

Figure S1: Study Participant Flowchart Across the Cohorts

Figure S2: Associations Between Dietary Patterns and SRS scores Removing One Cohort at a Time for: a) SRS:HEI, b) SRS:AHEIP, c)SRS:EDIP; d)ASD:HEI, e)ASD:AHEIP, f)ASD:EDIP)

Table S1: Diet Data Source by Cohort

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Figure S1: Study Participant Flowchart Across the Cohorts

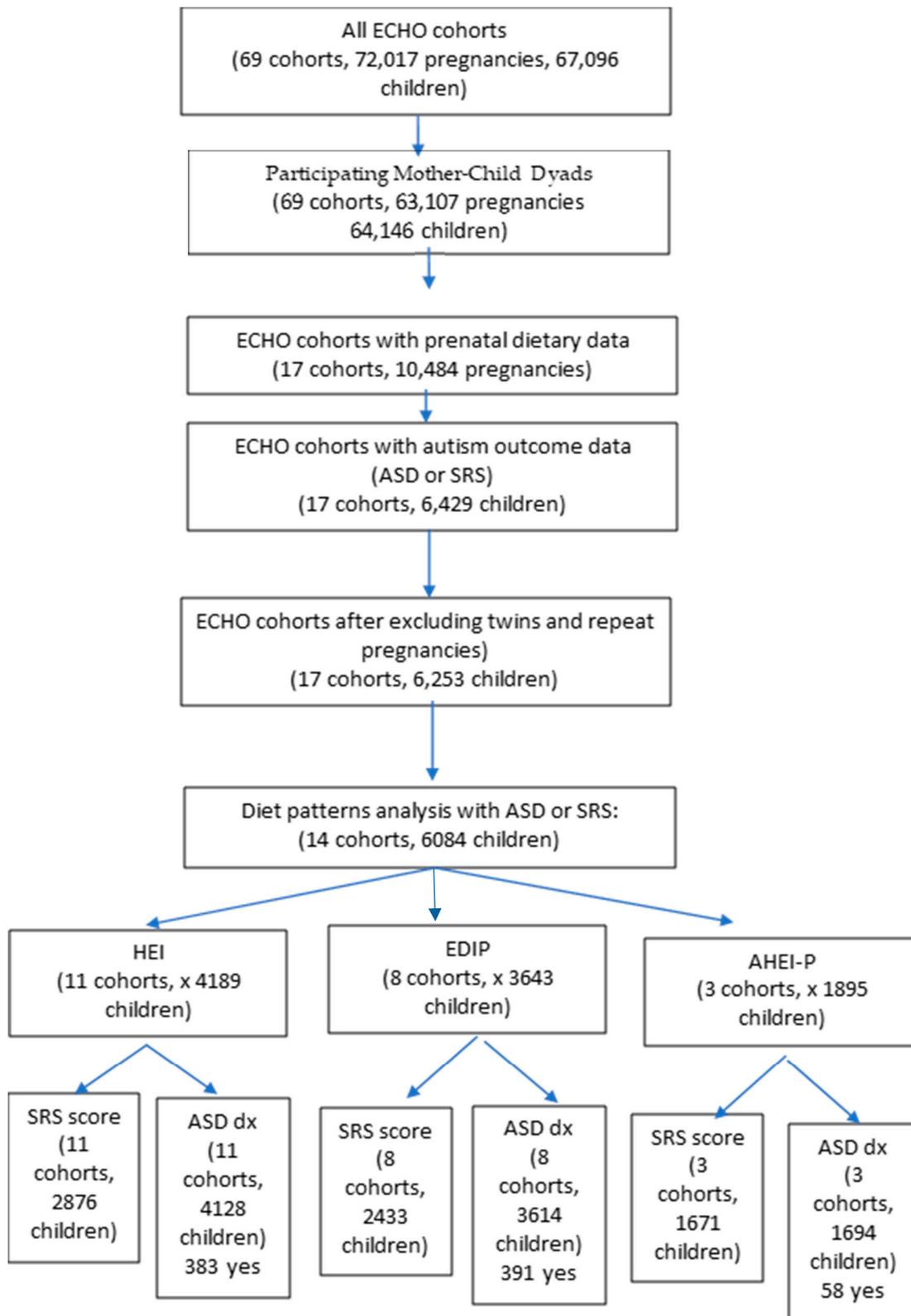
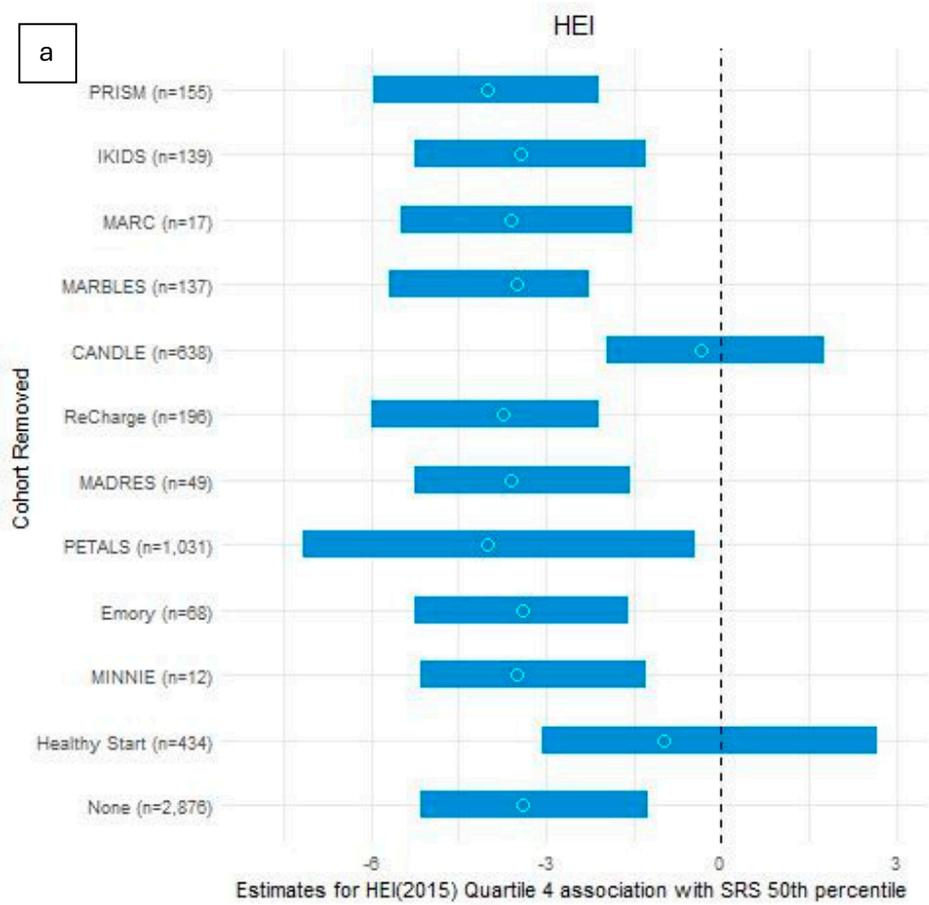


