The Effectiveness of a Family-Centered Childhood Obesity Intervention at the YMCA: A Pilot Study

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Study procedures

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Hispanic/Latino	0 (0.0%)	2 (7.4%)			
Multi-ethnicity	1 (6.7%)	0 (0.0%)			
Education, N (%)					
Some college or vocational training	0 (0.0%)	1 (3.7%)			
Two-year college degree	0 (0.0%)	2 (7.4%)			
Four year college degree	2 (13.3%)	13 (48.1%)			
Post-Baccalaureate education/degree	13 (86.7%)	11 (40.7%)			
Employment, N (%)					
Full time	12 (80.0%)	22 (81.5%)			
Part time	2 (13.3%)	4 (14.8%)			
Not employed outside of home	1 (6.7%)	1 (3.7%)			
Child characteristics					
Gender, N (%)					
Female	7 (46.7%)	18 (66.7%)			
Male	8 (53.3%)	9 (33.3%)			
Race/Ethnicity, N (%)					
Caucasian	6 (40.0%)	22 (81.5%)			
Asian	3 (20.0%)	2 (7.4%)			
Black	1 (6.7%)	2 (7.4%)			
Hispanic/Latino	1 (6.7%)	0 (0.0%)			
Multi-ethnicity	4 (26.7%)	1 (3.7%)			
Age (years), Mean (SD)	9.8 (1.7)	8.7 (1.5)			

Measure, Median (IQR)	Intervention group (N=14)	Control group (N=26)	p-value‡
BMI (kg/m²)			
Baseline	18.7 (16.8, 23.0)	16.2 (15.2, 18.6)	0.007
Change†	0.5 (-0.2, 0.8)	-0.1 (-0.3, 0.4)	0.18
BMI percentile (%)			
Baseline	81.5 (54.0, 95.0)	54.0 (24.0, 80.0)	0.04
Change	0 (-2.0, 4.0)	-2.5 (-8.0, 2.0)	0.2
Waist circumference (cm)			
Baseline	68.9 (62.3,. 75.3)	63.6 (58.5, 67.6)	0.018
Change	0.3 (-1.1, 1.7)	0.8 (-0.5, 2.0)	0.46
Waist circumference percentile (%)			
Baseline	77.5 (59.4, 93.5)	64.3 (48.6, 81.9)	

	Intervention group (N=14)		Control group (N=26)		
Healthy Habit item	N (%) based on all N=14	N (%) based on those who didn't meet the target at baseline	N (%) based on all N=26	N (%) based on those who didn't meet the target at baseline	
Fruit and vegetable servings (Ta	rget=5 or more serv	ings each day)			
Met target at both baseline an follow-up	d 0 (0.0%)	-	4 (15.4%)		
Met target at baseline, bu worsened at follow-up	et 2 (14.3%)	-	2 (7.7%)	-	
Worsened at follow-up	1 (7.1%)	1 (8.3%)	2 (7.7%)	2 (10.0%)	
No change	5 (35.7%)	5 (41.7%)	13 (50.0%)	13 (65.0%)	
Improved at follow-up	6 (42.9%)	6 (50.0%)	5 (19.2%)	5 (25.0%)	
Eat dinner at table with family (T	arget=7 or more tim	es each week)			
Met target at both baseline an follow-up	d 4 (28.6%)		9 (34.6%)		
Met target at baseline, bu worsened at follow-up	et 2 (14.3%)		2 (7.7%)	-	
Worsened at follow-up	4 (28.6%)	4 (50.0%)	2 (7.7%)	2 (13.3%)	
No change	2 (14.3%)	2 (25.0%)	4 (15.4%)	4 (26.7%)	
Improved at follow-up	2 (14.3%)	2 (25.0%)	9 (34.6%)	9 (60.0%)	
Eat breakfast (Target=7 times ea	ch week)				
Met target at both baseline an follow-up	d 11 (78.6%)		21 (80.8%)	-	
Met target at baseline, bu worsened at follow-up	ıt 1 (7.1%)	-	2 (7.7%)	-	
No change	1 (7.1%)	1 (50.0%)	0 (0.0%)	0 (0.0%)	
Improved at follow-up	1 (7.1%)	1 (50.0%)	3 (11.5%)	3 (100.0%)	
Eat takeout or fast food (Target=	0 times each week)				
Met target at both baseline an follow-up	d 1 (7.1%)		6 (23.1%)	-	
Met target at baseline, bu worsened at follow-up	ot 0 (0.0%)	-	2 (7.7%)	-	
Worsened at follow-up	1 (7.1%)	1 (7.7%)	0 (0.0%)	0 (0.0%)	
No change	9 (64.3%)	9 (69.2%)	13 (50.0%)	13 (72.2%)	
Improved at follow-up	3 (21.4%)	3 (23.1%)	5 (19.2%)	5 (27.8%)	
Drink 8-ounce servings of sugary drinks, including 100% juice (Target=0 servings each week)					
Met target at both baseline an follow-up	d 6 (42.9%)		12 (46.2%)	-	
Met target at baseline, bu worsened at follow-up	ot 0 (0.0%)		3 (11.5%)	-	
Worsened at follow-up	1 (7.1%)	1 (12.5%)	1 (3.8%)	1 (9.1%)	
No change		1 (3.8%-1%)			

Drink 8-ounce servings of sugary drinks, not including 100% juice (Target=0 servings each week)					
Met target at both baseline and follow-up	8 (57.1%)	-	20 (76.9%)	-	
Met target at baseline, but worsened at follow-up	1 (7.1%)	-	4 (15.4%)	-	
No change	1 (7.1%)	1 (20.0%)	0 (0.0%)	0 (0.0%)	
Improved at follow-up	4 (28.6%)	4 (80.0%)	2 (7.7%)	2 (100.0%)	
Drink 8-ounce servings of water (Target=5 or more servings each week)					
Met target at both baseline and follow-up	1 (7.1%)	-	2 (7.7%)	-	
Met target at baseline, but worsened at follow-up	2 (14.3%)	-	2 (7.7%)	-	
Worsened at follow-up	2 (14.3%)	2 (18.2%)	1 (3.8%)	1 (4.5%)	
No change	3 (21.4%)	3 (27.3%)	9 (34.6%)	9 (40.9%)	
Improved at follow-up	6 (42.9%)	6 (54.5%)	12 (46.2%)	12 (54.5%)	

Discussion

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