bottled drinks	114	
Meat Pies / Pasties						791
	111	8302	HH	Meat pies - ready to eat	419	
	111	8303	HH	Sausage rolls - ready to eat	184	
	111	8401	HH	Meat pies, pasties & puddings - frozen or not frozen	421	
Meat Pies / Pasties Takeaway / Eaten Out						460
	112	9501	HHTA	Takeaway meat pies & pasties	70	
	112	110501	EO	Meat pies & pasties	310	
	112	110502	EO	Meat pies	17	
	112	110503	EO	Sausage Roll (pastry)	188	

Appendix 9

EFS foods and their factor loadings for dietary patterns

Food Grouping	Component 1	Food Grouping	Component 2	Food Grouping	Component 3	Food Grouping	Component 4
Takeaway and Eaten Out Chips	0.571	Fruit Other Fresh	0.496	Cakes and Pastries	0.326	Onions	0.643
Meat Dishes Traditional Eaten Out	0.567	Vegetables Lettuce and Cucumber	0.495	Buns, Scones, Teacakes and Muffins/Crumpets	0.275	Tomatoes	0.490
Ethnic Main Meal Dishes Takeaway / Eaten Out	0.505	Yoghurt / Fromage Frais	0.406	White Fish	0.270	Fresh Potatoes	0.438
Processed Meat Products Takeaway / Eaten Out	0.469	Vegetables Other Fresh and Frozen	0.364	Breakfast Cereals Wholegrain / High Fibre	0.270	Wine	0.400
Wine Consumed Outside the Home	0.430	Fruit and Vegetable Juice	0.362	Butter	0.269	Vegetables Root Fresh	0.393
Oily Fish Dishes Eaten Out	0.412	Other Bread	0.362	Bread Brown / Wholemeal	0.268	Red Meat	0.364
White Fish Dishes Eaten Out	0.399	Mineral Water	0.323	Sweet Biscuits	0.262	Vegetables Green	0.362
Sauces Eaten Out	0.399	Fruit Citrus Fresh	0.310	Vegetables Green	0.255	Vegetables Other Fresh and Frozen	0.329
Ready Prepared Sandwiches/ Filled Rolls	0.391	Salad Dressings, Sauces, Pickles and Mayonnaise	0.292	Sugar and Preserves	0.251	Fresh Herbs	0.261
Meat Pies / Pasties Takeaway / Eaten Out	0.382	Fresh Herbs	0.289	Fruit Other Fresh	0.243	Shellfish	0.218
Lager / Beer / Cider Consumed Outside the Home	0.376	Cheese	0.278	Oily Fish Dishes Eaten Out	0.241	Household Processed Meat Products	0.182
Salad Main Meal Eaten Out	0.326	Bread Brown / Wholemeal	0.268	Fruit Citrus Fresh	0.239	Lager / Beer / Cider Consumed Outside the Home	0.177
Eggs	0.322	Wine Consumed Outside the Home	0.262	Oil Rich Fish	0.217	Poultry	0.170
Eaten Out Chips Fast Food Outlet	0.303	Oil Rich Fish	0.261	Wine Consumed Outside the Home	0.184	Vegetables Pulses	0.170
Cocktails / Spirits / Liqueurs with Mixers consumed Outside the Home	0.292	Savoury Biscuits	0.261	Vegetables Root Fresh	0.177	Fruit Berries and Frozen	0.166
Spirits and Liqueurs not Diluted Consumed Outside the Home	0.249	Tomatoes	0.254	Fresh Potatoes	0.177	Spirits and Liqueurs	0.156
Pizza	0.234	Breakfast Cereals Wholegrain / High Fibre	0.246	Tea	0.176	Lager / Beer / Cider	0.154
Takeaway Fish	0.206	Vegetable Based Ready Meals	0.236	Fruit Dried	0.167	Vegetables Lettuce and Cucumber	0.143
Butter Margarine Eaten Out	0.198	Pasta	0.227	White Fish Dishes Eaten Out	0.157	Fruit Other Fresh	0.140
Takeaway Vegetable Dishes and Products	0.178	Wine	0.210	Soup	0.148	Fruit Citrus Fresh	0.135
Lager / Beer /	0.155	Salad Main Meal	0.198	Milk Semi-	0.144	Eggs	0.135