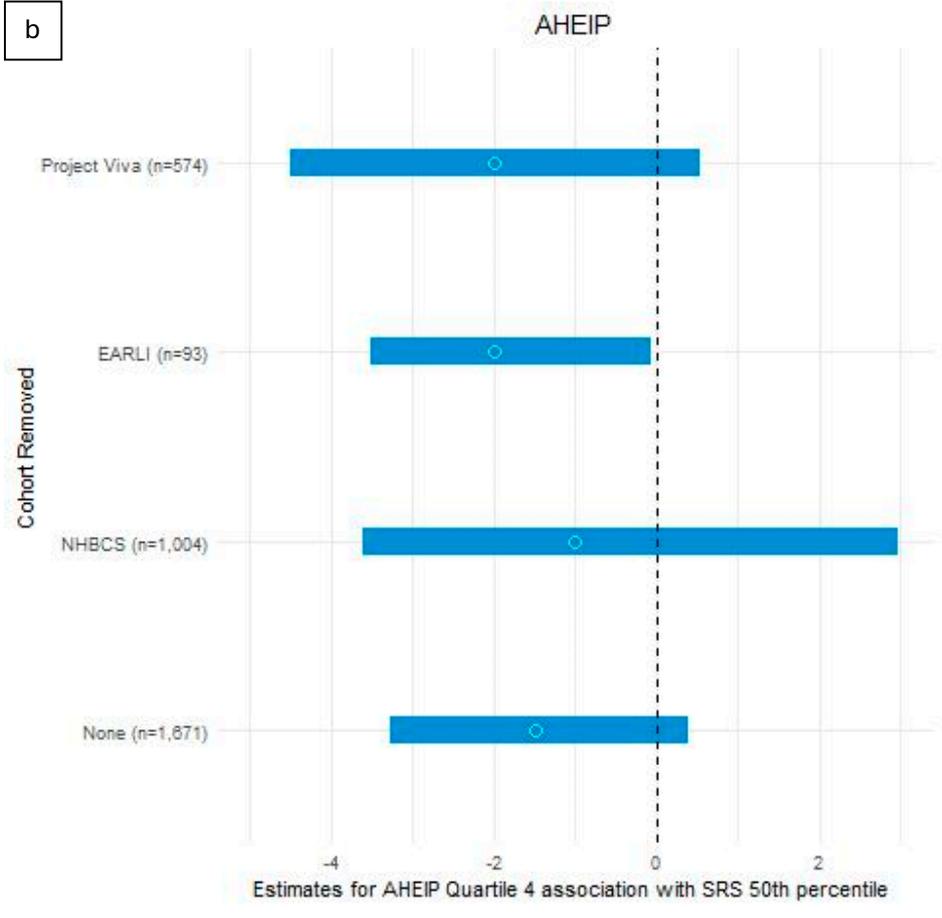
Figure S1: Several Cohorts contributed to multiple diet pattern analyses, and this can be seen further in the figures below

Figure S2: Associations Between Dietary Patterns and SRS scores Removing One Cohort at a Time for: a) SRS:HEI, b) SRS:AHEIP, c)SRS:EDIP; d)ASD:HEI, e)ASD:AHEIP, f)ASD:EDIP)



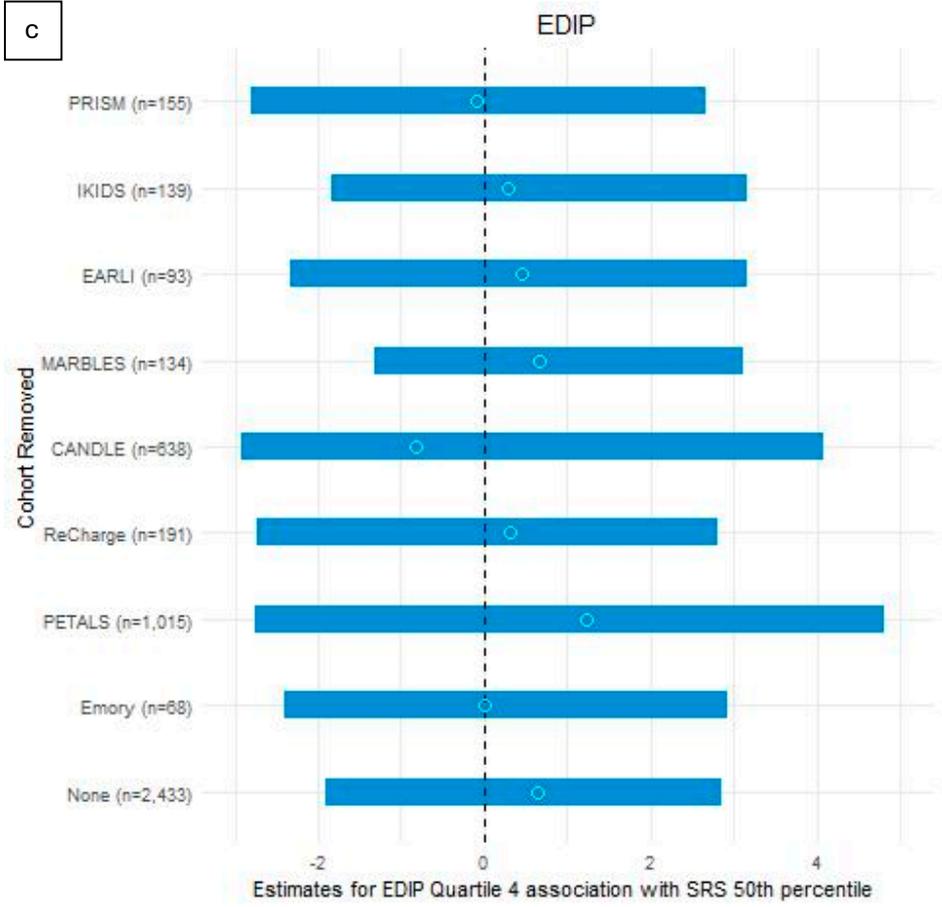
The indicated n values represent the number of participants in the listed cohort which was removed.

