

Supplementary Table 1. General characteristics of pregnant women and offspring according to tertiles of toxicant consumption

Characteristics	Dietary toxicants																				
	As			Cd			MeHg			Pb			PCDD/Fs			DL-PCBs			NDL-PCBs		
	T1 <194.83 µg/d	T3 >298.09 µg/d	P	T1 <5.11 µg/d	T3 >6.83 µg/d	P	T1 <3.62 µg/d	T3 >5.51 µg/d	P	T1 <2.92 µg/d	T3 >3.60 µg/d	P	T1 <8.55 TEQ/d	T3 >10.90 TEQ/d	P	T1 <14.00 TEQ/d	T3 >20.55 TEQ/d	P	T1 <133.91 TEQ/d	T3 >201.92 TEQ/d	P
Maternal characteristics																					
Age (years)	31.17±4.82	32.86±3.75	0.083	31.98±4.30	31.91±4.57	0.955	31.34±4.83	32.97±4.27	0.055	31.84±4.19	32.45±4.56	0.370	31.53±4.33	32.50±4.34	0.393	31.39±5.05	32.81±4.38	0.121	31.19±4.84	32.75±4.36	0.128
BMI (kg/m2), %			0.271			0.853			0.521			0.998			0.454			0.276			0.507
<25 (normal weight)	59.4	59.4		60.9	53.1		62.5	53.1		56.3	57.8		53.1	62.5		64.1	50.0		59.4	51.6	
25-29 (overweight)	21.9	28.1		28.1	32.8		21.9	35.9		29.7	28.1		28.1	25.0		21.9	39.1		23.4	35.9	
≥30 (obesity)	18.7	12.5		11.0	14.1		15.6	11.0		14.0	14.1		18.8	12.5		14.0	10.9		17.2	12.5	
Social class, %			0.620			0.339			0.620			0.182			0.761			0.620			0.620
Low	6.2	10.9		9.4	14.1		7.8	10.9		3.1	10.9		6.3	9.4		7.8	10.9		7.8	10.9	
Middle/High	93.8	89.1		90.6	85.9		92.2	89.1		96.9	89.1		93.7	90.6		92.2	89.1		92.2	89.1	
Smoking status, %			0.930			0.068			0.389			0.389			0.105			0.131			0.930
Never	67.2	68.8		75.0	57.8		70.3	73.4		73.4	62.5		70.3	59.4		75.0	71.9		70.3	68.7	
Ex-smoker/Smoker	32.8	31.2		25.0	42.2		29.7	26.6		26.6	37.5		29.7	40.6		25.0	28.1		29.7	31.3	
MedDiet during pregnancy (score)	9.34±2.29	10.19±2.48	0.130	9.42±2.17	9.83±2.38	0.175	9.36±2.39	10.65±2.35	0.008	9.77±2.38	9.69±2.41	0.734	10.01±2.59	9.87±2.69	0.643	9.47±2.56	10.61±2.45	0.023	9.66±2.39	10.59±2.43	0.088
Energy intake during pregnancy (kcal/d)	1892.11±468.66	2143.82±575.45	0.016	1789.28±455.11	2049.99±584.02	0.013	1863.54±446.98	2132.25±594.04	0.010	1709.09±375.45	2196.97±572.95	<.001	1721.66±394.41	2254.24±582.20	<.001	1875.24±452.22	2111.13±608.79	0.030	1871.06±469.60	2120.56±600.15	0.019
State-trait anxiety inventory score	14.49±7.27	14.37±6.14	0.566	16.02±6.84	13.58±5.92	0.128	15.49±7.62	14.17±6.19	0.550	14.95±7.44	14.04±5.67	0.515	16.07±8.26	13.95±5.60	0.175	15.52±7.63	14.44±6.29	0.586	15.20±7.3	14.21±6.17	0.688

Descriptive statistics are presented with quantitative variables expressed as mean ± standard deviations, and qualitative variables as percentages. P-value for comparisons between categories was calculated by Pearson's chi-square test or one-factor ANOVA tests for categorical variables and continuous variables, respectively. (%). Abbreviations: T, tertile; As, arsenic; Cd, cadmium; MeHg, methylmercury; Pb, lead; PCDD/Fs, polychlorinated dibenzo-p-dioxins and dibenzofurans; DL-PCBs, dioxin-like polychlorinated biphenyls; NDL-PCBs, non-dioxin-like polychlorinated biphenyls; MedDiet, Mediterranean diet; BMI, early pregnancy Body Mass Index; d, day.

