SUPPLEMENTAL TABLES

Supplemental Table 1. Wealth indicator variables from 1-week home visit used for index score construction, by category and source of information.

Category (source)		Indicator	Factor Loading
Asset ownership (self-report)			
	1.	Watch	-0.2588
	2.	Bicycle	-0.0659
	3.	Motorbike or scooter	-0.1211
	4.	Animal-drawn cart	-0.0111
	5.	Car or truck	-0.2980
	6.	Boat with a motor	-0.0067
	7.	Wheelbarrow	0.0193
	8.	Cell phone with internet	-0.2375
	9.	Cell phone without internet	0.0495
	10.	Landline telephone	-0.0189
	11.	Radio	-0.1214
	12.	Television	-0.1779
	13.	Computer	-0.2819
	14.	Bed to sleep on	-0.2086
	15.	Agricultural land	-0.0243
Livestock ownership (self-report)			
	1.	Milk cows	-0.0138
	2.	Cattle other than milk cows	-0.0074
	3.	Sheep or goats	0.1024
	4.	Poultry (chicken, duck, hens, etc.)	-0.0471
	5.	Other farm animals	0.0425
	6.	Farm animals that come inside	0.1021
Water source (self-report)			
	1.	Municipal water piped into home	-0.3695
	2.	Public tap / standpipe	0.3219
	3.	Tube well / bore hole	-0.0167
	4.	Protected well	-0.0101
	5.	Unprotected well	0.11

	6.	Protected spring	0.1014
	7.	Unprotected spring	0.1136
	8.	Surface water	-0.0343
Toilet facilities (staff-observed)			
	1.	Any ventilated pit latrine	0.1733
	2.	Any unventilated pit latrine	-0.1769
	3.	Any flush toilet to sewer	-0.308
	4.	Any flush toilet to septic system	-0.137
Flooring materials (staff-observed)			
	1.	Earth / sand	0.1775
	2.	Dung	0.4406
	3.	Wood plank	-0.0454
	4.	Cement	0.0529
	5.	Finished Cement	-0.0227
	6.	Vinyl	-0.1253
	7.	Ceramic tiles	-0.2243
	8.	Carpet	-0.0571
	9.	Other material	0.042
Wall materials (staff-observed)			
	1.	Mud	0.6483
	2.	Brick	0.153
	3.	Stone	0.025
	4.	Cement	-0.6392
	5.	Sand	-0.3656
	6.	Plywood	0.1763
	7.	Cardboard	0.1519
	8.	Corrugated iron	0.1879
	9.	Plastic	0.1399
	10.	Cow dung	0.486
	11.	Other	0.1163
Cooking fuels (self-report)			
	1.	Electricity	-0.6519
	2.	Wood	0.6197
	3.	Propane gas	-0.12

	4. Paraffin	0.0554
	5. Straw, shrub, or grass	0.5124
	6. Agricultural crops, like corn cobs	0.4886
	7. Animal dung	0.1084
	8. Plastic bags or refuse	0.3795
Living conditions (self-report)		
	1. Household members per room	0.5051

Note: Wealth index score was inverted for analyses (relative to reported factor loadings), so that a higher score represented greater wealth or social status.

Supplemental Table 2. Maternal urinary pyrethroid metabolites and child anthropometrics, by child sex. [1]