b



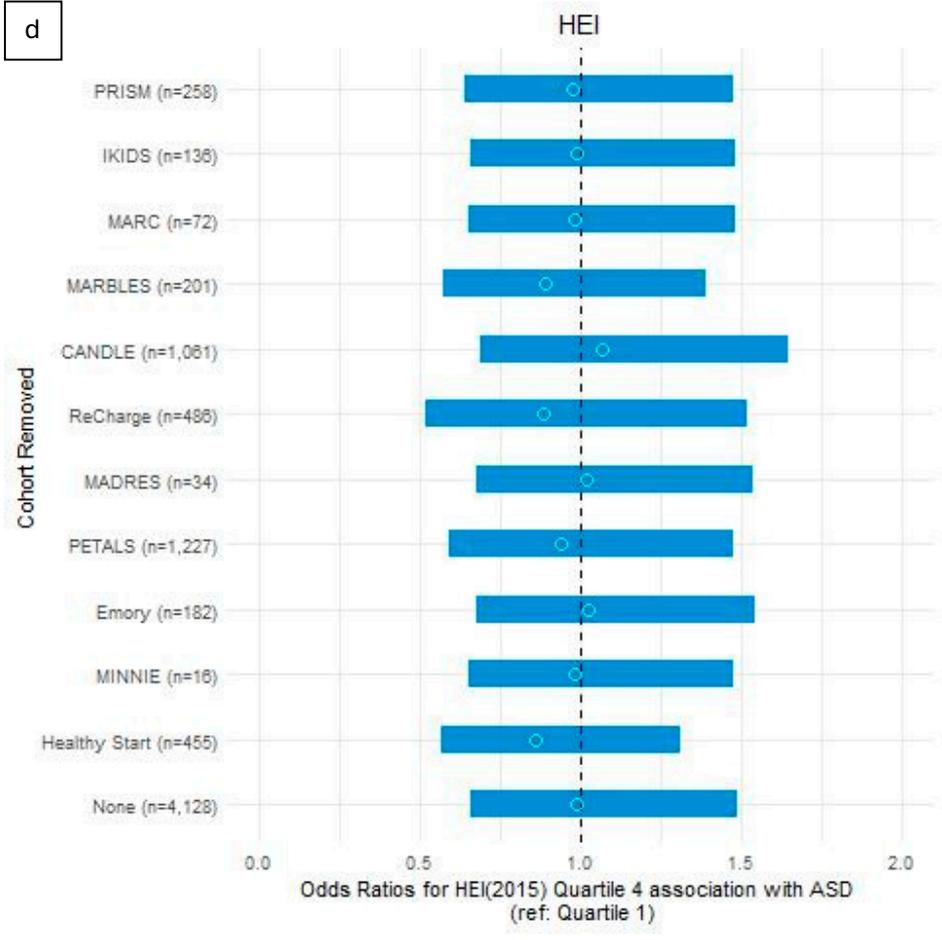
The indicated n values represent the number of participants in the listed cohort which was removed.

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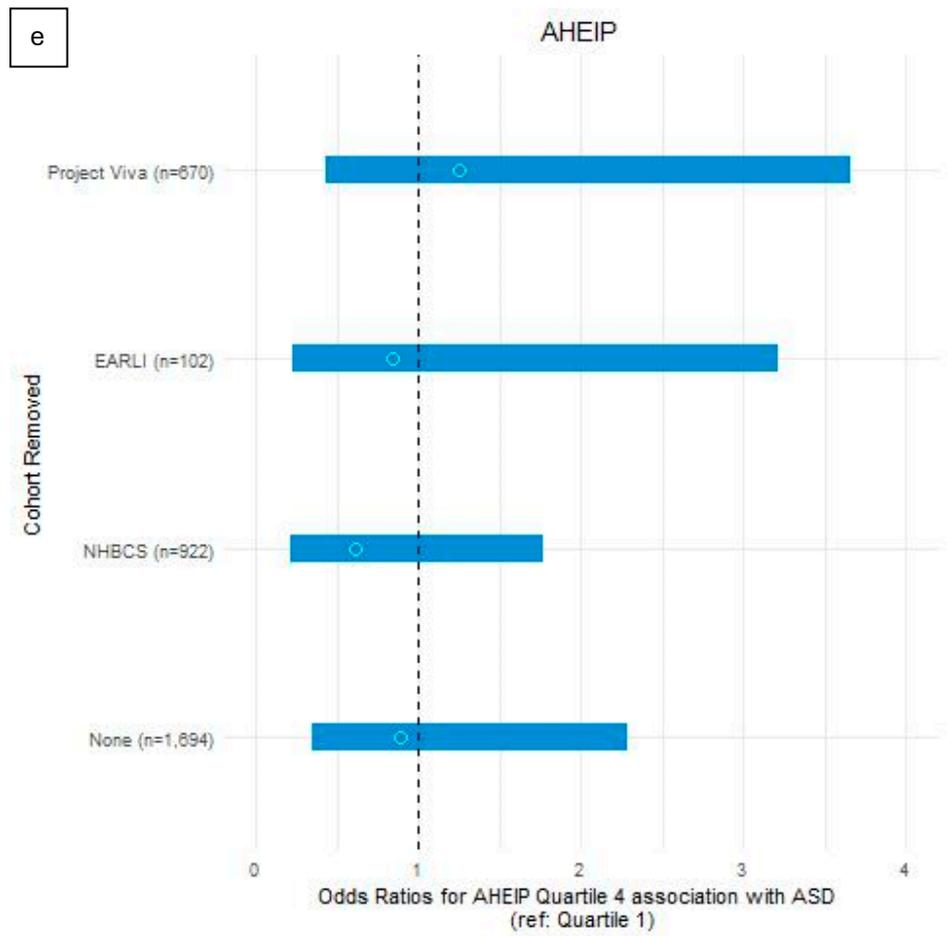


The indicated n values represent the number of participants in the listed cohort which was removed.

