

## ADDITIONAL FILE 1

Cross-sectional and prospective mediating effects of dietary intake on the relationship between sedentary behaviour and body mass index in adolescents

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Table S1: Comparison of baseline characteristics of participants included in the TV viewing and zBMI analyses (n=259) compared to those excluded in the analyses (n=26)

<b>Variables</b>	<b>Included (n= 259)</b>	<b>Excluded (n= 26)</b>
<b>Age, years</b>	12.9 (12.9, 13.0)	13.0 (12.9, 13.0)
<b>Sex, %</b>		
Male	47.5 (41.4, 53.6)	56.2 (45.6, 66.3)
Female	52.5 (46.4, 58.4)	43.8 (33.7, 54.5)
<b>Maternal education, %</b>		
Low	6.9 (4.4, 10.8)	18.6 (11.6, 28.5)*
Medium	65.3 (59.2, 70.8)	64.0 (53.1, 73.5)
High	27.8 (22.7, 33.6)	17.4 (10.7, 27.2)
<b>Pubertal status, %</b>		
Early puberty	19.3 (8.0, 4.6)	0.0 (0.0, 0.0)
Mid-pubertal	35.5 (30.0, 41.6)	31.4 (21.5, 43.5)
Late-pubertal	35.5 (30.0, 41.6)	44.3 (32.9, 56.3)
Post-pubertal	27.0 (21.9, 32.8)	24.3 (15.5, 36.0)
<b>BMI</b>		
kg/m <sup>2</sup>	20.7 (20.2, 21.3)	20.8 (19.9, 21.7)
z-score	0.4 (0.3, 0.5)	0.4 (0.2, 0.6)
Overweight, %	18.9 (14.6, 24.2)	23.9 (56.4, 76.2)
Obese, %	9.2 (6.3, 13.5)	9.1 (4.5, 17.3)
<b>Sedentary behaviour</b>		
TV viewing (hours/day)	3.2 (3.0, 3.4)	3.0 (2.7, 3.3)
<b>Dietary intake</b>		
Discretionary foods (freq/day)	2.4 (2.2, 2.6)	2.3 (2.0, 2.7)
Sugar-sweetened beverages (freq/day)	2.1 (1.8, 2.3)	2.0 (1.4, 2.4)
Takeaway food (freq/week)	3.4 (3.1, 3.6)	3.5 (2.9, 4.1)

BMI: Body mass index; zBMI: BMI z-score; TV: television; MVPA: moderate-to-vigorous

physical activity; freq: frequency.

\*Significant  $p < 0.05$ .

Footnote: Maternal education: low = some secondary education or less; medium = completing secondary school, an apprenticeship or technical certificate; high = university or tertiary qualification. Pubertal status self-assessed using the ‘Tanner Stages’ [24]. BMI z-score determined using the age- and sex-specific CDC 2000 reference data [18]. Overweight and obesity determined using the International Obesity Task Force (IOTF) criteria [19].

Table S2: Comparison of baseline characteristics of participants included in the sedentary time and zBMI analyses (n=140) compared to those excluded in the analyses (n=145)

<b>Variables</b>	<b>Included (n= 140)</b>	<b>Excluded (n= 145)</b>
<b>Age, years</b>	12.9 (12.9, 13.0)	13.0 (12.9, 13.0)*
<b>Sex, %</b>		
Male	50.0 (41.7, 58.3)	49.5 (42.7, 56.3)
Female	50.0 (41.7, 58.3)	50.5 (43.7, 57.3)
<b>Maternal education, %</b>		
Low	5.0 (2.3, 10.2)	13.2 (9.2, 18.6)*
Medium	62.8 (54.4, 70.5)	66.3 (59.5, 72.5)
High	32.1 (24.8, 40.4)	20.5 (15.5, 26.6)
<b>Pubertal status, %</b>		
Early puberty	14.3 (35.1, 56.2)	1.6 (0.5, 4.8)
Mid-pubertal	41.4 (33.5, 50.0)	29.6 (23.5, 36.6)
Late-pubertal	35.0 (27.5, 43.4)	39.2 (32.4, 46.4)
Post-pubertal	22.1 (16.0, 30.0)	29.6 (23.5, 36.6)
<b>BMI</b>		
kg/m <sup>2</sup>	20.3 (19.7, 21.0)	21.0 (20.4, 21.6)
z-score	0.3 (0.1, 0.5)	0.5 (0.3, 0.6)
Overweight, %	13.6 (8.8, 20.4)	24.6 (19.2, 31.0)*
Obese, %	9.2 (5.4, 15.4)	9.2 (5.9, 14.0)
<b>Sedentary behaviour</b>		
Total sedentary time (hours/day)	6.1 (6.0, 6.2)	5.8 (5.3, 6.2)
Average sedentary bouts (minutes/day)	6.6 (6.5, 6.6)	6.6 (6.5, 6.6)
<b>MVPA (minutes/day)</b>	48.2 (35.0, 61.4)	40.8 (34.2, 47.4)
<b>Dietary intake</b>		
Discretionary foods (freq/day)	2.4 (2.1, 2.7)	2.3 (2.1, 2.5)
Sugar-sweetened beverages (freq/day)	1.9 (1.6, 2.2)	2.2 (1.9, 2.4)
Takeaway food (freq/week)	3.2 (2.8, 3.6)	3.5 (3.1, 3.9)

BMI: Body mass index; zBMI: BMI z-score; MVPA: moderate-to-vigorous physical activity;

freq: frequency.

\*Significant  $p < 0.05$ .

Footnote: Maternal education: low = some secondary education or less; medium = completing secondary school, an apprenticeship or technical certificate; high = university or tertiary qualification. Pubertal status self-assessed using the ‘Tanner Stages’ [24]. BMI z-score determined using the age- and sex-specific CDC 2000 reference data [18]. Overweight

and obesity determined using the International Obesity Task Force (IOTF) criteria [19].