

Table 3 Multivariate analysis of the association between good school performance and fruit and vegetable intake and nutritional status in Palestinian adolescents aged 12–15 years ($n = 932$)

Variable	<i>n</i>	Good school performance		Model 1 ^a		Model 2 ^b		Model 3 ^c	
		%	<i>P</i> -value	OR (95% CI)	<i>P</i> -value	OR (95% CI)	<i>P</i> -value	OR (95% CI)	<i>P</i> -value
<i>Fruit & vegetable intake</i>									
≤ 3 t/w	680	59.9	< 0.001	1		1		1	
> 3 t/w	252	72.6		1.58 (1.09–2.27)	0.015	1.57 (1.09–2.27)	0.015	1.61 (1.11–2.32)	0.012
<i>Sex</i>									
Boys	502	54.7	< 0.001	1		1		1	
Girls	430	70.7		1.95 (1.23–2.98)	< 0.001	1.95 (1.44–2.65)	< 0.001	1.89 (1.39–2.57)	< 0.001
<i>Residential status</i>									
Local citizen	367	58.6	0.008	1		1		1	
Refugee	561	66.7		1.91 (1.23–2.98)	0.004	1.92 (1.23–2.99)	0.004	1.91 (1.22–2.98)	0.005
<i>Residential area</i>									
Gaza city (high income)	373	67.6	0.005	1		1		1	
Gaza city (low income)	210	67.6		2.87 (1.67–4.90)	< 0.001	2.88 (1.68–4.92)	< 0.001	2.89 (1.69–4.67)	< 0.001
Village	143	58.7		1.52 (0.92–2.53)	0.102	1.52 (0.91–2.53)	0.106	1.55 (0.93–2.58)	0.095
Camp	206	54.4		0.56 (0.37–0.85)	0.006	0.56 (0.37–0.85)	0.006	0.56 (0.37–0.85)	0.006
<i>Age (years)</i>									
12	161	70.8	0.002	1		1		1	
13	291	64.9		0.79 (0.49–1.26)	0.320	0.78 (0.49–1.25)	0.314	0.80 (0.49–1.28)	0.354
14	305	64.6		0.78 (0.49–1.25)	0.305	0.78 (0.49–1.26)	0.313	0.81 (0.50–1.30)	0.386
15	175	51.4		0.45 (0.27–0.76)	0.003	0.45 (0.27–0.76)	0.003	0.47 (0.28–0.79)	0.004
<i>Father's work status</i>									

Unemployed	429	53.1	< 0.001	1		1		1	
Employed	501	72.3		1.40 (1.00-1.97)	0.051	1.41 (1.01-1.99)	0.046	1.41 (1.0-1.99)	0.047
Household SES									
Low	244	54.9	< 0.001	1		1		1	
Medium	431	62.9		0.88 (0.61-1.28)	0.519	0.88 (0.61-1.27)	0.496	0.86 (0.59-1.25)	0.420
High	232	74.6		1.00 (0.62-1.61)	0.994	1.00 (0.62-1.61)	0.990	0.97 (0.60-1.57)	0.898
Father's education									
Low	485	51.8	< 0.001	1		1		1	
Medium	262	69.8		1.81 (1.27-2.61)	< 0.001	1.81 (1.25-2.61)	< 0.001	1.79 (1.24-2.58)	0.002
High	173	85.5		3.38 (2.00-5.72)	< 0.001	3.37 (1.99-5.70)	< 0.001	3.38 (2.00-5.73)	< 0.001
Mother's education									
Low	531	53.9	< 0.001	1		1		1	
Medium/high	391	75.7		1.92 (1.36-2.71)	< 0.001	1.92 (1.36-2.70)	< 0.001	1.88 (1.33-2.65)	< 0.001
BMI^d									
Underweight	50	60.0	0.819	-		1		1	
Normal	710	63.8		-	-	1.22 (0.60-2.45)	0.583	1.08 (0.53-2.22)	0.826
Overweight/obese	172	62.2		-	-	1.10 (0.51-2.37)	0.816	0.94 (0.43-2.07)	0.885
Stunting^e									
Non-stunted	843	65.5	< 0.001	-				1	
Stunted	89	42.7		-	-	-	-	0.53 (0.31-0.90)	0.02

^aAdjusted for sociodemographic factors; ^bAdjusted for BMI-for-age percentile groups; ^cAdjusted for stunting.

^dUnderweight: BMI for-age < 5th percentile; overweight and obesity: > 85th percentile.

^eStunting: height-for-age < 3rd percentile.

n = number of respondents; t/w = times per week; SES = socioeconomic status; BMI = body mass index; OR = odds ratio; CI = confidence interval.