

**Table 3** Differences in childhood diet by childhood social class group in the families\* in the Boyd Orr survey of diet and health in pre-second world war Britain (1937 to 1939)

Social class	Mean dietary intake					
	Unadjusted difference	95% CI	P for trend	Adjusted difference <sup>†</sup>	95% CI	P for trend
<b>Fruit (g)</b>						
I						
II	-92.7	-115.2 to -70.1		-93.8	-115.5 to -72.0	
III	-123.6	-144.8 to -102.3		-117.6	-138.2 to -97.0	
IV	-149.2	-170.3 to -128.1		-145.0	-165.4 to -124.5	
V	-153.6	-175.1 to -132.1		-144.3	-165.2 to -123.3	
Unemployed	-164.3	-185.3 to -143.2	<0.001‡	-149.5	-170.1 to -128.9	<0.001
Unclassifiable	-148.8	-171.1 to -126.5		-138.9	-160.6 to -117.2	
<b>Vegetables (g)</b>						
I						
II	-55.3	-78.0 to -32.6		-55.6	-77.7 to -33.5	
III	-67.6	-89.1 to -46.2		-62.0	-82.8 to -41.1	
IV	-88.9	-110.2 to -67.6		-84.4	-105.1 to -63.7	
V	-78.9	-100.6 to -57.2		-69.3	-90.5 to -48.1	
Unemployed	-87.5	-108.7 to -66.2	<0.001	-72.8	-93.7 to -51.9	<0.001
Unclassifiable	-75.7	-98.2 to -53.2		-64.9	-86.9 to -43.0	
<b>Fish (g)</b>						
I						
II	-7.6	-17.2 to 2.1		-7.7	-17.2 to 1.7	
III	-6.2	-15.3 to 2.9		-4.2	-13.1 to 4.7	

IV	-11.1	-20.1 to -2.02		-9.5	-18.4 to -0.7	
V	-11.2	-20.5 to -2.0		-7.9	-16.9 to 1.2	
Unemployed	-12.3	-21.3 to -3.2	<0.001	-7.0	-15.9 to 2.0	<0.001
Unclassifiable	-12.5	-22.1 to -3.0		-8.8	-18.2 to 0.6	

### **Fat (g)**

I						
II	-12.0	-25.6 to 1.6		-13.3	-23.0 to -3.5	
III	-34.7	-47.6 to -21.9		-24.7	-33.9 to -15.5	
IV	-43.0	-55.8 to -30.3		-35.4	-44.6 to -26.3	
V	-44.7	-57.8 to -31.7		-28.4	-37.8 to -19.1	
Unemployed	-57.7	-70.4 to -45.0	<0.001	-32.4	-41.7 to -23.2	<0.001
Unclassifiable	-47.8	-61.3 to -34.3		-30.0	-39.7 to -20.3	

### **Saturated fat (g)**

I						
II	-7.6	-14.1 to -1.0		-8.2	-13.3 to -3.0	
III	-20.8	-27.0 to -14.7		-16.5	-21.3 to -11.6	
IV	-25.3	-31.4 to -19.2		-22.0	-26.8 to -17.2	
V	-28.5	-34.8 to -22.2		-21.5	-26.4 to -16.6	
Unemployed	-34.1	-40.3 to -28.0	<0.001	-23.2	-28.1 to -18.4	<0.001
Unclassifiable	-28.0	-34.5 to -21.5		-20.3	-25.5 to -15.2	

### **Carotene (µg)**

I					
II	-560.0	-949.0 to -171.0		-562.2	-947.5 to -177.0
III	-889.4	-1256.2 to -522.7		-828.3	-1192.1 to -464.4