	cis-DBCA		*cis*-DCCA		*trans*-DCCA		PBA	
	β [95% CI]	p-value	β [95% CI]	p-value	β [95% CI]	p-value	β [95% CI]	p-value
HAZ (SD)								
Boy	0.01 [-0.19, 0.21]	0.94	-0.02 [-0.22, 0.17]	0.83	-0.03 [-0.20, 0.14]	0.76	0.01 [-0.20, 0.22]	0.94
Girl	0.02 [-0.15, 0.20]	0.80	0.17 [-0.03, 0.37]	0.09	0.16 [-0.02, 0.33]	0.07	0.09 [-0.13, 0.30]	0.43
p-interaction		*0.92*		*0.18*		*0.14*		*0.61*
WAZ (SD)								
Boy	-0.15 [-0.33, 0.04]	0.12	-0.18 [-0.35, -0.008]	0.04*	-0.19 [-0.35, -0.04]	0.02*	-0.17 [-0.36, 0.01]	0.07
Girl	-0.02 [-0.20, 0.16]	0.84	0.08 [-0.11, 0.27]	0.42	0.07 [-0.11, 0.24]	0.45	0.04 [-0.18, 0.25]	0.75
p-interaction		*0.32*		*0.05*		*0.03**		*0.15*
BMI Z-Score (SD)								
Boy	-0.22 [-0.40, -0.04]	0.02*	-0.22 [-0.41, -0.03]	0.02*	-0.23 [-0.40, -0.06]	0.01**	-0.25 [-0.46, -0.04]	0.02*
Girl	-0.06 [-0.26, 0.14]	0.55	-0.08 [-0.29, 0.14]	0.49	-0.08 [-0.28, 0.12]	0.43	-0.06 [-0.29, 0.18]	0.65
p-interaction		*0.24*		*0.31*		*0.26*		*0.21*

HAZ = Height-for-age Z-score; WAZ = Weight-for-age Z-score; SD = standard deviation

**p < 0.05; ** p <0.01*

[1] Multivariable linear regression predicting anthropometric measures by log10-transformed pyrethroid metabolites, adjusted for the same set of covariates as the main model but adding a product term between pyrethroid metabolite concentration and child sex.

Supplemental Table 3. Maternal urinary pyrethroid metabolites and child anthropometrics, by maternal late-pregnancy daily caloric intake sufficiency status. [1]

	cis-DBCA		*cis*-DCCA		*trans*-DCCA		PBA	
	β [95% CI]	p-value	β [95% CI]	p-value	β [95% CI]	p-value	β [95% CI]	p-value
HAZ (SD)								
Sufficient	0.03	0.80	0.19	0.05*	0.24	0.007**	0.19	0.10
	[-0.18, 0.23]		[0.004, 0.38]		[0.07, 0.41]		[-0.03, 0.41]	
Low	0.01	0.92	0.01	0.90	-0.02	0.80	-0.02	0.87
	[-0.16, 0.18]		[-0.17, 0.19]		[-0.17, 0.14]		[-0.21, 0.17]	
p-interaction		*0.90*		*0.18*		*0.03**		*0.17*
WAZ (SD)								
Sufficient	-0.07	0.49	-0.17	0.07	-0.13	0.17	-0.14	0.21
	[-0.28, 0.14]		[-0.36, 0.01]		[-0.31, 0.06]		[-0.35, 0.08]	
Low	-0.09	0.28	-0.01	0.96	-0.05	0.50	-0.06	0.58
	[-0.25, 0.07]		[-0.18, 0.17]		[-0.20, 0.10]		[-0.24, 0.12]	
p-interaction		*0.91*		*0.20*		*0.54*		*0.58*
BMI Z-score (SD)								
Sufficient	-0.13	0.26	-0.43	0.001**	-0.41	0.001**	-0.39	0.007**
	[-0.36, 0.10]		[-0.68, -0.19]		[-0.64, -0.17]		[-0.66, -0.11]	
Low	-0.15	0.09	-0.02	0.79	-0.06	0.47	-0.07	0.46
	[-0.32, 0.02]		[-0.20, 0.15]		[-0.21, 0.10]		[-0.26, 0.12]	
p-interaction		*0.92*		*0.009***		*0.02**		*0.07*

HAZ = Height-for-age Z-score; WAZ = Weight-for-age Z-score; SD = standard deviation

**p < 0.05; ** p <0.01*

[1] Multivariable linear regression predicting anthropometric measures by log10-transformed pyrethroid metabolites, adjusted for the same set of covariates as the main model but adding a product term between pyrethroid metabolite concentration and caloric intake sufficiency status (equal to or above versus below recommended number of daily calories). Recommended caloric intake was calculated for each individual using Institute of Medicine (2009) formulae for women in late pregnancy based on age, height, weight, and activity level (Mean recommended intake in this population = 12,134 kJ; Range = 10,164 to 14,712 kJ).

