

Supplemental Tables for Reviewers Only

TABLE S1. Bivariate results; Spearman's rho correlation for income, race, habitual physical activity questionnaire score (HAQ), 3 day activity diary score (3d AD), average energy density (ED), average caloric intake (Av kcal), average dietary saturated fat percent (Sat fat %), average fiber intake (fiber) by visit year

	Year	Income	Race	HAQ	3d AD	ED	Av kcal	Satfat%	Fiber	BMI	BF%
Income	3	1	-.348**	.069**	-.056	-.176**	-.007	-.090**	.057	-.114**	-.034
	5	1	-.358**	.122**	.036	-.164**	-.010	-.175**	.128**	-.147**	-.079**
	7	1	-.354**	.301**	.012	-.185**	-.053	-.156**	.132**	-.144**	-.135**
	8	1	-.348**	.289**	-.028	-.154**	-.074**	-.211**	.138**	-.149**	-.114**
	10	1	-.357**	.317**	-.067**	-.207**	-.083**	-.238**	.144**	-.172**	-.163**
Race	3		1	-.090**	-.088**	.208**	.088**	.020	-.022	.188**	.087**
	5		1	-.193**	-.104**	.250**	.099**	.079**	-.064**	.185**	.094**
	7		1	-.346**	-.164**	.300**	.133**	.120**	-.121**	.200**	.121**
	8		1	-.291**	-.075**	.276**	.103**	.142**	-.115**	.207**	.108**
	10		1	-.348**	-.013	.373**	.111**	.206**	-.119**	.207**	.162**
HAQ	3			1	.263**	-.038	.017	-.013	.042	-.060**	-.086**
	5			1	.285**	-.095**	.020	-.045	.075**	-.090**	-.120**
	7			1	.249**	-.153**	.007	-.138**	.199**	-.141**	-.152**
	8			1	.220**	-.129**	-.014	-.192**	.156**	-.128**	-.155**
	10			1	.103**	-.172**	-.066**	-.212**	.202**	-.144**	-.159**
AD	3				1	.004	.056	.004	.064**	.003	-.085**
	5				1	-.001	.082**	.062**	.075**	-.028	-.081**
	7				1	-.049	.086**	-.017	.127**	.003	-.005
	8				1	-.011	.096**	-.020	.136**	.052	.031
	10				1	-.071**	.050	-.047	.048	.078**	.062**
ED	3					1	.249**	.342**	.064**	-.029	-.077**
	5					1	.291**	.382**	.094**	-.056	-.084**
	7					1	.290**	.449**	.060	-.035	-.031
	8					1	.261**	.481**	.074**	-.053	-.045
	10					1	.238**	.458**	.037	-.024	.001
Kcal	3						1	.102**	.678**	-.046	-.097**
	5						1	.195**	.664**	-.127**	-.148**
	7						1	.209**	.627**	-.069**	-.089**
	8						1	.231**	.620**	-.066**	-.082**
	10						1	.221**	.575**	-.028	-.049
Satfat%	3							1	-.154**	.046	-.010
	5							1	-.068**	.025	.017
	7							1	-.114**	-.040	-.034

	8							1	-.093**	-.019	.000
	10							1	-.151**	.008	.016
Fiber	3								1	-.092**	-.123**
	5								1	-.113**	-.118**
	7								1	-.102**	-.117**
	8								1	-.089**	-.076**
	10								1	-.088**	-.095**
BMI	3									1	.835**
	5									1	.853**
	7									1	.864**
	8									1	.873**
	10									1	.900**

\*\* significance at  $P < 0.001$ ; two-tailed t test

TABLE S2. Percent variance (% var.) explained by first indices and first indices' canonical correlation (CC). Standardized canonical coefficients for physical activity and confounders [income category (Inc), race, maturation stage (MS), height (Ht), weight (Wt), race by HAQ (RxHAQ), race by 3 day AD (Rx3d AD), habitual physical activity questionnaire score (HAQ), 3 day activity diary score (3d AD)], and diet quality indicators [average energy density (ED), average caloric intake (Av kcal), average dietary saturated fat percent (Sat fat %), average fiber intake (fiber)] by visit year (y).

y	n	% var.	CC	Physical Activity, Confounders									Diet Quality			
				Inc	Race	MS	Ht	Wt	Rx HAQ	Rx3d AD	HAQ	3d AD	ED	Av kcal.	Sat fat %	fiber
3	1701	66.26	0.29	0.32**	-0.64**	0.32	-0.30*	0.29†	0.14*	-0.66**	-0.03†	0.45*	-0.88	-0.55	0.35	0.23
5	1576	66.19	0.34	0.41**	-0.67**	0.02*	-0.18*	0.38	0.35*	-0.54**	-0.09**	0.27**	-0.67	-0.79	0.10	0.76
7	1457	69.97	0.42	0.27**	-0.59**	-0.02*	-0.06*	0.10*	-.10**	-0.46**	0.37**	0.30**	-0.57	-0.89	-0.15	0.91
8	1423	70.60	0.41	0.36**	-0.41**	-0.00	-0.04**	0.16	-0.56**	-0.31**	0.89**	0.29**	-0.54	-0.65	-0.08	0.86
10	1699	74.26	0.46	0.36**	-0.48**	n/a	-0.08*	0.16*	-0.33**	-0.17**	0.72**	0.25**	-0.60	-0.49	-0.17	0.65