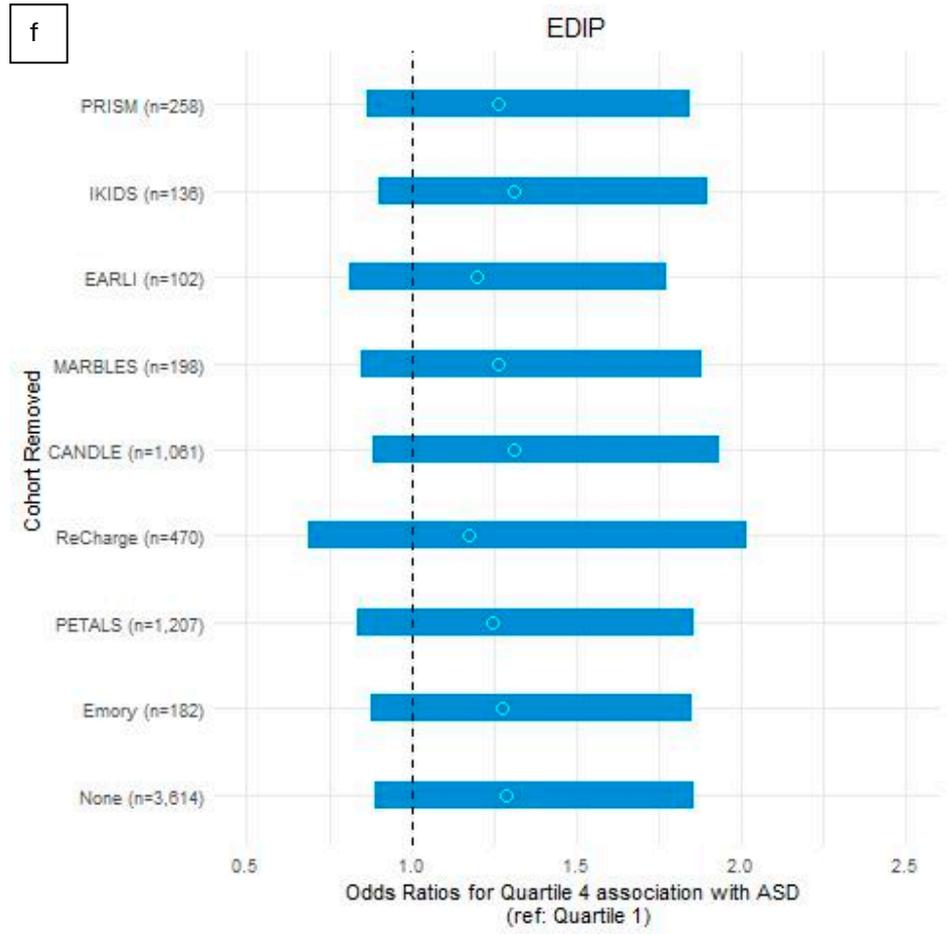
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Table S1: Diet Data Source by Cohort

Cohort Name	Diet Source	HEI	EDIP	AHEI-P
Healthy Start	ASA-24	x		
Maternal Health Influences and Nutrition in Neonatal and Infant Development (MINNIE)	ASA-24	x		
Atlanta ECHO Cohort of Emory University	BLOCK	x	x	
Pregnancy Environment and Lifestyle Study (PETALS)	BLOCK	x	x	
Maternal and Developmental Risks from Environmental and Social Stressors (MADRES)	ASA-24	x		
Revisiting Childhood Autism Risk from Genes and the Environment Study (ReCHARGE)	BLOCK	x	x	
New Hampshire Birth Cohort Study (NHBCS)	HARVARD FFQ			x
Conditions Affecting Neurocognitive Development and Learning in Early Childhood (CANDLE)	BLOCK	x	x	
University of California – Markers of Autism Risk in Babies (MARBLES)	BLOCK	x	x	
Early Autism Risk Longitudinal Investigation (EARLI)	DHQ2		x	x
Project Viva	HARVARD FFQ			x
Michigan Archive for Research in Child Health (MARCH)	BLOCK	x		
Illinois Kids Development Study (IKIDS)	BLOCK	x	x	
PRogramming of Intergenerational Stress Mechanisms (PRISM)	BLOCK	x	x	

Table S2: Participant Characteristics by Dietary Pattern Analytic Sample Among Those with SRS Outcome Data (SRS-Any n=4547, SRS-HEI n=2876, SRS-AHEI-P n= 1671, SRS-EDIP n=2433)

Characteristics	SRS-Any n(%)	SRS-HEI n(%)	SRS-AHEI-P n(%)	SRS-EDIP n(%)
Cohort Type				
High Familial Likelihood	230(5%)	137(5%)	93(6%)	227(9%)
Population based	4,317(95%)	2,739(95%)	1,578(94%)	2,206(91%)
Maternal and Child Characteristics				
Maternal race				
Asian & Pacific Islander	380(8%)	324(11%)	56(3%)	317(13%)
Black/African American	728(16%)	612(21%)	116(7%)	564(23%)
Native American or Native Alaskan	27(1%)	20(1%)	7(0%)	17(1%)
White	2,979(66%)	1,540(54%)	1,439(86%)	1,169(48%)
Multiple/Other Race	276(6%)	230(8%)	46(3%)	215(9%)
Unknown/missing	157(3%)	150(5%)	7(0%)	151(6%)
Maternal ethnicity				
Hispanic/Latino	763(17%)	680(24%)	>80(>5%)	560(23%)
Not Hispanic/Latino	3,771(83%)	2,188(76%)	1,583(95%)	1,866(77%)
Missing	13(0%)	8(0%)	<5	7(0%)
Maternal age, years				
<18-28 years	1,331(29%)	1,012(35%)	319(19%)	843(35%)
29-34 years	1,992(44%)	1,198(42%)	794(48%)	990(41%)
35-40 years	1,087(24%)	602(21%)	485(29%)	540(22%)
41+ years	137(3%)	64(2%)	73(4%)	60(2%)
Maternal education				
Less than high school	183(4%)	166(6%)	17(1%)	123(5%)
HS degree, GED or equivalent	617(14%)	496(17%)	121(7%)	439(18%)
Some college, no degree, Assoc/Trade	1,021(22%)	688(24%)	333(20%)	600(25%)
Bachelor's degree (BA, BS)	1,426(31%)	842(29%)	584(35%)	722(30%)
Masters, Prof or Doctorate Degree	1,235(27%)	<685(>24%)	556(33%)	>545(>22%)
Missing	65(1%)	<5	60(4%)	<5
Pre-Pregnancy BMI, kg/m2				
<18.5	118(3%)	71(2%)	47(3%)	66(3%)
18.5-24.9	2,163(48%)	1,232(43%)	931(56%)	1,007(41%)
25-29.9	1,178(26%)	767(27%)	411(25%)	644(26%)
>=30	1,065(23%)	789(27%)	276(17%)	700(29%)

