Supplementary Data

Supplementary Table 1. Relationship of food insecurity with child BMI-z, waist circumference, and overweight or obese status in the Healthy Communities Study, by child sex and race/ethnicity (*n*=5138)

	Sex					*P-interaction*[1,2,3]
	Female *n*=2614 (50.9%)		**Male** *n*=2524 (49.1%)			
Variable[4]	**Food Secure**	**Food Insecure**	**Food Secure**	**Food Insecure**		
BMI z-score	0.60 (0.46, 0.73)	0.73 (0.59, 0.87)	0.67 (0.54,0.80)	0.81 (0.67, 0.95)		0.85
Waist circumference[5] (cm)	69.3 (68.1,70.6)	70.2 (68.9,71.5)	68.3 (67.1,69.6)	69.3 (68.0,70.6)		0.79
Overweight or obese (%)	34.6	39.9	38.0	40.1		0.25

	Race/ethnicity								*P-interaction*[1,2,3]
	Non-Hispanic White *n*=1520 (29.6%)		**Non-Hispanic African American** *n* =927 (18.0%)		**Non-Hispanic Other** *n* =396 (7.7%)		**Hispanic or Latino** *n* =2295 (44.7%)		
Variable[4]	**Food Secure**	**Food Insecure**	**Food Secure**	**Food Insecure**	**Food Secure**	**Food Insecure**	**Food Secure**	**Food Insecure**	
BMI z-score	0.45 (0.31, 0.59)	0.63 (0.45, 0.81)	0.64 (0.48, 0.81)	0.71 (0.55, 0.88)	0.40 (0.21, 0.60)	0.72 (0.48, 0.95)	0.77 (0.63, 0.92)	0.90 (0.75, 1.04)	0.37
Waist circumference[5] (cm)	67.8 (66.5, 69.1)	69.5 (67.8, 71.1)	66.3 (64.8, 67.9)	66..4 (64.9, 67.9)	67.2 (65.5, 68.9)	70.1 (67.8, 72.3)	70.6 (69.3, 72.0)	71.4 (70.0, 72.7)	0.18
Overweight or obese (%)	35.2	28.7	36.2	37.3	40.6	26.7	45.8	42.4	0.07

[1] Analyses used multilevel modeling for BMI-z and waist circumference, and multilevel logistic regression for overweight or obese status. Multilevel models included an interaction term for food security and child's sex or race/ethnicity.

[2] Covariates included: maximum father education, maximum maternal employment, annual household income. Child sex (not included for gender interaction), child age, and height were also included in as covariates for waist circumference outcomes. The community-level covariates included: US region, minority. Standard errors are clustered at community and school level.

[3] Results from overall test for interaction by sex or child race/ethnicity p<0.05.

[4] Values reported are predicted means (95% CI) for BMI-z and waist circumference and predicted probabilities (as percentages) for overweight or obese status.

[5] Waist Circumference analytical sample size: (*n*=5094)