Cider		Eaten Out		Skimmed			
Alcopops Consumed outside the Home	0.155	Nuts and Edible Seeds	0.192	Cream	0.139	Butter	0.128
Salad Not Meal Sized Eaten Out	0.148	Fish Based Ready Meals / Convenience Products	0.191	Malt Bread / Fruit Loaf	0.120	Cheese	0.128
Wine	0.141	Tinned / Bottled Fish	0.182	Butter Margarine Eaten Out	0.119	Cooking Oil	0.126
Rice	0.120	Salad Not Meal Sized Eaten Out	0.180	Dairy Desserts	0.112	Flour	0.118
Crisps and Savoury Snacks	0.119	Vegetables Green	0.175	Ice Cream	0.110	Vegetables Peas	0.117
Mineral Water	0.117	Oily Fish Dishes Eaten Out	0.173	Meat Dishes Traditional Eaten Out	0.110	Oil Rich Fish	0.110
Spirits and Liqueurs	0.076	Ready Prepared Sandwiches/ Filled Rolls	0.172	Salad Main Meal Eaten Out	0.107	Puddings	0.099
Chewing Gum	0.066	Vegetables Root Fresh	0.169	Fruit Berries and Frozen	0.106	White Fish	0.098
Other Bread	0.062	Fruit Dried	0.158	Breakfast Cereals Low in Fibre NMES<30%	0.088	Spirits and Liqueurs not Diluted Consumed Outside the Home	0.094
Vegetables Other Fresh and Frozen	0.058	Rice	0.146	Fish Based Ready Meals / Convenience Products	0.078	Vegetables Baked Beans	0.094
Quiche	0.056	Shellfish	0.138	Milk Whole	0.075	Nuts and Edible Seeds	0.088
Meat Based Ready Meals	0.052	Fruit Berries and Frozen	0.137	Flour	0.074	Bread White	0.085
Soft Drinks Low Calorie	0.052	Milk Skimmed	0.136	Yoghurt / Fromage Frais	0.072	Fruit Dried	0.076
Vegetable Based Ready Meals	0.048	Poultry	0.134	Vegetables Other Fresh and Frozen	0.072	Wine Consumed Outside the Home	0.071
Shellfish	0.044	Onions	0.123	Coffee	0.071	Tinned / Bottled Fish	0.067
Nuts and Edible Seeds	0.042	Meat Dishes Traditional Eaten Out	0.123	Takeaway Fish	0.070	Coffee	0.067
Bread White	0.041	Sauces Eaten Out	0.122	Spirits and Liqueurs	0.067	Margarine	0.061
Soup	0.035	Soft Drinks Low Calorie	0.114	Reduced Fat Spread	0.064	Salad Dressings, Sauces, Pickles and Mayonnaise	0.059
Unspecified Milk	0.029	Meat Based Ready Meals	0.112	Quiche	0.064	White Fish Dishes Eaten Out	0.038
Fish Based Ready Meals / Convenience Products	0.022	Milk Semi-Skimmed	0.110	Savoury Biscuits	0.064	Bread Brown / Wholemeal	0.032
Soft Drinks Not Low Calorie	0.018	Quiche	0.098	Puddings	0.056	Vegetables Other Canned	0.027
Fresh Herbs	0.010	Vegetables Other Canned	0.094	Chocolate Biscuits	0.055	Meat Pies / Pasties Takeaway / Eaten Out	0.024
Milk Whole	0.004	Soup	0.090	Red Meat	0.049	Bread and Rolls Type Unspecified	0.022
Buns, Scones, Teacakes and Muffins/Crumpets	0.003	Cocktails / Spirits / Liqueurs with Mixers consumed Outside the Home	0.084	Bread and Rolls Type Unspecified	0.039	Pasta	0.022