† significance at  $P < 0.1$ ; \* significance at  $P < 0.05$ ; \*\* significance at  $P < 0.001$ ; for dependant variates significance is evaluated with a univariate F test for association with first indices canonical correlation.

TABLE S3. Cohort stratified by race (black). Percent variance (% var) explained by first indices and first indices' canonical correlation (CC). Standardized canonical coefficients for physical activity and confounders [income category (Inc), maturation stage (MS), height (Ht), weight (Wt), habitual physical activity questionnaire score (HAQ), 3 day activity diary score (3d AD)], and diet quality indicators [average energy density (ED), caloric intake (Av kcal), average dietary saturated fat percent (Sat fat %), average fiber intake (fiber)] by visit year (y).

y	n	% var.	CC	Physical Activity, Confounders						Diet Quality			
				Inc	MS	Ht	Wt	HAQ	3d AD	ED	Av kcal	Sat fat%	fiber
3	870	67.24	0.22	0.23*	0.48	-0.50	0.40	0.00	-0.70**	-0.43	-0.39	0.11	-0.53
5	815	70.17	0.29	0.72**	-0.02	-0.21	0.49*	0.37*	-0.47**	-0.37	-0.91	-0.26	0.80
7	741	52.78	0.24	0.38*	0.01†	-0.25*	0.44*	0.21*	-0.79**	-0.31	-0.81	-0.21	0.02
8	734	57.52	0.23	0.51**	0.09	-0.35†	0.65†	-0.00	-0.62**	-0.46	-0.70	-0.19	-0.00
10	861	56.70	0.25	0.72**	n/a	-0.11	0.49†	0.19*	-0.41**	-0.12	-0.72	-0.58	0.19

† significance at  $P < 0.1$ ; \* significance at  $P < 0.05$ ; \*\* significance at  $P < 0.001$ ; for dependant variates significance is evaluated with a univariate F test for association with first indices canonical correlation.

TABLE S4. Cohort stratified by race (white). Percent variance (% var) explained by first indices and first indices' canonical correlation (CC). Standardized canonical coefficients for physical activity and confounders [income category (Inc), maturation stage (MS), height (Ht), weight (Wt), habitual physical activity questionnaire score (HAQ), 3 day activity diary score (3d AD)], and diet quality indicators [average energy density (ED), caloric intake (Av kcal), average dietary saturated fat percent (Sat fat %), average fiber intake (fiber)] by visit year (y).

y	n	% var.	CC	Physical Activity, Confounders						Diet Quality			
				Inc	MS	Ht	Wt	HAQ	3d AD	ED	Av kcal	Sat fat%	fiber
3	831	48.80	0.17	0.86**	0.17*	0.35*	-0.10*	0.14	-0.10	-0.79	0.33	-0.30	0.15
5	761	62.86	0.27	0.71**	-0.39*	0.37†	-0.35*	-0.01†	-0.00*	0.22	0.41	-0.69	0.41
7	716	77.85	0.34	0.59**	-0.04	0.02†	-0.01†	0.69**	0.02†	0.08	-0.15	-0.38	0.93
8	689	71.13	0.36	0.53**	0.07	0.16**	-0.09	0.65**	0.12*	0.05	-0.26	-0.61	0.78
10	838	80.26	0.38	0.55**	n/a	-0.01**	0.05	0.73**	0.06*	-0.11	-0.32	-0.45	0.79

† significance at  $P < 0.1$ ; \* significance at  $P < 0.05$ ; \*\* significance at  $P < 0.001$ ; for dependant variates significance is evaluated with a univariate F test for association with first indices canonical correlation.