Missing	23(1%)	17(1%)	6(0%)	16(1%)
Prenatal smoking				
Active	206(5%)	135(5%)	71(4%)	111(5%)
Not active	4,315(95%)	2,734(95%)	1,581(95%)	2,308(95%)
Missing	26(1%)	7(0%)	19(1%)	14(1%)
Ever breastfeed				
Yes	3,284(72%)	2,073(72%)	>1,210(>72%)	1,680(69%)
No	63(1%)	60(2%)	<5	43(2%)
Missing	1,200(26%)	743(26%)	457(27%)	710(29%)
Prenatal vitamin use				
Yes	1,925(42%)	1,490(52%)	N/A	1,045(43%)
No	114(3%)	91(3%)	23(1%)	85(3%)
Missing	2,508(55%)	1,295(45%)	1,213(73%)	1,303(54%)
Prenatal vitamin use (first month)				
Yes	274(6%)	274(10%)	1,671(100%)	<5
No	174(4%)	174(6%)	435(26%)	<5
Missing	4,099(90%)	2,428(84%)	N/A	2,430(100%)
Child sex				
Male	2,357(52%)	1,535(53%)	822(49%)	1,320(54%)
Female	2,190(48%)	1,341(47%)	849(51%)	1,113(46%)
Child year of birth				
1999-2004	574(13%)	N/A	574(34%)	N/A
2005-2009	436(10%)	385(13%)	51(3%)	385(16%)
2010-2014	2,042(45%)	1,229(43%)	813(49%)	879(36%)
2015+	1,495(33%)	1,262(44%)	233(14%)	1,169(48%)
Birthweight				
Small for gestational age	223(5%)	170(6%)	53(3%)	139(6%)
Normal for gestational age	3,417(75%)	2,189(76%)	1,228(73%)	1,820(75%)
Large for gestational age	750(16%)	391(14%)	359(21%)	357(15%)
Missing	157(3%)	126(4%)	31(2%)	117(5%)
ASD diagnosis				
Yes	252(6%)	200(7%)	52(3%)	215(9%)
No	4,033(89%)	2,615(91%)	1,418(85%)	2,189(90%)
ASD not available	262(6%)	61(2%)	201(12%)	29(1%)
Total SRS raw score				
SRS available	4,547(100%)	2,876(100%)	1,671(100%)	2,433(100%)
	Mean (Std)			
Parity	0.83(0.96)	0.83(0.97)	0.83(0.94)	0.84(0.96)
Total caloric intake, kcal	2,004(945)	1,951(1,045)	2,095(733)	1,925(1,090)
Diet Score	N/A	64.3 (12.7)	58.0 (12.1)	0.42 (0.52)
SRS Score	29.3(22.5)	30.9(24.0)	26.5(19.1)	31.5(25.1)

Table S3: Participant Characteristics By Dietary Pattern Analytic Sample Among Those with ASD Outcome Data (ASD-Any n=5822, ASD-HEI n=4128, ASD-AHEI-P n= 1694, ASD-EDIP n=3614)

Characteristics	ASD-Any n(%)	ASD-HEI n(%)	ASD-AHEI-P n(%)	ASD-EDIP n(%)
Cohort Type				
High Familial Likelihood	303(5%)	201(5%)	102(6%)	300(8%)
Population based	5,519(95%)	3,927(95%)	1,592(94%)	3,314(92%)
Maternal and Child Characteristics				
Maternal race				
Asian & Pacific Islander	487(8%)	424(10%)	63(4%)	411(11%)
Black/African American	1,208(21%)	1,087(26%)	121(7%)	1,026(28%)
Native American or Native Alaskan	30(1%)	22(1%)	8(0%)	20(1%)
White	3,498(60%)	2,049(50%)	1,449(86%)	1,626(45%)
Multiple/Other Race	364(6%)	317(8%)	47(3%)	302(8%)
Unknown/missing	235(4%)	229(6%)	6(0%)	229(6%)
Maternal ethnicity				
Hispanic/Latino	991(17%)	898(22%)	>90(>5%)	787(22%)
Not Hispanic/Latino	4,813(83%)	3,217(78%)	1,596(94%)	2,816(78%)
Missing	18(0%)	13(0%)	<5	11(0%)
Maternal age, years				
<18-28 years	1,910(33%)	1,572(38%)	338(20%)	1,386(38%)
29-34 years	2,441(42%)	1,644(40%)	797(47%)	1,406(39%)
35-40 years	1,305(22%)	816(20%)	489(29%)	732(20%)
41+ years	166(3%)	96(2%)	70(4%)	90(2%)
Maternal education				
Less than high school	300(5%)	280(7%)	20(1%)	235(7%)
HS degree, GED or equivalent	975(17%)	840(20%)	135(8%)	778(22%)
Some college, no degree, Assoc/Trade	1,371(24%)	1,002(24%)	369(22%)	892(25%)
Bachelor's degree (BA, BS)	1,698(29%)	1,131(27%)	567(33%)	997(28%)
Masters, Prof or Doctorate Degree	1,414(24%)	863(21%)	551(33%)	703(19%)
Missing	64(1%)	12(0%)	52(3%)	9(0%)
Pre-Pregnancy BMI, kg/m2				
<18.5	168(3%)	117(3%)	51(3%)	110(3%)
18.5-24.9	2,695(46%)	1,762(43%)	933(55%)	1,500(42%)
25-29.9	1,490(26%)	1,068(26%)	422(25%)	929(26%)
>=30	1,408(24%)	1,128(27%)	280(17%)	1,029(28%)

Missing	61(1%)	53(1%)	8(0%)	46(1%)
Prenatal smoking				
Active	305(5%)	231(6%)	74(4%)	200(6%)
Not active	5,490(94%)	3,890(94%)	1,600(94%)	3,397(94%)
Missing	27(0%)	7(0%)	20(1%)	17(0%)
Ever breastfeed				
Yes	4,035(69%)	2,850(69%)	>1,190(>70%)	2,386(66%)
No	114(2%)	111(3%)	<5	90(2%)
Missing	1,673(29%)	1,167(28%)	506(30%)	1,138(31%)
Prenatal vitamin use				
Yes	2,913(50%)	2,406(58%)	N/A	1,926(53%)
No	175(3%)	145(4%)	30(2%)	138(4%)
Missing	2,734(47%)	1,577(38%)	1,157(68%)	1,550(43%)
Prenatal vitamin use (first month)				
Yes	289(5%)	289(7%)	1,694(100%)	N/A
No	181(3%)	181(4%)	507(30%)	<5
Missing	5,352(92%)	3,658(89%)	N/A	>3,610(<100%)
Child sex				
Male	3,057(53%)	2,229(54%)	828(49%)	1,977(55%)
Female	2,765(47%)	1,899(46%)	866(51%)	1,637(45%)
Child year of birth				
1999-2004	670(12%)	N/A	670(40%)	N/A
2005-2009	802(14%)	750(18%)	52(3%)	747(21%)
2010-2014	2,560(44%)	1,771(43%)	789(47%)	1,400(39%)
2015+	1,790(31%)	1,607(39%)	183(11%)	1,467(41%)
Birthweight				
Small for gestational age	311(5%)	263(6%)	48(3%)	229(6%)
Normal for gestational age	4,387(75%)	3,133(76%)	1,254(74%)	2,707(75%)
Large for gestational age	955(16%)	581(14%)	374(22%)	536(15%)
Missing	169(3%)	151(4%)	18(1%)	142(4%)
ASD diagnosis				
Yes	441(8%)	383(9%)	58(3%)	391(11%)
No	5,381(92%)	3,745(91%)	1,636(97%)	3,223(89%)
Total SRS raw score				
SRS not available	1,537(26%)	1,313(32%)	224(13%)	1,210(33%)
SRS available	4,285(74%)	2,815(68%)	1,470(87%)	2,404(67%)
	Mean (Std)			
Parity	0.83(0.98)	0.85(1.00)	0.82(0.94)	0.85(1.00)
Total caloric intake, kcal	2,060(1,058)	2,053(1,166)	2,079(733)	2,051(1,222)
Diet Score	N/A	64.2 (12.3)	58.1 (12.0)	0.47 (0.59)
SRS Score	29.2(22.4)	30.6(23.7)	26.4(19.4)	31.4(25.0)