Fruit and Vegetable Juice	0.001	Dairy Desserts	0.068	Milk Skimmed	0.037	Rice	0.020
Pasta	-0.005	Coffee	0.066	Margarine	0.034	Takeaway Vegetable Dishes and Products	0.018
Vegetables Lettuce and Cucumber	-0.007	Convenience Meat Products	0.061	Mineral Water	0.030	Quiche	0.018
Milk Semi-Skimmed	-0.016	Chewing Gum	0.054	Fruit Canned and Bottled	0.029	Sugar and Preserves	0.018
Chocolate Confectionery	-0.018	Crisps and Savoury Snacks	0.053	Sugar Confectionery	0.024	Fruit Canned and Bottled	0.016
Margarine	-0.021	Ethnic Main Meal Dishes Takeaway / Eaten Out	0.051	Fresh Herbs	0.021	Cream	0.014
Coffee	-0.022	Buns, Scones, Teacakes and Muffins/Crumpets	0.048	Onions	0.019	Milk Semi-Skimmed	0.010
Fruit Berries and Frozen	-0.023	Sweet Biscuits	0.048	Sauces Eaten Out	0.017	Milk Whole	0.007
Butter	-0.023	Reduced Fat Spread	0.047	Meat Pies / Pasties	0.017	Oily Fish Dishes Eaten Out	0.005
Ice Cream	-0.024	Cream	0.044	Nuts and Edible Seeds	0.011	Tea	0.004
Oil Rich Fish	-0.030	Chocolate Confectionery	0.040	Hot Milky Drinks - Dry Weight	0.009	Other Bread	0.003
Convenience Meat Products	-0.034	Alcopops Consumed outside the Home	0.039	Vegetables Pulses	0.006	Hot Milky Drinks - Dry Weight	0.000
White Fish	-0.035	Flour	0.032	Cheese	-0.003	Fruit and Vegetable Juice	-0.011
Meat Pies / Pasties	-0.035	Malt Bread / Fruit Loaf	0.032	Cooking Oil	-0.007	Reduced Fat Spread	-0.012
Breakfast Cereals Low in Fibre NMES<30%	-0.036	Fruit Canned and Bottled	0.026	Vegetables Peas	-0.010	Salad Not Meal Sized Eaten Out	-0.013
Flour / Pastry Food Items	-0.038	Flour / Pastry Food Items	0.024	Eggs	-0.015	Alco pops Consumed outside the Home	-0.013
Onions	-0.047	Ice Lollies	0.022	Takeaway Vegetable Dishes and Products	-0.028	Flour / Pastry Food Items	-0.018
Cheese	-0.050	Cakes and Pastries	0.018	Salad Not Meal Sized Eaten Out	-0.033	Salad Main Meal Eaten Out	-0.019
Vegetables Baked Beans	-0.052	Breakfast Cereals Low in Fibre NMES<30%	0.016	Vegetables Lettuce and Cucumber	-0.035	Breakfast Cereals Wholegrain / High Fibre	-0.020
Sugar Confectionery	-0.054	Breakfast Cereals Low in Fibre NMES>30%	0.016	Meat Based Ready Meals	-0.045	Ethnic Main Meal Dishes Takeaway / Eaten Out	-0.022
Ice Lollies	-0.055	Hot Milky Drinks - Dry Weight	0.010	Flour / Pastry Food Items	-0.047	Unspecified Milk	-0.028
Dairy Desserts	-0.057	Ice Cream	0.006	Poultry	-0.048	Pasta, canned	-0.033
Hot Milky Drinks - Dry Weight	-0.058	White Fish Dishes Eaten Out	0.003	Lager / Beer / Cider	-0.054	Cocktails / Spirits / Liqueurs with Mixers consumed Outside the Home	-0.037
Vegetables Pulses	-0.059	White Fish	-0.008	Wine	-0.055	Takeaway Fish	-0.039
Cream	-0.059	Lager / Beer / Cider Consumed Outside the Home	-0.009	Shellfish	-0.055	Meat Dishes Traditional Eaten Out	-0.042
Vegetables Root Fresh	-0.060	Vegetables Pulses	-0.010	Fruit and Vegetable Juice	-0.059	Ice Cream	-0.043
Salad Dressings, Sauces, Pickles	-0.060	Spirits and Liqueurs not	-0.017	Ice Lollies	-0.059	Convenience Meat Products	-0.044