IV	-986.6	-1351.3 to -621.8		-936.7	-1298.3 to -575.1	
V	-1153.8	-1525.5 to -782.1		-1050.3	-1420.3 to -680.3	
Unemployed	-1055.7	-1419.1 to -692.4	<0.001	-900.0	-1264.4 to -535.6	<0.001
Unclassifiable	-898.8	-1283.7 to -513.9		-781.1	-1164.8 to -397.5	
<b>Vitamin C (mg)</b>						
I						
II	-26.1	-36.5 to -15.8		-26.5	-36.2 to -16.7	
III	-34.7	-44.5 to -25.0		-31.1	-40.3 to -21.9	
IV	-42.6	-52.3 to -33.0		-39.9	-49.0 to -30.8	
V	-42.5	-52.4 to -32.6		-36.5	-45.9 to -27.2	
Unemployed	-45.7	-55.3 to -36.0	<0.001	-36.4	-45.6 to -27.2	<0.001
Unclassifiable	-39.2	-49.5 to -29.0		-32.7	-42.4 to -23.0	
<b>Vitamin E (mg)</b>						
I						
II	-1.1	-2.0 to -0.3		-1.2	-2.0 to -0.4	
III	-1.3	-2.1 to -0.5		-0.9	-1.7 to -0.2	
IV	-1.9	-2.7 to -1.1		-1.6	-2.4 to -0.9	
V	-1.3	-2.1 to -0.4		-0.7	-1.5 to 0.1	
Unemployed	-1.5	-2.3 to -0.7	0.04	-0.6	-1.3 to 0.2	<0.001
Unclassifiable	-1.7	-2.5 to -0.8		-1.0	-1.8 to -0.2	

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\*As the individual level data is the same for each family member the data were analysed for the 1234 families that were represented in the main analysis. †adjusted for energy intake as a categorical variable based on quartiles of energy intake; ‡ $\chi^2$  test for trend across categories I, II, III, IV, V, and unemployed. CI, confidence interval.

**Table 4** Childhood diet and all-cause mortality in the in the Boyd Orr Survey of Diet and Health in Pre-World War II Britain (1937 to 1939)

Quartiles of dietary intake		Number of deaths	Age, energy, and sex adjusted*		Fully adjusted†	
			Rate ratio‡ (95% CI)	P for trend§	Rate ratio (95% CI)	P for trend
Fruit	1 (low)	275	1.00		1.00	
	2	253	0.92 (0.76 to 1.12)		0.95 (0.78 to 1.15)	
	3	251	0.88 (0.72 to 1.07)		0.91 (0.74 to 1.11)	
	4 (high)	231	0.82 (0.66 to 1.00)	0.05	0.87 (0.69 to 1.11)	0.2
Vegetables	1 (low)	251	1.00		1.00	
	2	276	1.09 (0.90 to 1.33)		1.01 (0.83 to 1.24)	
	3	233	0.95 (0.78 to 1.17)		0.86 (0.70 to 1.07)	
	4 (high)	250	1.04 (0.85 to 1.27)	0.96	0.95 (0.75 to 1.19)	0.4
Fish	1 (low)	261	1.00		1.00	
	2	247	0.91 (0.75 to 1.11)		0.92 (0.76 to 1.12)	
	3	248	0.95 (0.78 to 1.16)		0.93 (0.77 to 1.13)	
	4 (high)	254	0.97 (0.80 to 1.18)	0.9	0.98 (0.79 to 1.20)	0.8
Fat	1 (low)	249	1.00		1.00	
	2	277	1.17 (0.94 to 1.45)		1.16 (0.94 to 1.45)	
	3	250	1.01 (0.79 to 1.29)		1.01 (0.78 to 1.31)	
	4 (high)	234	0.89 (0.67 to 1.18)	0.2	0.85 (0.60 to 1.20)	0.3
Saturated fat	1 (low)	260	1.00		1.00	
	2	275	1.09 (0.89 to 1.33)		1.09 (0.89 to 1.34)	
	3	223	0.86 (0.68 to 1.08)		0.83 (0.65 to 1.06)	
	4 (high)	252	0.91 (0.70 to 1.17)	0.2	0.83 (0.60 to 1.15)	0.1
Carotene	1 (low)	243	1.00		1.00	