Table S4: Distribution (mean, SD) of Dietary Pattern Scores Across the Cohorts Included in Analytic Samples

Cohort Name	Analytic Sample (n)	HEI	EDIP	AHEIP
Healthy Start	ASD+SRS 468	49.65 (9.95)		
	ASD 455	49.69 (9.92)		
	SRS 434	49.71 (10.06)		
Maternal Health Influences and Nutrition in Neonatal and Infant Development (MINNIE)	ASD+SRS 17	47.62 (12.57)		
	ASD 16	47.94 (12.91)		
	SRS 12	49.58 (14.22)		
Atlanta ECHO Cohort of Emory University	ASD+SRS 182 182	60.71 (9.39)	0.56 (0.52)	
	ASD 182 182	60.71 (9.39)	0.56 (0.52)	
	SRS 68 68	63.29 (9.40)	0.47 (0.45)	
Pregnancy Environment and Lifestyle Study (PETALS)	ASD+SRS 1227 1207	71.89 (9.34)	0.29 (0.35)	
	ASD 1227 1207	71.89 (9.34)	0.29 (0.35)	
	SRS 1031 1015	72.01 (9.24)	0.29 (0.34)	
Maternal and Developmental Risks from Environmental and Social Stressors (MADRES)	ASD+SRS 49	44.90 (9.60)		
	ASD 34	43.50 (9.95)		
	SRS 49	44.90 (9.60)		
Revisiting Childhood Autism Risk from Genes and the Environment Study (ReCHARGE)	ASD+SRS 486 470	66.69 (9.43)	0.60 (0.64)	
	ASD 486 470	66.69 (9.43)	0.60 (0.64)	
	SRS 196 191	67.15 (9.09)	0.57 (0.51)	
New Hampshire Birth Cohort Study (NHBCS)	ASD+SRS 1121			56.67 (12.46)
	ASD 922			56.31 (12.49)
	SRS 1004			56.66 (12.48)
Conditions Affecting Neurocognitive Development and Learning in Early Childhood (CANDLE)	ASD+SRS 1062 1062	62.29 (10.34)	0.69 (0.76)	
	ASD 1061 1061	62.30 (10.34)	0.69 (0.76)	
	SRS 638 638	62.34 (10.34)	0.66 (0.73)	

University of California – Markers of Autism Risk in Babies (MARBLES)	ASD+SRS	66.11 (9.71)	0.31 (0.31)	
	ASD 201 198	66.13 (9.65)	0.31 (0.31)	
	SRS 137 134	66.30 (9.81)	0.32 (0.30)	
Early Autism Risk Longitudinal Investigation (EARLI)	ASD+SRS 103 103		0.14 (0.35)	52.72 (14.10)
	ASD 102 102		0.14 (0.35)	52.78 (14.16)
	SRS 93 93		0.17 (0.31)	52.17 (14.08)
Project Viva	ASD+SRS 671			61.35 (9.96)
	ASD 670			61.32 (9.94)
	SRS 574			61.32 (9.96)
Michigan Archive for Research in Child Health (MARCH)	ASD+SRS 76	47.80 (14.35)		
	ASD 72	48.29 (14.26)		
	SRS 17	44.36 (13.98)		
Illinois Kids Development Study (IKIDS)	ASD+SRS 141 141	64.82 (9.86)	0.19 (0.30)	
	ASD 136 136	64.82 (9.88)	0.18 (0.31)	
	SRS 139 139	64.80 (9.86)	0.19 (0.30)	
PRogramming of Intergenerational Stress Mechanisms (PRISM)	ASD+SRS 275 275	65.00 (11.30)	0.52 (0.55)	
	ASD 258 258	65.05 (11.07)	0.53 (0.55)	
	SRS 155 155	66.59 (10.75)	0.47 (0.44)	

Table S5: Association Between Maternal Dietary Patterns During Pregnancy and Child SRS Raw Scores Modeled Using Quantile Regression Fixed at the 10th, 20th, 70th, and 90th Percentiles

Percentile	Quartile	HEI	AHEI-P	EDIP
		Adjusted (β , 95% CI)	Adjusted (β , 95% CI)	Adjusted (β , 95% CI)
0.1	Q1	0 (reference)	0 (reference)	0 (reference)
	Q2	-1.60 (-2.86,-0.70)	-2.00 (-4.22,-0.42)	-1.00 (-2.12,0.24)
	Q3	-3.40 (-4.75,-2.05)	-2.00 (-4.62,0.37)	-1.00 (-1.97,0.03)
	Q4	-1.80 (-3.31,-0.55)	-2.00 (-3.90,-0.48)	-1.50 (-2.24,-0.11)
0.2	Q1	0 (reference)	0 (reference)	0 (reference)
	Q2	-1.33 (-3.11,-0.16)	-2.33 (-4.00,-0.51)	-1.25 (-2.87,0.30)
	Q3	-3.33 (-5.21,-2.76)	-2.33 (-4.43,-0.61)	-0.75 (-2.23,0.71)
	Q4	-3.33 (-5.35,-2.23)	-2.00 (-4.35,-0.74)	-0.13 (-1.81,1.49)
0.7	Q1	0 (reference)	0 (reference)	0 (reference)
	Q2	-4.00 (-7.98,-0.30)	0.00 (-2.76,3.68)	-2.43 (-4.08,1.96)
	Q3	-5.00 (-8.51,-1.05)	-0.50 (-3.85,3.59)	-2.52 (-4.40,1.22)
	Q4	-5.00 (-8.44,-1.82)	-1.50 (-5.09,2.69)	1.86 (-1.40,5.97)
0.9	Q1	0 (reference)	0 (reference)	0 (reference)
	Q2	-0.00 (-5.51,5.36)	-1.83 (-7.57,4.94)	-0.50 (-4.52,2.63)
	Q3	-2.50 (-7.99,2.92)	-2.50 (-10.15,3.85)	0.70 (-4.99,3.98)
	Q4	-4.50 (-9.48,0.69)	-4.00 (-12.46,2.24)	2.40 (-2.87,7.87)

