Supplementary Material

Table 1. Healthy lifestyle behaviour cut-offs used in the analysis (half serves in the recommendations were rounded up to whole serves).

Indicator	Healthy (met indicator)	Unhealthy (did not meet indicator)
Fruit recommendations (serves per day)		
5-8 years	≥2 [a]	<2
9-15 years	≥2	<2
Vegetables recommendations (serves per day)		
5-8 years	≥5 [b]	<5
9-11 years	≥5	<5
12-15 years, girls	≥5	<5
12-15 years, boys	≥6 [c]	<6
Discretionary foods (serves per week)		
5-15 years	≤3	>3
Average time in PA/day (minutes)		
5-15 years	≥60	<60
Average time screen time/day (hours)		
5-15 years	<2	≥2

[a] 1.5 in National Health and Medical Research Committee (NHMRC) Dietary Guidelines (27).

[b] 4.5 in National Health and Medical Research Committee (NHMRC) Dietary Guidelines (27).

[c] 5.5 in National Health and Medical Research Committee (NHMRC) Dietary Guidelines (27).

Table 2. Unadjusted associations between diet/physical activity indicators and scoring in the at-risk range for each of the Strength and Difficulty Questionnaire (SDQ) subscales.

	Emotional Symptoms OR (95% CI)		Conduct Problems OR (95% CI)		Hyper-activity OR (95% CI)		Peer Problems OR (95% CI)		Prosocial Behaviour OR (95% CI)	
Indicator	**5-10 years**	**11-15years**	**5-10years**	**11-15years**	**5-10years**	**11-15years**	**5-10years**	**11-15years**	**5-10years**	**11-15years**
Met fruit recommendation	0.70 (0.42,1.17)	0.73 (0.45-1.19)	0.83 (0.45,1.54)	0.67 (0.33-1.33)	0.70 (0.43-1.14)	1.19 (0.67-2.09)	0.49 (0.26-0.92)*	0.75 (0.44-1.26)	0.83 (0.27-2.56)	1.16 (0.44-3.08)
Met vegetable recommendation	0.36 (0.07,1.91)	0.67 (0.23-2.01)	0.57 (0.14,2.38)	0.41 (0.12-1.46)	0.46 (0.17-1.27)	0.45 (0.16-1.33)	0.97 (0.29-3.25)	1.04 (0.38-2.82)	NA#	0.34 (0.6-1.92)
Met discretionary food limit	0.82 (0.49,1.36)	0.78 (0.48-1.27)	0.44 (0.22,0.88)*	0.53 (0.27-1.04)	0.61 (0.37-1.00)	0.64 (0.37-1.12)	0.71 (0.37-1.34)	0.73 (0.44-1.23)	0.06 (0.02-0.18)*	0.62 (0.21-1.83)
Met PA recommendation	0.60 (0.36-1.02)	0.74 (0.43-1.27)	0.67 (0.36-1.26)	0.89 (0.44-1.82)	1.20 (0.72-1.99)	0.92 (0.52-1.63)	0.61 (0.32-1.16)	0.37 (0.20-0.70)*	0.74 (0.24-2.27)	0.95 (0.33-2.72)
Met screen time recommendation	0.46 (0.27-0.78)*	0.61 (0.36-1.04)	0.42 (0.22-0.80)*	0.70 (0.33-1.48)	0.44 (0.26-0.72)*	0.53 (0.29-0.96)*	0.35 (0.18-0.69)*	0.68 (0.38-1.20)	0.18 (0.06-0.56)*	0.25 (0.06-0.97)*

*p<0.05, #Insufficient responses to report this measure.

Table 3. Demographics included in multivariable analysis of diet and physical activity factors predictive of total difficulties score in children aged 5-15 years, stratified by age.

Mean Score Difference

	5-10 years	11-15 years
Sex (ref: female)	-1.59 (-2.65, -0.55)**	-1.26 (-2.41, -0.10)*
Mother completed high school/diploma (ref: University degree)	0.36 (-1.34, 2.05)	3.45 (1.80, 5.09) ***
Mother completed year 10 or below (ref: University degree)	1.26 (0.16, 2.35)**	1.03 (0.01, 2.06)*
Age	-0.01 (-0.26, 0.25)	-0.21 (-0.56, 0.15)
Single parent family	1.93 (0.71, 3.14)*	2.08 (0.69, 3.46)**
Living regional or remote (ref: Major cities)	-1.27 (-2.22, -0.32)**	0.63 (-0.55, 1.80)
BMI: overweight/obese	0.54 (-0.61, 1.70)	1.15 (-0.57, 2.87)

*** = P<0.001, **= P <0.01, *=P<0.05. All factors were included in a single multivariable model, adjusted for age, sex, BMI, mother's highest qualification, family structure (single parent family), and remoteness.