Supplemental Table 4. Maternal urinary pyrethroid metabolites and child anthropometrics, by family poverty status. [1]

	cis-DBCA		*cis*-DCCA		*trans*-DCCA		3-PBA	
	β [95% CI]	p-value	β [95% CI]	p-value	β [95% CI]	p-value	β [95% CI]	p-value
HAZ (SD)								
Non-poor	-0.05	0.68	0.05	0.63	0.10	0.33	0.06	0.62
	[-0.28, 0.18]		[-0.16, 0.27]		[-0.10, 0.30]		[-0.19, 0.31]	
Poor	0.05	0.54	0.08	0.39	0.03	0.65	0.03	0.73
	[-0.11, 0.21]		[-0.10, 0.26]		[-0.12, 0.19]		[-0.16, 0.22]	
p-interaction		*0.49*		*0.85*		*0.61*		*0.86*
WAZ (SD)								
Non-poor	-0.16	0.14	-0.15	0.12	-0.13	0.16	-0.20	0.07
	[-0.38, 0.05]		[-0.34, 0.04]		[-0.31, 0.05]		[-0.41, 0.02]	
Poor	-0.04	0.64	-0.003	0.98	-0.05	0.55	-0.02	0.85
	[-0.20, 0.12]		[-0.18, 0.17]		[-0.20, 0.11]		[-0.20, 0.16]	
p-interaction		*0.36*		*0.27*		*0.50*		*0.22*
BMI Z-score (SD)								
Non-poor	-0.21	0.04*	-0.28	0.004**	-0.30	0.001**	-0.36	0.002**
	[-0.41, -0.01]		[-0.47, -0.09]		[-0.48, -0.12]		[-0.59, -0.13]	
Poor	-0.10	0.25	-0.07	0.46	-0.09	0.30	-0.06	0.59
	[-0.28, 0.07]		[-0.27, 0.12]		[-0.27, 0.08]		[-0.26, 0.15]	
p-interaction		*0.44*		*0.14*		*0.10*		*0.04**

HAZ = Height-for-age Z-score; WAZ = Weight-for-age Z-score; SD = standard deviation

**p < 0.05; ** p <0.01*

[1] Multivariable linear regression predicting anthropometric measures by log10-transformed pyrethroid metabolites, adjusted for the same set of covariates as the main model but adding a product term between pyrethroid metabolite concentration and family food poverty status (at or above versus below income limits for food poverty). The South African mid-2013 food poverty level was defined as 386 Rand / person / month.

Supplemental Table 5. Maternal urinary pyrethroid metabolites and child anthropometrics, by maternal HIV status. [1]

	cis-DBCA		*cis*-DCCA		*trans*-DCCA		PBA	
	β [95% CI]	p-value	β [95% CI]	p-value	β [95% CI]	p-value	β [95% CI]	p-value
HAZ (SD)								
Negative	-0.004	0.96	0.07	0.35	0.07	0.31	0.04	0.66
	[-0.15, 0.14]		[-0.08, 0.22]		[-0.06, 0.20]		[-0.13, 0.21]	
Positive	0.14	0.38	0.05	0.78	-0.01	0.93	0.07	0.67
	[-0.17, 0.44]		[-0.30, 0.41]		[-0.29, 0.27]		[-0.25, 0.38]	
p-interaction		*0.42*		*0.92*		*0.60*		*0.87*
WAZ (SD)								
Negative	-0.12	0.10	-0.06	0.41	-0.07	0.31	-0.11	0.18
	[-0.26, 0.02]		[-0.20, 0.08]		[-0.20, 0.06]		[-0.26, 0.05]	
Positive	0.13	0.42	-0.04	0.78	-0.11	0.32	0.05	0.79
	[-0.19, 0.46]		[-0.34, 0.26]		[-0.34, 0.11]		[-0.28, 0.37]	
p-interaction		*0.16*		*0.92*		*0.73*		*0.41*
BMI Z-score (SD)								
Negative	-0.17	0.02*	-0.15	0.06	-0.16	0.03*	-0.19	0.03*
	[-0.32, -0.03]		[-0.31, 0.01]		[-0.31, -0.01]		[-0.37, -0.02]	
Positive	0.06	0.76	-0.16	0.37	-0.18	0.18	-0.03	0.88
	[-0.33, 0.46]		[-0.50, 0.19]		[-0.45, 0.08]		[-0.43, 0.37]	
p-interaction		*0.27*		*0.98*		*0.89*		*0.46*

HAZ = Height-for-age Z-score; WAZ = Weight-for-age Z-score; SD = standard deviation

**p < 0.05; ** p <0.01*

[1] Multivariable linear regression predicting anthropometric measures by log10-transformed pyrethroid metabolites, adjusted for the same set of covariates as the main model but adding a product term between pyrethroid metabolite concentration and maternal HIV status.