Modeled using quantile regression fixed at indicated percentile of SRS total raw score
Adjusted: maternal age, maternal pre-pregnancy BMI, child sex (male, female), cohort type (familial/not-assign Recharge to ASD High group), maternal ethnicity/race (non-Hispanic white, non-Hispanic Black, Hispanic, Other), maternal education (less than high school, high school/GED, some college/associates degree/trade school, bachelor's degree, graduate degree), maternal smoking (yes, no), and child year of birth (1998-2004, 2005-2009, 2010-2014, 2015+)

Table S6: Association Between Maternal Dietary Patterns During Pregnancy and Child SRS Raw Scores + Adjustment for Additional Factors

	Adjusted (PRIMARY RESULT) (β, 95% CI)	Adjusted + diet form type (β, 95% CI)	Adjusted + supplement use (β, 95% CI)	Adjusted + dietary folic acid (β, 95% CI)	Adjusted + parity (β, 95% CI)	Adjusted + breastfeeding Ever (β, 95% CI)	Adjusted + Income (β, 95% CI)	Adjusted + Preterm (β, 95% CI)	Adjusted + Birth size (β, 95% CI)	Adjusted + GDB (β, 95% CI)
EDIP	n= 2433	n= 2433	n= 1130	n=2431	n= 2433	n= 2433	n= 2433	n= 2433	n= 2433	n= 2433
Q1	0 (reference)	0 (reference)	0 (reference)	0 (reference)	0 (reference)	0 (reference)	0 (reference)	0 (reference)	0 (reference)	0 (reference)
Q2	-1.25 (-3.73,0.65)	-1.45 (-3.74,0.86)	-0.00 (-5.21,3.31)	-1.34 (-3.82,0.73)	-1.71 (-3.97,0.44)	-1.36 (-3.88,1.16)	-1.26 (-3.85,1.34)	-1.25 (-3.90,1.03)	-1.38 (-3.81,1.06)	-1.13 (-3.50,0.91)
Q3	-0.42 (-3.44,2.11)	-0.55 (-3.25,2.17)	0.00 (-4.85,2.81)	-0.46 (-3.51,2.26)	-0.08 (-2.34,2.04)	-1.14 (-3.31,1.04)	-0.58 (-2.78,1.61)	-0.92 (-3.44,2.37)	-0.50 (-2.93,1.93)	-0.80 (-3.39,1.93)
Q4	0.64 (-1.91,2.85)	0.36 (-2.20,2.99)	3.00 (-1.60,5.57)	0.51 (-2.57,2.59)	0.90 (-1.99,3.74)	-0.09 (-2.71,2.53)	0.45 (-2.04,2.95)	0.33 (-2.12,2.96)	0.50 (-2.15,3.15)	0.40 (-1.99,2.99)
AHEIP	n= 1671	n= 1671^a	n= 458^b	n= 1669	n= 1187	n= 1671	n= 101	n= 1671	n= 1671	n= 1671
Q1	0 (reference)	0 (reference)	0 (reference)	0 (reference)	0 (reference)	0 (reference)	-	0 (reference)	0 (reference)	0 (reference)
Q2	0.00 (-2.56,1.79)	0.00 (-2.41,1.79)	-3.00 (-7.57,1.97)	0.06 (-2.23,2.35)	-0.33 (-3.32,2.65)	0.00 (-2.31,2.31)	-	0.00 (-2.22,2.22)	0.00 (-2.13,2.13)	-0.00 (-2.09,2.09)
Q3	-1.50 (-3.95,0.86)	-1.50 (-3.95,0.90)	-3.00 (-6.00,1.94)	-1.85 (-4.49,0.78)	-0.33 (-3.53,2.86)	-1.50 (-4.22,1.22)	-	-1.57 (-3.99,0.85)	-1.00 (-3.32,1.32)	-1.50 (-4.12,1.12)
Q4	-1.50 (-3.27,0.39)	-1.50 (-3.45,0.39)	-1.00 (-3.90,3.41)	-2.12 (-4.28,0.04)	-0.33 (-3.16,2.49)	-1.50 (-3.85,0.85)	-	-1.57 (-3.71,0.57)	-1.67 (-3.83,0.50)	-1.50 (-3.70,0.70)
HEI	n= 2876	n= 2876	n= 2876	n=2876	n= 2876	n= 2876	n= 2876	n= 2876	n= 2876	n= 2876
Q1	0 (reference)	0 (reference)	0 (reference)	0 (reference)	0 (reference)	0 (reference)	0 (reference)	0 (reference)	0 (reference)	0 (reference)
Q2	-1.84 (-3.99,-0.20)	-0.33 (-2.12,1.86)	-2.42 (-4.36,-0.48)	-1.82 (-4.18,-0.25)	-2.20 (-4.98,0.07)	-0.47 (-2.30,1.36)	-2.25 (-4.34,-0.16)	-1.80 (-3.98,-0.03)	-2.07 (-4.01,-0.13)	-2.03 (-3.68,0.01)
Q3	-4.24 (-6.17,-2.26)	-2.00 (-3.79,0.46)	-4.62 (-6.80,-2.45)	-4.13 (-6.18,-2.24)	-4.21 (-6.21,-1.83)	-2.35 (-4.61,-0.10)	-4.75 (-6.75,-2.75)	-4.20 (-6.09,-2.12)	-4.47 (-6.41,-2.53)	-4.03 (-5.58,-1.86)

Q4	-3.41 (-5.15,-1.26)	-1.00 (-3.22,2.02)	-4.79 (-7.02,-2.56)	-3.28 (-5.15,-1.13)	-3.15 (-5.93,-1.03)	-2.00 (-4.04,0.04)	-4.00 (-6.28,-1.72)	-3.40 (-5.22,-1.15)	-3.24 (-5.37,-1.12)	-3.55 (-4.97,-1.05)
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Modeled using quantile regression fixed at 50th percentile