and Mayonnaise		Diluted Consumed Outside the Home					
Malt Bread / Fruit Loaf	-0.065	Butter Margarine Eaten Out	-0.021	Unspecified Milk	-0.068	Breakfast Cereals Low in Fibre NMES<30%	-0.046
Tomatoes	-0.067	Pizza	-0.022	Spirits and Liqueurs not Diluted Consumed Outside the Home	-0.072	Soup	-0.048
Fruit Citrus Fresh	-0.069	Eaten Out Chips Fast Food Outlet	-0.023	Bread White	-0.073	Vegetable Based Ready Meals	-0.053
Fresh Potatoes	-0.069	Spirits and Liqueurs	-0.034	Vegetable Based Ready Meals	-0.075	Mineral Water	-0.055
Fruit Canned and Bottled	-0.070	Unspecified Milk	-0.045	Meat Pies / Pasties Takeaway / Eaten Out	-0.082	Meat Pies / Pasties	-0.055
Milk Skimmed	-0.071	Vegetables Baked Beans	-0.046	Other Bread	-0.092	Milk Skimmed	-0.062
Pasta, canned	-0.081	Chocolate Biscuits	-0.046	Cocktails / Spirits / Liqueurs with Mixers consumed Outside the Home	-0.096	Ice Lollies	-0.064
Puddings	-0.082	Bread and Rolls Type Unspecified	-0.047	Household Processed Meat Products	-0.099	Butter Margarine Eaten Out	-0.067
Cakes and Pastries	-0.084	Vegetables Peas	-0.052	Tomatoes	-0.117	Sauces Eaten Out	-0.068
Poultry	-0.087	Cooking Oil	-0.056	Ethnic Main Meal Dishes Takeaway / Eaten Out	-0.125	Ready Prepared Sandwiches/ Filled Rolls	-0.082
Fruit Dried	-0.087	Sugar Confectionery	-0.056	Tinned / Bottled Fish	-0.126	Malt Bread / Fruit Loaf	-0.083
Vegetables Green	-0.090	Puddings	-0.057	Alco pops Consumed outside the Home	-0.130	Chewing Gum	-0.085
Tinned / Bottled Fish	-0.090	Tea	-0.067	Chocolate Confectionery	-0.135	Buns, Scones, Teacakes and Muffins/Crumpets	-0.095
Red Meat	-0.097	Butter	-0.071	Vegetables Other Canned	-0.139	Takeaway and Eaten Out Chips	-0.096
Breakfast Cereals Wholegrain / High Fibre	-0.098	Takeaway Vegetable Dishes and Products	-0.074	Pasta, canned	-0.145	Processed Meat Products Takeaway / Eaten Out	-0.103
Flour	-0.101	Red Meat	-0.082	Takeaway and Eaten Out Chips	-0.151	Savoury Biscuits	-0.104
Bread Brown / Wholemeal	-0.105	Lager / Beer / Cider	-0.089	Chewing Gum	-0.156	Eaten Out Chips Fast Food Outlet	-0.108
Vegetables Other Canned	-0.108	Processed Potato	-0.098	Rice	-0.162	Yoghurt / Fromage Frais	-0.110
Processed Potato	-0.110	Eggs	-0.102	Convenience Meat Products	-0.176	Pizza	-0.120
Cooking Oil	-0.113	Pasta, canned	-0.119	Vegetables Baked Beans	-0.185	Processed Potato	-0.120
Vegetables Peas	-0.113	Meat Pies / Pasties Takeaway / Eaten Out	-0.129	Soft Drinks Low Calorie	-0.195	Fish Based Ready Meals / Convenience Products	-0.121
Savoury Biscuits	-0.114	Processed Meat Products Takeaway / Eaten Out	-0.131	Ready Prepared Sandwiches/ Filled Rolls	-0.206	Breakfast Cereals Low in Fibre NMES>30%	-0.141
Tea	-0.116	Takeaway Fish	-0.153	Breakfast Cereals Low in Fibre	-0.207	Soft Drinks Low Calorie	-0.142

				NMES>30%			
Bread and Rolls Type Unspecified	-0.121	Soft Drinks Not Low Calorie	-0.158	Lager / Beer / Cider Consumed Outside the Home	-0.209	Soft Drinks Not Low Calorie	-0.158
Breakfast Cereals Low in Fibre NMES>30%	-0.123	Sugar and Preserves	-0.163	Processed Potato	-0.234	Dairy Desserts	-0.159
Fruit Other Fresh	-0.131	Margarine	-0.172	Eaten Out Chips Fast Food Outlet	-0.273	Sugar Confectionery	-0.194
Chocolate Biscuits	-0.133	Fresh Potatoes	-0.172	Pasta	-0.311	Cakes and Pastries	-0.196
Yoghurt / Fromage Frais	-0.140	Takeaway and Eaten Out Chips	-0.186	Pizza	-0.315	Crisps and Savoury Snacks	-0.197
Sugar and Preserves	-0.178	Household Processed Meat Products	-0.241	Soft Drinks Not Low Calorie	-0.333	Chocolate Biscuits	-0.226
Household Processed Meat Products	-0.180	Meat Pies / Pasties	-0.262	Processed Meat Products Takeaway / Eaten Out	-0.367	Sweet Biscuits	-0.229
Sweet Biscuits	-0.184	Milk Whole	-0.389	Salad Dressings, Sauces, Pickles and Mayonnaise	-0.417	Chocolate Confectionery	-0.242
Reduced Fat Spread	-0.196	Bread White	-0.465	Crisps and Savoury Snacks	-0.460	Meat Based Ready Meals	-0.243