Supplemental Table 6. Sensitivity Analysis - Adjusted associations between log_{10}-transformed maternal urinary pyrethroid metabolite concentration and child anthropometrics including additional child covariates. [1]

	cis-DBCA		*cis*-DCCA		*trans*-DCCA		PBA	
	β [95% CI]	p-value	β [95% CI]	p-value	β [95% CI]	p-value	β [95% CI]	p-value
Height (cm)	0.02 [-0.56, 0.60]	0.95	0.37 [-0.28, 1.01]	0.26	0.33 [-0.23, 0.89]	0.25	0.23 [-0.45, 0.91]	0.51
Weight (kg)	-0.25 [-0.50, 0.01]	0.06	-0.14 [-0.41, 0.13]	0.30	-0.15 [-0.38, 0.09]	0.22	-0.19 [-0.48, 0.10]	0.20
BMI (kg/m^2)	-0.25 [-0.44, -0.06]	0.01**	-0.25 [-0.46, -0.03]	0.03*	-0.25 [-0.43, -0.06]	0.01*	-0.25 [-0.48, -0.03]	0.03*
HC (cm)	0.002 [-0.24, 0.24]	0.99	-0.03 [-0.29, 0.23]	0.84	-0.02 [-0.25, 0.20]	0.83	0.03 [-0.24, 0.31]	0.81
AC (cm)	-0.15 [-0.33, 0.03]	0.10	-0.19 [-0.37, 0.0003]	0.05	-0.20 [-0.36, -0.04]	0.02*	-0.20 [-0.40, -0.001]	0.05*
WAZ (SD)	-0.12 [-0.26, 0.01]	0.08	-0.08 [-0.22, 0.06]	0.26	-0.09 [-0.21, 0.03]	0.15	-0.10 [-0.25, 0.05]	0.18
HAZ (SD)	0.001 [-0.14, 0.14]	0.99	0.06 [-0.09, 0.21]	0.42	0.06 [-0.07, 0.19]	0.38	0.03 [-0.12, 0.19]	0.68
BMI Z-Score (SD)	-0.19 [-0.33, -0.04]	0.01*	-0.17 [-0.33, -0.02]	0.03*	-0.18 [-0.32, -0.04]	0.01*	-0.19 [-0.36, -0.01]	0.03*
WFH Z-Score (SD)	-0.18 [-0.32, -0.04]	0.01*	-0.16 [-0.32, -0.01]	0.04*	-0.18 [-0.31, -0.04]	0.01*	-0.18 [-0.35, -0.01]	0.04*

** $p < 0.05$; ** $p < 0.01$*

[1] Estimated by multivariable linear regression adjusted for all the covariates in Table 3 plus: frequency of diarrhea in the 1st and 2nd years of life (none; less than once a month; a few times a month; a few times a week; constantly), any persistent fevers lasting 4 days or more between 0 and 1 year; number of persistent fevers between 1 and 2 years; and a child food diversity score calculated by summing whether or not any of 18 food groups were consumed in the past month assessed at 2 year visit.