TABLE S5. Percent variance (% var.) explained by first indices and first indices' canonical correlation (CC). Standardized canonical coefficients for obesity correlates [income category (Inc), race, maturation stage (MS), height (Ht), weight (Wt), race by HAQ (RxHAQ), race by 3 day AD (Rx3d AD), habitual physical activity questionnaire score (HAQ), 3 day activity diary score (3d AD), average energy density (ED), average caloric intake (Av kcal), average dietary saturated fat percent (Sat fat %), average fiber intake (fiber)], and body composition [BMI, body fat percent (BF%)] by visit year (y).

y	n	% var.	CC	Obesity Correlates											Body Composition	
				Inc	Race	MS	Rx HAQ	Rx3d AD	HAQ	3d AD	ED	Av kcal	Sat fat %	fiber	BMI	BF%
3	1693	81.43	0.39	0.21**	-0.50**	-0.77**	0.33**	0.11**	-0.36**	-0.29**	0.07*	0.05*	-0.21**	-0.05**	-1.80	1.12
5	1557	75.28	0.35	0.38**	-0.32**	-0.56**	0.01**	-0.45**	0.06**	0.18**	0.16*	0.30**	-0.12*	-0.26*	-1.61	0.75
7	1412	62.65	0.27	0.32**	-0.71**	-0.27**	0.24**	0.14*	-0.04**	-0.22	0.18	-0.02*	0.28†	0.26**	-1.19	0.22
8	1378	63.45	0.30	0.15**	-0.67**	-0.11*	0.37**	-0.64**	-0.19**	0.18**	0.18	0.07*	0.17*	0.03*	-1.73	0.90
10	1679	83.47	0.29	0.38**	-0.68**	n/a	-0.11**	0.11**	0.42**	-0.28*	0.32	0.14	0.08	0.06**	-1.14	0.16

† significance at  $P < 0.1$ ; \* significance at  $P < 0.05$ ; \*\* significance at  $P < 0.001$ ; for dependant variates significance is evaluated with a univariate F test for association with first indices canonical correlation.

TABLE S6. Cohort stratified by race (black). Percent variance (% var) explained by first indices and first indices' canonical correlation (CC). Standardized canonical coefficients for obesity correlates [income category (Inc) maturation stage (MS), height (Ht), weight (Wt), habitual physical activity questionnaire score (HAQ), 3 day activity diary score (3d AD), average energy density (ED), average caloric intake (Av kcal), average dietary saturated fat percent (Sat fat %), average fiber intake (fiber)], and body composition [BMI, body fat percent (BF%)] by visit year (y).

y	n	% var.	CC	Obesity Correlates								Body Composition	
				Inc	MS	HAQ	3d AD	ED	Av kcal	Sat fat %	fiber	BMI	BF%
3	865	63.89	0.29	0.25**	-0.92**	0.02	-0.24*	0.07*	0.09*	-0.31*	-0.08†	-1.91	1.27
5	802	55.82	0.26	0.02**	0.66**	-0.43*	0.02**	-0.31*	-0.57*	-0.05*	0.37	-0.50	1.43
7	714	89.14	0.25	0.44*	-0.45*	0.50*	-0.10	0.09	0.17*	0.29†	0.32*	0.81	-1.66
8	701	56.55	0.23	0.32*	0.05	0.70**	-0.26*	0.30†	0.66*	-0.34*	-0.18†	0.72	-1.60
10	851	75.32	0.18	0.43*	n/a	0.36*	-0.31	0.53**	0.35†	0.19†	0.12	-0.70	-0.32

† significance at  $P < 0.1$ ; \* significance at  $P < 0.05$ ; \*\* significance at  $P < 0.001$ ; for dependant variates significance is evaluated with a univariate F test for association with first indices canonical correlation.



TABLE S7. Cohort stratified by race (white). Percent variance (% var) explained by first indices and first indices' canonical correlation (CC). Standardized canonical coefficients for obesity correlates [income category (Inc) maturation stage (MS), height (Ht), weight (Wt), habitual physical activity questionnaire score (HAQ), 3 day activity diary score (3d AD), average energy density (ED), average caloric intake (Av kcal), average dietary saturated fat percent (Sat fat %), average fiber intake (fiber)], and body composition [BMI, body fat percent (BF%)] by visit year (y).

y	n	% var.	CC	Obesity Correlates							Body Composition		
				Inc	MS	HAQ	3d AD	ED	Av kcal	Sat fat %	fiber	BMI	BF%
3	828	81.76	0.39	0.22*	-0.84**	-0.20**	-0.23**	0.09	0.05	-0.23*	-0.09*	-1.76	1.17
5	755	88.34	0.36	0.51**	-0.70**	0.12*	-0.02*	0.28*	0.13*	-0.21	-0.06*	-1.14	0.17
7	698	66.57	0.24	0.57**	-0.43*	0.40**	-0.13	0.30*	0.01	0.04*	0.22*	-0.26	-0.76
8	677	76.35	0.27	0.47**	-0.40*	0.56**	-0.29	0.30	0.17	-0.15	0.10	0.11	-1.10
10	828	80.54	0.26	0.70**	n/a	0.56**	-0.28	0.10*	0.12	0.03	0.02*	0.51	0.52

† significance at  $P < 0.1$ ; \* significance at  $P < 0.05$ ; \*\* significance at  $P < 0.001$ ; for dependant variates significance is evaluated with a univariate F test for association with first indices canonical correlation