Appendix 10

Components of the EFS Diet Quality Index and Scoring System

20th February 2008		
FOODS	Scoring	Rationale
Fruit and Vegetables		
A sliding score from 0 to 10 used to score intake. Total weight adjusted to one portion of fruit juice (150ml = 80g fruit) & one portion of baked beans per person per day	Weight divided by 400g x 10 Minimum Score = 0; Maximum Score = 10	SDT = $\geq 400\text{g}$ / day WHO/FAO expert consultation on diet, nutrition and prevention of chronic diseases.
Fish		
Addition of scores from Oily and White Fish	Sliding scale from 0 to 10, with any scores between 10 and 15 below adjusted to 10 Minimum Score = 0; Maximum Score = 10	SACN - 2 140g portions of cooked fish per week of which 1 should be oily
Oily Fish A sliding score form 0 to 10 used to score intake	Weight divided by 280g x 10 Minimum Score = 0; Maximum Score = 10	
White Fish A sliding score form 0 to 5 used to score intake	Weight divided by 140g x 5 Minimum Score = 0; Maximum Score = 5	
Meat and Meat Products		
Addition of Scores from Red Meat and Processed Meat	Score out of 10	WCRF, 2007
Red Meat A score of 0 or 5 used to score intake	$\leq 71.4\text{g} / \text{day} = 5$ $> 71.4\text{g} / \text{day} = 0$	
Processed Meat A score of 0 or 5 used to score intake	$0\text{g} / \text{day} = 5$ $> 0\text{g} / \text{day} = 0$ Minimum Score = 0; Maximum Score = 10	
NUTRIENTS	Scoring	Rationale
Fat		
A score of 0 or 10 used to score intake	$\leq 35\%$ food energy = 10 $> 35\%$ food energy = 0	SDT and DRV $\leq 35\%$ food energy
Saturated Fat		
A score of 0 or 10 used to score intake	$\leq 11\%$ food energy = 10 $> 11\%$ food energy = 0	SDT and DRV $\leq 11\%$ food energy

Starch		
A score of 0 or 10 used to score intake	$\geq 39\%$ food energy = 10 $< 39\%$ food energy = 0	DRV $\leq 39\%$ food energy
NME Sugars		
A score of 0 or 10 used to score intake	$\leq 11\%$ food energy = 10 $> 11\%$ food energy = 0	DRV $\leq 11\%$ food energy
NSP		
A sliding score of 0 to 10 used to score intake	Weight divided by 18g x 10 Minimum Score = 0; Maximum Score = 10	DRV
Alcohol		
A score of 0 or 5 used to score intake	$\leq 5\%$ total energy = 5 $> 5\%$ total energy = 0	

Appendix 11

EFS Summary Coding Frame for Food Elements of DQI

Fruit and Vegetables Including Fruit (and Vegetable) Juice and Baked Beans

NB: Further adjusted to 1 portion of fruit juice (150ml equivalent to 80g) & baked beans per 2000kcal

MAFF CODE	Description	Factor
16201	Cabbages, fresh	1
16301	Brussels sprouts, fresh	1
16401	Cauliflower, fresh	1
16701	Lettuce & leafy salads	1
16702	Prepared lettuce salads	1
16801	Peas, fresh	1
16901	Beans, fresh	1
17101	Other fresh green vegetables	1
17201	Carrots, fresh	1
17301	Turnips & swede, fresh	1
17401	Other root vegetable, fresh	1
17501	Onions, leeks, shallots, fresh	1
17601	Cucumbers, fresh	1
17701	Mushrooms, fresh	1
17801	Tomatoes, fresh	1
18301	Stewpack, stir-fry pack, pack of mixed vegetables	1
18302	Stem vegetables	1
18303	Marrow, courgettes, aubergine, pumpkin and other fresh vegetables	1
18304	Fresh herbs	1
18401	Tomatoes, canned or bottled	1
18501	Peas, canned	1
18802	Baked beans in sauce	1
18803	Other canned beans & pulses	1
19101	Other canned vegetables	1
19201	Dried pulses other than air-dried	6.19
19501	Air-dried vegetables	14.39
19602	Tomato puree and vegetable purees	5.2
19603	Vegetable juices e.g. tomato juice, carrot juice	1
20301	Peas, frozen	1
20401	Beans, frozen	1
20601	Ready meals & other vegetable products - frozen or not frozen	0.4
20604	All vegetable takeaway products	0.4
20801	Other frozen vegetables	1
21001	Fresh oranges	1
21401	Other fresh citrus fruits	1
21701	Fresh apples	1
21801	Fresh pears	1
22101	Fresh stone fruit	1
22201	Fresh grapes	1
22701	Other fresh soft fruit	1
22801	Fresh bananas	1