Adjusted: maternal age, maternal pre-pregnancy BMI, child sex (male, female), cohort type (familial/not-assign Recharge to ASD High group), maternal ethnicity/race (non-Hispanic white, non-Hispanic Black, Hispanic, Other), maternal education (less than high school, high school/GED, some college/associates degree/trade school, bachelor's degree, graduate degree), maternal smoking (yes, no), and child year of birth (1998-2004, 2005-2009, 2010-2014, 2015+)

^aFor this model cohort type was not included in adjusted models due to collinearity with form type

^bThis model was run in a subset due to data availability

^{*}Supplement use in the 1st month could not be analyzed due to high missingness

Q2	1.04 (0.71,1.51)	0.93 (0.63,1.38)	1.01 (0.69,1.48)	1.04 (0.71, 1.51)	1.04 (0.71,1.52)	1.04 (0.72,1.52)	1.02 (0.70,1.48)	1.04 (0.71,1.51)	1.03 (0.71,1.50)	1.03 (0.71,1.50)
Q3	0.92 (0.62,1.35)	0.81 (0.54,1.22)	0.89 (0.60,1.31)	0.92 (0.62, 1.35)	0.91 (0.61,1.35)	0.93 (0.63,1.38)	0.90 (0.61,1.33)	0.92 (0.62,1.35)	0.91 (0.61,1.34)	0.92 (0.62,1.35)
Q4	0.99 (0.66,1.49)	0.87 (0.57,1.32)	0.96 (0.63,1.44)	0.99 (0.66, 1.49)	0.94 (0.62,1.42)	1.01 (0.67,1.51)	0.97 (0.64,1.46)	0.99 (0.66,1.49)	0.98 (0.65,1.47)	0.98 (0.66,1.48)

Adjusted: maternal age, maternal pre-pregnancy BMI, child sex (male, female), cohort type (familial/not-assign Recharge to ASD High group), maternal ethnicity/race (non-Hispanic white, non-Hispanic Black, Hispanic, Other), maternal education (less than high school, high school/GED, some college/associates degree/trade school, bachelor's degree, graduate degree), maternal smoking (yes, no), and child year of birth (1998-2004, 2005-2009, 2010-2014, 2015+)

^aFor this model cohort type was not included in adjusted models due to collinearity with form type

^bThis model was run in a subset due to data availability

*Supplement use in the 1st month could not be analyzed due to high missingness

Table S8: Association Between Maternal Dietary Patterns During Pregnancy and Child SRS Raw Scores, Excluding SRS Preschool and Short Forms

	Primary result: Adjusted (β , 95% CI)	Adjusted (β , 95% CI) excluding SRS preschool and short forms
EDIP	n= 2433	n=1765
Q1	0 (reference)	0 (reference)
Q2	-1.25 (-3.73,0.65)	-0.78 (-1.98,2.77)
Q3	-0.42 (-3.44,2.11)	0.11 (-1.92,2.89)
Q4	0.64 (-1.91,2.85)	0.67 (-1.66,4.75)
AHEI-P	n =1671	n=1318
Q1	0 (reference)	0 (reference)
Q2	0.00 (-2.56,1.79)	-0.38 (-2.84,0.99)
Q3	-1.50 (-3.95,0.86)	-1.38 (-3.40,1.66)
Q4	-1.50 (-3.27,0.39)	-1.38 (-3.28,0.75)
HEI	n= 2876	n= 2229
Q1	0 (reference)	0 (reference)
Q2	-1.84 (-3.99,-0.20)	-0.00 (-3.01,1.98)
Q3	-4.24 (-6.17,-2.26)	-2.00 (-4.97,1.58)
Q4	-3.41 (-5.15,-1.26)	-1.00 (-3.66,1.00)

SRS results modeled using quantile regression fixed at 50th percentile

Adjusted: maternal age, maternal pre-pregnancy BMI, child sex (male, female), cohort type (familial/not-assign Recharge to ASD High group), maternal ethnicity/race (non-Hispanic white, non-Hispanic Black, Hispanic, Other), maternal education (less than high school, high school/GED, some college/associates degree/trade school, bachelor's degree, graduate degree), maternal smoking (yes, no), and child year of birth (1998-2004, 2005-2009, 2010-2014, 2015+)

*Of those excluded: 38% preschool and 62% short form

Table S9: Association Between Maternal Dietary Patterns During Pregnancy and SRS T-scores

	n	Crude, T score (β , 95% CI)	Adjusted, T score (β , 95% CI)	Test of trend (p)
EDIP	2433			
Q1	608	0 (reference)	0 (reference)	0.2
Q2	608	-1.00 (N/A, 1.41)	-0.00 (-1.51,0.70)	
Q3	609	-0.00 (-16.40, 6.90)	-0.00 (-1.00,0.80)	
Q4	608	-0.00 (N/A, 0.00)	1.00 (-0.49,1.46)	
AHEIP	1671			
Q1	417	0 (reference)	0 (reference)	0.02
Q2	418	-2.00 (-8.48, 8.48)	0.00 (-0.93,0.92)	
Q3	418	-2.00 (-2.00, 8.04)	-0.50 (-1.56,0.58)	
Q4	418	-3.00 (-3.00, N/A)	-1.00 (-1.65,0.02)	
HEI	2876			
Q1	719	0 (reference)	0 (reference)	0.11
Q2	719	0.00 (-5.09, 2.09)	-1.00 (-1.78,-0.04)	
Q3	719	0.00 (-5.09, 10.09)	-2.00 (-2.62,-1.04)	
Q4	719	1.00 (-5.09, 2.09)	-1.00 (-1.96,-0.24)	
<p>Modeled using quantile regression fixed at 50th percentile of SRS total T-score Adjusted: maternal age, maternal pre-pregnancy BMI, child sex (male, female), cohort type (familial/not), maternal ethnicity/race (non-Hispanic White, non-Hispanic Black, Hispanic, Other), maternal education (less than high school, high school/GED, some college/associates degree/trade school, bachelor's degree, graduate degree), maternal smoking (yes, no), and child year of birth (1998-2004, 2005-2009, 2010-2014, 2015+) Energy Adjusted: maternal age, maternal pre-pregnancy BMI, child sex (male, female), cohort type (familial/not), maternal ethnicity/race (non-Hispanic White, non-Hispanic Black, Hispanic, Other), maternal education (less than high school, high school/GED, some college/associates degree/trade school, bachelor's degree, graduate degree), maternal smoking (yes, no), and child year of birth (1998-2004, 2005-2009, 2010-2014, 2015+)</p>				