	2	264	1.05 (0.86 to 1.28)		1.08 (0.88 to 1.31)	
	3	255	1.01 (0.82 to 1.23)		0.95 (0.77 to 1.16)	
	4 (high)	248	1.03 (0.84 to 1.25)	0.9	0.96 (0.77 to 1.19)	0.4
Vitamin C	1 (low)	260	1.00		1.00	
	2	253	0.93 (0.76 to 1.14)		1.00 (0.81 to 1.23)	
	3	257	0.95 (0.77 to 1.17)		1.03 (0.82 to 1.28)	
	4 (high)	240	0.91 (0.73 to 1.13)	0.5	1.02 (0.79 to 1.32)	0.8
Vitamin E	1 (low)	250	1.00		1.00	
	2	256	1.09 (0.89 to 1.32)		1.15 (0.94 to 1.42)	
	3	226	0.94 (0.77 to 1.16)		0.97 (0.77 to 1.22)	
	4 (high)	278	1.23 (1.00 to 1.51)	0.1	1.25 (0.98 to 1.60)	0.2

\*All models control for within-family clustering of diet with the “irr” cluster option in Stata; †also adjusted for childhood family food expenditure, father’s social class, district of residence as a child, period of birth, season when studied as a child, and Townsend score for current address or place of death; ‡rate ratio and CI calculated by Poisson regression; §linear test for trend was obtained by entering the quartiles as continuous terms.

**Table 5** Childhood diet and coronary heart disease mortality in the Boyd Orr survey of diet and health in pre-second world war Britain (1937 to 1939)

Quartiles of dietary intake	Number of deaths	Age, energy, and sex adjusted*		Fully adjusted†		
		Rate ratio‡ (95% CI)	P for trend§	Rate ratio (95% CI)	P for trend	
Fruit	1 (low)	72	1.00		1.00	
	2	75	1.06 (0.73 to 1.56)		1.06 (0.72 to 1.56)	
	3	69	0.88 (0.60 to 1.30)		0.90 (0.60 to 1.34)	
	4 (high)	82	1.07 (0.73 to 1.58)	0.9	1.19 (0.76 to 1.87)	0.7
Vegetables	1 (low)	79	1.00		1.00	
	2	68	0.81 (0.55 to 1.18)		0.78 (0.52 to 1.16)	

	3	65	0.84 (0.57 to 1.23)		0.81 (0.53 to 1.23)	
	4 (high)	86	1.08 (0.75 to 1.55)	0.6	1.01 (0.70 to 1.63)	0.7
Fish	1 (low)	76	1.00		1.00	
	2	76	0.98 (0.68 to 1.42)		0.99 (0.68 to 1.43)	
	3	64	0.82 (0.56 to 1.21)		0.85 (0.58 to 1.25)	
	4 (high)	82	1.08 (0.75 to 1.56)	0.9	1.18 (0.80 to 1.76)	0.6
Fat	1 (low)	80	1.00		1.00	
	2	73	0.88 (0.58 to 1.33)		0.83 (0.54 to 1.26)	
	3	70	0.76 (0.48 to 1.19)		0.67 (0.41 to 1.09)	
	4 (high)	75	0.71 (0.42 to 1.18)	0.2	0.56 (0.30 to 1.08)	0.07
Saturated fat	1 (low)	85	1.00		1.00	
	2	66	0.76 (0.51 to 1.12)		0.81 (0.54 to 1.21)	
	3	64	0.69 (0.45 to 1.06)		0.68 (0.43 to 1.08)	
	4 (high)	83	0.80 (0.50 to 1.27)	0.3	0.70 (0.39 to 1.26)	0.2
Carotene	1 (low)	60	1.00		1.00	
	2	85	1.33 (0.91 to 1.95)		1.38 (0.94 to 2.02)	
	3	65	0.98 (0.66 to 1.46)		0.97 (0.64 to 1.48)	
	4 (high)	88	1.40 (0.96 to 2.05)	0.2	1.42 (0.93 to 2.17)	0.3
Vitamin C	1 (low)	67	1.00		1.00	
	2	72	1.00 (0.67 to 1.48)		1.04 (0.69 to 1.57)	
	3	79	1.09 (0.72 to 1.63)		1.12 (0.73 to 1.73)	
	4 (high)	80	1.13 (0.75 to 1.70)	0.5	1.20 (0.74 to 1.95)	0.4
Vitamin E	1 (low)	77	1.00		1.00	
	2	73	1.03 (0.70 to 1.50)		1.06 (0.71 to 1.57)	
	3	71	0.97 (0.66 to 1.43)		0.99 (0.65 to 1.52)	

4 (high) 77 1.05 (0.71 to 1.54) 0.9 1.05 (0.66 to 1.68) 0.9

\*All models control for within-family clustering of diet with the “irr” cluster option in Stata; †also adjusted for childhood family food expenditure, father’s social class, district of residence as a child, period of birth, season when studied as a child, and Townsend score for current address or place of death; ‡rate ratio and CI calculated by Poisson regression; §Linear test for trend was obtained by entering the quartiles as continuous terms.