22901	Fresh melon	1
23101	Other fresh fruit	1
23301	Tinned peaches, pears & pineapples	0.6
23601	All other tinned or bottled fruit	0.52
24001	Dried fruit	3.71
24101	Frozen strawberries, apple slices, peach halves, oranges and other frozen fruits	1
24801	Pure fruit juices	1
29601	Pizzas - frozen and not frozen	0.16
29602	Takeaway pizza	0.16
31801	Soups - canned or cartons	0.3
32001	Soups - from takeaway	0.3
32201	Meals on wheels - items not specified	0.2
100103	Vegetable or fruit based curry	0.4
100104	Dhal & Dhal dishes	0.4
100106	Other Indian dishes	0.4
100108	Indian buffet or shared meal or unspecified Indian meal	0.2
100201	Chinese or Thai meat or fish based dishes excluding curry	0.2
100202	Chop suey and fu yung dishes	0.2
100203	Chinese or Thai vegetable based main course dishes	0.4
100204	Chinese or Thai curry	0.2
100206	Other Chinese or Thai dishes	0.2
100207	Chinese or Thai buffet or shared meal or unspecified Chinese or Thai meal	0.2
100301	All other ethnic meals	0.2
110601	Meat and vegetable stews, casseroles or hotpots	0.2
110602	Chicken or turkey stews, casseroles or hotpots	0.2
110603	Meat lasagne, cannelloni, moussaka and other meat-based oven baked dishes	0.2
130201	Pizza - cheese & tomato, vegetable; incl Pizza, type not specified	0.4
130202	Pizza - meat, fish or poultry	0.16
150101	Lettuce & cress	1
150102	Other green vegetables e.g. spinach, cabbage, sprouts	1
150201	Peppers - raw/cooked	1
150202	Courgettes, marrow, aubergine, pumpkin, plantain, cucumbers	1
150203	Peas & sweetcorn	1
150204	Baked Beans and other beans (not green beans) & pulses	1
150205	Tomato - fresh, raw	1
150206	Tomato - cooked or processed	1
150301	Carrots	1
150302	Onions - raw or cooked incl 'onions' type not specified	1
150303	Onions - fried	1
150304	Other root vegetables/ tubers e.g. turnip, parsnip, radish, beetroot	1
150401	Mushrooms - raw or cooked	1
150501	Mixed vegetables and 'veg' type not specified.	1
150502	Other vegetables e.g. artichoke, asparagus	1
150503	Vegetables in batter or breadcrumbs and deep fried veg e.g. onion rings	0.4
150504	Onion and other vegetable bhajis & pakora	0.4
150601	Veggie burger, bean burger, veggie sausage, nut roast	0.4
150602	Vegetable lasagne, veg cannelloni, veg moussaka and other oven baked vegetable based dishes	0.4

