



Effects of Pediatric Diet and Physical Activity on Weight Loss

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INTRODUCTION

- Pediatric obesity is a major health problem in the US
- Family-based behavioral treatment (FBBT) is a widely used approach for pediatric obesity
- This study investigated relationships between weight status change and change in diet and physical activity (PA) following FBBT

METHODS

- Children and their families enrolled in one of three 8- to 12-week FBBTs
- Data collected at baseline and follow-up (6-12 mos.)
- Anthropomorphic data collected in-person at visits; diet composition assessed with 24-hour diet recall; PA measured with accelerometers
- Regression analyses conducted separately for each gender; Δ in %OW was regressed on Δ in diet and Δ in PA, controlling for demographic variables and time to follow-up

Baseline Patient Demographics

Sex	
Male	58 (49.6%)
Female	59 (50.4%)
Ethnicity	
White	79 (67.5%)
Black	3 (2.6%)
Hispanic	25 (21.4%)
Other/Multiracial	9 (7.7%)
Age	Mean 9.1, SD 1.66, range 5-13
BMIz (>85th Percentile)	Mean 1.81, SD 0.495

RESULTS

Change in % Overweight from Baseline to Follow-up				
Change in health behaviors from baseline to follow-up	Gender	β	Confidence Intervals	P-value
Energy intake	Boys	-0.003	(-0.365, 0.359)	0.985
		-0.087	(-0.373, 0.244)	0.615
% energy from fat	Boys	0.027	(-0.268, 0.321)	0.856
		-0.213	(-0.589, 0.154)	0.243
Fruit/vegetable intake	Boys	-0.199	(-0.526, 0.132)	0.233
		0.224	(-0.071, 0.456)	0.147
Sugar-sweetened beverage intake	Boys	-0.102	(-0.446, 0.244)	0.558
		0.124	(-0.207, 0.420)	0.497
MVPA	Boys	-0.120	(-0.393, 0.152)	0.378
		-0.030	(-0.342, 0.281)	0.845
Parent weight	Boys	0.179	(-0.071, 0.182)	0.376
		0.272	(-0.046, 0.296)	0.146

RESULTS



CONCLUSION

- Increasing fruit/vegetable consumption and PA, and decreasing sugar-sweetened beverage consumption, supported weight loss in FBBTs; however, the findings were non-significant and differed by gender
- Parent weight loss appears to be an important factor in treatment success (accounting for 6.3% of the variance in girls)
- More research is needed to identify age/gender differences for tailoring health behavior change approaches

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