Supplemental Table 7. Sensitivity Analysis – Adjusted associations between log_{10}-transformed maternal urinary pyrethroid metabolite concentration and child anthropometrics including additional child covariates, stratified by maternal caloric intake status and child sex.

	cis-DBCA		*cis*-DCCA		*trans*-DCCA		PBA	
	β [95% CI]	p-value	β [95% CI]	p-value	β [95% CI]	p-value	β [95% CI]	p-value
Maternal caloric intake sufficiency status [1]								
BMI (kg/m^2)								
Sufficient	-0.27 [-0.60, 0.06]	0.11	-0.70 [-1.04, -0.35]	0.0001**	-0.67 [-0.97, -0.37]	0.00002**	-0.59 [-0.99, -0.20]	0.003**
Low	-0.24 [-0.48, -0.01]	0.04*	-0.04 [-0.30, 0.22]	0.76	-0.06 [-0.29, 0.17]	0.61	-0.11 [-0.39, 0.16]	0.41
p-interaction		*0.88*		*0.003***		*0.002***		*0.05**
AC								
Sufficient	-0.15 [-0.46, 0.16]	0.34	-0.47 [-0.77, -0.16]	0.003**	-0.48 [-0.76, -0.19]	0.001**	-0.35 [-0.69, -0.01]	0.04*
Low	-0.15 [-0.37, 0.07]	0.18	-0.06 [-0.29, 0.18]	0.64	-0.08 [-0.28, 0.12]	0.45	-0.14 [-0.38, 0.11]	0.27
p-interaction		*0.99*		*0.04**		*0.03**		*0.33*
WFH								
Sufficient	-0.16 [-0.41, 0.08]	0.20	-0.45 [-0.71, -0.20]	0.0005**	-0.44 [-0.67, -0.22]	0.0002**	-0.39 [-0.67, -0.11]	0.007**
Low	-0.19 [-0.36, -0.01]	0.04*	-0.03 [-0.23, 0.16]	0.74	-0.06 [-0.22, 0.11]	0.50	-0.09 [-0.30, 0.12]	0.39
p-interaction		*0.87*		*0.01***		*0.01***		*0.09*
Child sex [2]								
BMI (kg/m^2)								
Boy	-0.32 [-0.57, -0.07]	0.01*	-0.36 [-0.65, -0.07]	0.02*	-0.34 [-0.58, -0.10]	0.01**	-0.35 [-0.64, -0.06]	0.02*
Girl	-0.18 [-0.46, 0.10]	0.22	-0.12 [-0.45, 0.21]	0.47	-0.13 [-0.43, 0.17]	0.40	-0.13 [-0.48, 0.23]	0.49
p-interaction		*0.45*		*0.31*		*0.30*		*0.33*
AC								
Boy	-0.16 [-0.39, 0.08]	0.20	-0.29 [-0.54, -0.04]	0.03*	-0.29 [-0.50, -0.07]	0.01**	-0.24 [-0.49, 0.01]	0.05
Girl	-0.15 [-0.41, 0.11]	0.25	-0.06 [-0.36, 0.23]	0.68	-0.09 [-0.35, 0.18]	0.53	-0.12 [-0.45, 0.21]	0.48
p-interaction		*0.98*		*0.28*		*0.27*		*0.56*
WFH								
Boy	-0.23	0.02*	-0.23	0.03*	-0.23	0.01*	-0.24	0.03*

	[-0.42, -0.04]		[-0.43, -0.02]		[-0.41, -0.05]		[-0.46, -0.02]	
Girl	-0.12	0.24	-0.09	0.43	-0.11	0.32	-0.10	0.43
	[-0.33, 0.08]		[-0.32, 0.14]		[-0.32, 0.10]		[-0.35, 0.15]	
p-interaction		*0.44*		*0.39*		*0.38*		*0.42*

** p < 0.05; ** p < 0.01*

[1] Identical model to Supplemental Table 6 except additional interaction term for maternal caloric intake (product of pyrethroid metabolite and sufficient/insufficient status).

[2] Identical model to Supplemental Table 6 except additional interaction term for child sex (product of pyrethroid metabolite and boy/girl status).