150603	Stuffed vegetables (e.g. stuffed pepper) and vegetable based starter	0.4
150604	Vegetable based stews & casseroles and veg-based pies	0.4
160101	Mixed salad, main course - without dressing	1
160102	Mixed salad, side dish - without dressing; incl 'salad' type not specified	1
160103	Green salad - without dressing	1
160201	Vegetable/ fruit and nut salad - with dressing	0.4
160301	Meat salad e.g. beef, lamb salads	0.2
160302	Chicken or turkey salad	0.2
160303	Fish salad e.g. tuna, salmon salads	0.2
160401	Cheese salad including ploughman's	0.2
160402	Egg salad	0.2
160501	Other salads e.g. Greek, Florida, Russian	0.2
160601	Salad buffet or buffet meal where items not specified	0.2
170105	Noodles with meat, vegetables etc.	0.2
180102	Vegetable-based soups	0.3
180104	Soups, other; incl SOUP NOT SPECIFIED	0.3
200101	All citrus fruit, fresh e.g. orange, grapefruit	1
200102	Banana, fresh	1
200103	Apples, fresh	1
200104	Pears, fresh	1
200105	Stone fruit, fresh e.g. apricot, plum, peach, cherry, avocado	1
200106	Grapes, fresh	1
200107	Soft fruit/berries, fresh e.g. strawberries, blackberries - NO cream/ice cream	1
200108	Melon, fresh	1
200109	Pineapple, fresh	1
200110	Fresh fruit salad, without cream/ice cream	1
200111	Other fresh fruit (kiwi, passion) & 'fruit', type not specified	1
200112	Free school fruit	1
200201	Dried fruit e.g. sultanas, raisins	3.71
200301	Tinned, stewed/baked or processed fruit - without cream/ice cream	1
230207	Vegetarian based sandwich on white bread or roll	0.4
230208	Vegetarian based sandwich on brown bread or roll	0.4
230209	Vegetarian based sandwich bread not specified	0.4
240102	Meat-based sauce e.g. Bolognese, chilli con carne	0.2
240104	Tomato-based sauce containing vegetables, incl ratatouille	0.4
240203	Coleslaw	0.4
240301	Fruit filling e.g. peaches for pancakes	1
240302	Vegetable filling	0.4
240701	Unspecified meal e.g. 'meal', 'school meal' or 'meal at work'	0.2
260204	PURE fruit juices	1
260205	Vegetable juices e.g. tomato juice, carrot juice	1
290205	Fruit and other pies/pastries	0.5

Oil Rich Fish

NB: Factors to adjust to cooked weight per week i.e. cooked weight per 2000kcal x 7 days

MAFF CODE	Description	Factor
10601	Herrings & other blue fish, fresh or chilled	6.195
10602	Herrings & other blue fish, frozen	6.195
10701	Salmon, fresh or chilled	6.58
10702	Salmon, frozen	6.58
10801	Blue fish, dried or salted or smoked	17.77
11901	Tinned salmon	7
12001	Other tinned or bottled fish	1.33
12103	Ready meals & other fish products - frozen or not frozen	1.05
120201	Trout, tuna and salmon only - fresh - without sauce/dressing	7
120202	Other fatty fish - without sauce/dressing e.g. herring, mackerel, sardines	7
120401	Kippers and other smoked fish e.g. smoked salmon	7
120603	Fish based pie or other dish e.g. paella, kedgeree, tuna pasta bake	1.05
160303	Fish salad e.g. tuna, salmon salads	0.7

White Fish

NB: Factors to adjust to cooked weight per week i.e. cooked weight per 2000kcal x 7 days

MAFF CODE	Description	Factor
10201	White fish, fresh or chilled	6.58
10202	White fish, frozen	6.58
11401	White fish, dried or salted or smoked	18.9
11702	Shellfish, fresh or chilled	7
11703	Shellfish, frozen	7
11801	Takeaway fish	3.85
12001	Other tinned or bottled fish	5.67
12103	Ready meals & other fish products - frozen or not frozen	2.45
12304	Takeaway fish products	3.5
12305	Takeaway fish based meals	3.5
100101	Meat or fish based curry with sauce	1.75
100102	Meat or fish based curry without sauce	1.75
100201	Chinese or Thai meat or fish based dishes excluding curry	1.75
120101	White fish - grilled, steamed, baked or boiled - no sauce	7
120102	White fish - fried (incl in batter/breadcrumbs) - no sauce	3.85
120301	Shellfish - without sauce or dressing e.g. prawns, shrimps, oysters, crab	7
120501	Other fish products and unspecified 'fish' e.g. squid, sushi, crabsticks	7
120601	Fish, processed, in breadcrumbs (fish fingers, fish cakes, scampi) - without sauce/dressing	3.5
120602	Fish burgers [in bun]	1.575
120603	Fish based pie or other dish e.g. paella, kedgeree, tuna pasta bake	2.45
130202	Pizza - meat, fish or poultry	0.175
160303	Fish salad e.g. tuna, salmon salads	0.7
230110	Fish based sandwich on white bread or roll	2.31
230111	Fish based sandwich on brown bread or roll	2.31
230112	Fish based sandwich bread not specified	2.31
240304	Fish-based filling e.g. tuna mayonnaise	4.55