**Table 6** Childhood diet and stroke mortality in the in the Boyd Orr survey of diet and health in pre-second world war Britain (1937 to 1939)

intake	Quartiles of dietary	Number of deaths	Age, energy, and sex adjusted*		Fully adjusted†	
			Rate ratio‡ (95% CI)	P for trend§	Rate ratio (95% CI)	P for trend
Fruit	1 (low)	22	1.00		1.00	
	2	21	0.97 (0.53 to 1.79)		0.93 (0.51 to 1.71)	
	3	26	1.20 (0.66 to 2.17)		1.13 (0.63 to 2.04)	
	4 (high)	14	0.68 (0.33 to 1.39)	0.5	0.48 (0.21 to 1.10)	0.3
Vegetables	1 (low)	25	1.00		1.00	
	2	27	1.07 (0.61 to 1.87)		0.96 (0.55 to 1.67)	
	3	18	0.74 (0.40 to 1.37)		0.61 (0.32 to 1.13)	
	4 (high)	13	0.56 (0.28 to 1.13)	0.06	0.40 (0.19 to 0.83)	0.01
Fish	1 (low)	18	1.00		1.00	
	2	14	0.73 (0.36 to 1.48)		0.79 (0.39 to 1.60)	
	3	18	1.08 (0.56 to 2.10)		1.13 (0.58 to 2.18)	
	4 (high)	33	2.01 (1.11 to 3.64)	0.01	2.01 (1.09 to 3.69)	0.01
Fat	1 (low)	18	1.00		1.00	
	2	35	2.30 (1.22)		2.05 (1.09 to 3.85)	
	3	12	0.80 (0.34)		0.69 (0.29 to 1.63)	
	4 (high)	18	1.22 (0.50 to 3.00)	0.7	0.76 (0.26 to 2.16)	0.2

Saturated fat	1 (low)	21	1.00		1.00	
	2	26	1.40 (0.77 to 2.57)		1.37 (0.74 to 2.51)	
	3	13	0.75 (0.34 to 1.64)		0.71 (0.32 to 1.58)	
	4 (high)	23	1.54 (0.69 to 3.45)	0.6	1.31 (0.49 to 3.47)	0.9
Carotene	1 (low)	18	1.00		1.00	
	2	27	1.59 (0.86 to 2.92)		1.51 (0.82 to 2.76)	
	3	24	1.34 (0.72 to 2.50)		1.16 (0.62 to 2.16)	
	4 (high)	14	0.83 (0.41 to 1.70)	0.6	0.62 (0.29 to 1.31)	0.2
Vitamin C	1 (low)	19	1.00		1.00	
	2	30	1.55 (0.85 to 2.83)		1.51 (0.83 to 2.75)	
	3	18	0.99 (0.49 to 1.98)		0.90 (0.45 to 1.81)	
	4 (high)	16	0.91 (0.44 to 1.87)	0.5	0.68 (0.31 to 1.48)	0.2
Vitamin E	1 (low)	22	1.00		1.00	
	2	26	1.28 (0.71 to 2.29)		1.16 (0.65 to 2.07)	
	3	16	0.81 (0.41 to 1.57)		0.67 (0.34 to 1.31)	
	4 (high)	19	1.02 (0.53 to 1.99)	0.7	0.82 (0.41 to 1.64)	0.3

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\*All models control for within-family clustering of diet with the “irr” cluster option in Stata; †also adjusted for childhood family food expenditure, father’s social class, district of residence as a child, period of birth, season when studied as a child, and Townsend score for current address or place of death; ‡rate ratio and CI calculated by Poisson regression; §linear test for trend was obtained by entering the quartiles as continuous terms.