Supplemental Table 8. Sensitivity Analysis – Main models re-fit with one high BMI (> 25) observation and 10 other highest leverage observations excluded. [1]

	cis-DBCA		*cis*-DCCA		*trans*-DCCA		3-PBA	
	β [95% CI]	p-value	β [95% CI]	p-value	β [95% CI]	p-value	β [95% CI]	p-value
Height (cm)	0.12 [-0.44, 0.68]	0.67	0.35 [-0.27, 0.96]	0.27	0.31 [-0.22, 0.83]	0.25	0.26 [-0.38, 0.91]	0.42
Weight (kg)	-0.13 [-0.36, 0.10]	0.28	-0.13 [-0.37, 0.10]	0.26	-0.14 [-0.35, 0.07]	0.18	-0.17 [-0.42, 0.09]	0.20
BMI (kg/m^2)	-0.17 [-0.35, 0.005]	0.06	-0.24 [-0.44, -0.05]	0.01*	-0.25 [-0.42, -0.08]	0.01*	-0.25 [-0.46, -0.05]	0.02*
HC (cm)	0.06 [-0.17, 0.30]	0.60	-0.06 [-0.31, 0.20]	0.65	-0.06 [-0.29, 0.17]	0.61	0.002 [-0.27, 0.28]	0.99
AC (cm)	-0.12 [-0.29, 0.05]	0.16	-0.15 [-0.33, 0.03]	0.10	-0.18 [-0.34, -0.02]	0.03*	-0.19 [-0.38, 0.002]	0.05
WFA (Z)	-0.06 [-0.19, 0.07]	0.36	-0.06 [-0.19, 0.06]	0.33	-0.08 [-0.19, 0.03]	0.18	-0.08 [-0.22, 0.05]	0.23
HFA (Z)	0.04 [-0.10, 0.17]	0.60	0.08 [-0.07, 0.23]	0.31	0.07 [-0.06, 0.20]	0.29	0.06 [-0.10, 0.21]	0.48
BMI-FA (Z)	-0.13 [-0.27, 0.01]	0.06	-0.18 [-0.33, -0.004]	0.02*	-0.19 [-0.32, -0.06]	0.01*	-0.19 [-0.35, -0.03]	0.02*
WFH (Z)	-0.12 [-0.26, 0.01]	0.08	-0.17 [-0.31, -0.03]	0.02*	-0.18 [-0.31, -0.05]	0.01*	-0.18 [-0.34, -0.02]	0.03*

** $p < 0.05$*

[1] Identical models as main Table 3 except with 11 observations deleted: 1 subject with BMI > 25 kg/m^2 and 10 subjects with highest leverage as estimated by dfbeta values (absolute dfbeta values between 0.01 and 0.026). No observations were judged to be high leverage (dfbeta > 2/sqrt(N) or 0.08).

Adjustment variables: maternal age, educational attainment, marital status, parity, HIV status, any alcohol use during pregnancy, family wealth score, household income per person per month, total number of household members, energy intake in late pregnancy (sufficient or not), percentage of calories from protein, height, post-delivery BMI, child sex, months of exclusive breastfeeding, source of drinking water, and maternal serum organochlorine concentrations (HCB, BHCCH, Dieldrin, PCBs 118, 138, 153, 180, *p,p'*-DDT, *p,p'*-DDE, *o,p'*-DDT).

Supplemental Table 9. Association between self-reported, antenatal pesticide usage and child BMI at 3.5 years. [1]

	Beta (95% CI)	*p-value*
Any commercial pesticide applied by self during peri-conception period (N = 166 reported "Yes")		
Overall	-0.13 (-0.38, 0.12)	0.316
Boys	-0.34 (-0.61, -0.06)*	0.018
Girls	0.07 (-0.34, 0.48)	0.733
Interaction Term		0.112
Doom Blue Death (commonly brand of permethrin insecticide) used during pregnancy (N = 129 reported "Yes")		
Overall	-0.14 (-0.42, 0.13)	0.296
Boys	-0.30 (-0.62, 0.02)	0.066
Girls	0.02 (-0.45, 0.49)	0.945
Interaction Term		0.293

** p < 0.05*

[1] Adjustment variables: maternal age, educational attainment, marital status, parity, HIV status, any alcohol use during pregnancy, family wealth score, household income per person per month, total number of household members, energy intake in late pregnancy (sufficient or not), percentage of calories from protein, height, post-delivery BMI, child sex, months of exclusive breastfeeding, source of drinking water, and maternal serum organochlorine concentrations (HCB, BHCCH, Dieldrin, PCBs 118, 138, 153, 180, *p,p'*-DDT, *p,p'*-DDE, *o,p'*-DDT).