Red Meat

NB: Factors to adjust to cooked weight of meat portion

MAFF CODE	Description	Factor
3102	Beef: joints (including sides) on the bone	0.66
3103	Beef: joints (boned)	0.62
3104	Beef steak (less expensive)	0.62
3105	Beef steak (more expensive)	0.75
3106	Beef, minced	0.82
3107	All other beef and veal	0.67
3601	Mutton	0.7
3602	Lamb joints	0.69
3603	Lamb chops	0.69
3604	All other lamb	0.73
4101	Pork joints	0.66
4102	Pork chops – uncooked	0.79
4103	Pork fillets and steak	0.65
4104	All other pork – uncooked	0.68
4603	Ox liver	0.91
4604	Lambs liver	0.78
4605	Pigs liver	0.88
4607	All other liver	0.89
5101	All offal's other than liver	0.81
7801	Other meat (rabbit, venison, etc) – uncooked	0.9
8901	COMPLETE meat-based ready meals	0.19
9505	MEAT- based meals incl Indian & Chinese takeaways	0.29
100101	Meat or fish based curry with sauce	0.145
100102	Meat or fish based curry without sauce	0.5
100201	Chinese or Thai meat or fish based dishes excluding curry	0.145
100202	Chop suey and fu yung dishes	0.09
110101	Steak - without sauce e.g. braised, sirloin	1
110102	Roast meat with sauce or gravy	0.52
110103	Pork chops with sauce or gravy	0.52
110104	Lamb chops with sauce or gravy	0.52
110105	Spare ribs	1
110108	All offal including liver, kidney, tongue	1
110204	Game with sauce or gravy	0.52
110601	Meat and vegetable stews, casseroles or hotpots	0.3
110603	Meat lasagne, cannelloni, moussaka and other meat-based oven baked dishes	0.21
170105	Noodles with meat, vegetables etc.	0.2
240102	Meat-based sauce e.g. Bolognese, chilli con carne	0.48

Processed Meat

NB: Factors to adjust to cooked weight of processed meat portion

MAFF CODE	Description	Factor
5502	Bacon and ham joints, uncooked	0.69
5505	Bacon and ham rashers, uncooked	0.66
5801	Cooked ham & bacon	1
5904	Takeaway chicken	1
6201	Corned beef/ corned meat (canned or sliced)	1
6601	Other cooked meat	1
7102	Other canned meat and canned meat products	1
7901	Sausages (uncooked) - pork	0.78
8001	Sausages (uncooked) - beef	0.78
8302	Meat pies	0.27
8303	Sausage rolls	0.19
8401	Meat pies, pasties and puddings	0.24
8501	Burgers	0.73
8902	Other convenience meat products	0.51
9301	Pâté	1
9302	Delicatessen type sausages: cooked or cured	1
9403	Meat pastes and spreads	1
9501	Takeaway meat pies & pasties	0.26
9502	Burger & bun e.g. hamburger	0.45
9503	Kebabs	0.29
9504	Sausages & saveloys	1
9506	Miscellaneous meats	1
110106	Bacon	1
110107	Gammon or ham	1
110202	Chicken or turkey in breadcrumbs or batter	0.6
110301	Small or single burgers	0.34
110302	Large or double burgers	0.37
110303	Chicken burger	0.286
110401	Kebabs - all types including chicken	0.46
110402	Plain sausages e.g. beef, pork	1
110403	Other sausages	1
110404	Hot dogs and sausage sandwiches	0.46
110501	Meat pies (pastry topped) and pasties	0.3
110502	Meat pies (potato topped e.g. shepherd's pie)	0.3
110503	Sausage roll (pastry)	0.2
110701	All pates	1
110801	Other meat products or dishes	0.29
130202	Pizza - meat, fish or poultry	0.075
160301	Meat salad e.g. beef, lamb salads	0.2
230101	Meat based sandwich on white bread or roll	0.21
230102	Meat based sandwich on brown bread or roll	0.21
230103	Meat based sandwich bread not specified	0.21
230107	Bacon and egg based sandwich on white bread or roll including Bacon and Egg McMuffin	0.24
230108	Bacon and egg based sandwich on brown bread or roll	0.24
230109	Bacon and egg based sandwich bread not specified	0.24