Supplementary Table 2. Association of 4-year children psychological problems and tertiles of prenatal dietary toxicants consumption

Emotional and Behavior scale	As			Cd			MeHg			Dietary toxicants Pb			PCDD/Fs			DL-PCBs			NDL-PCBs		
	T1	T3	P	T1	T3	P	T1	T3	P	T1	T3	P	T1	T3	P	T1	T3	P	T1	T3	P
	<194.8 3 µg/d	>298.09 µg/d		<5.11 µg/d	>6.83 µg/d		<3.62 µg/d	>5.51 µg/d		<2.92 µg/d	>3.60 µg/d		<8.55 TEQ/d	>10.90 TEQ/d		<14.00 TEQ/d	>20.55 TEQ/d		<133.91 TEQ/d	>201.92 TEQ/d	
Syndrome Scales																					
Emotionally reactive	57.56± 9.64	56.77± 8.37	0.879	57.03± 9.75	57.56± 8.78	0.877	57.34± 9.39	56.64± 8.06	0.878	57.23±1 0.11	57.95± 8.02	0.530	57.41± 9.75	56.45± 7.51	0.775	57.50± 9.82	57.17± 8.77	0.874	57.22± 9.35	57.16± 8.65	0.987
Anxious/depressed	55.88± 7.14	56.70± 8.00	0.758	56.17± 7.96	56.55± 7.67	0.805	55.83± 6.52	56.06± 7.64	0.878	55.63±7. 47	57.19± 7.78	0.388	55.69± 7.18	55.97± 6.74	0.719	56.05± 7.26	56.27± 7.93	0.984	55.72± 6.58	56.11± 7.64	0.819
Somatic complaints	55.39± 6.67	55.50± 6.05	0.944	56.73± 7.56	54.86± 6.12	0.114	55.50± 6.80	55.25± 6.41	0.971	55.52±6. 83	55.91± 6.49	0.517	55.33± 6.90	55.34± 6.49	1.000	55.59± 6.92	55.31± 6.46	0.915	55.39± 6.83	55.09± 6.32	0.936
Withdrawn	57.73± 6.84	58.58± 7.10	0.574	57.84± 8.04	57.55± 6.79	0.914	57.39± 6.94	57.81± 7.14	0.793	57.34±7. 63	58.19± 6.32	0.805	56.86± 7.45	57.11± 5.78	0.083	57.39± 7.08	57.97± 7.46	0.840	57.52± 6.83	57.91± 7.28	0.910
Attention problems	58.64± 7.38	58.22± 7.16	0.191	58.33± 7.07	58.13± 7.66	0.455	58.48± 7.10	57.34± 7.37	0.625	57.42±7. 02	58.22± 6.97	0.818	58.19± 7.30	57.17± 7.02	0.720	58.16± 6.83	57.81± 7.61	0.808	58.22± 7.22	57.61± 7.42	0.824
Aggressive behavior	55.98± 7.21	55.53± 7.40	0.814	55.36± 6.67	56.36± 8.76	0.545	55.98± 6.83	54.02± 5.37	0.122	55.27±7. 07	55.75± 6.97	0.932	56.09± 8.12	54.28± 5.80	0.257	56.28± 7.18	54.66± 7.02	0.468	55.80± 6.76	54.91± 7.27	0.705
Broad-band scales																					
Internalizing	55.19± 11.37	56.02± 10.86	0.311	54.84± 13.11	55.41± 11.33	0.755	54.64± 11.65	55.11± 11.03	0.935	53.72±1 2.83	57.09± 10.05	0.144	53.63± 12.92	54.91± 10.06	0.657	54.84± 11.96	55.44± 11.49	0.739	54.48± 11.67	55.34± 11.37	0.865
Externalizing	54.11± 11.25	54.09± 10.36	0.495	53.52± 10.91	54.34± 12.49	0.620	54.23± 10.81	51.73± 9.56	0.338	53.20±1 0.59	54.41± 9.97	0.667	53.98± 12.06	52.28± 9.33	0.610	54.33± 11.00	52.42± 10.73	0.629	53.98± 10.71	52.92± 10.53	0.866
Total problems	55.03± 11.74	55.06± 11.21	0.589	54.73± 13.05	55.13± 12.90	0.691	54.77± 11.36	53.47± 10.75	0.756	53.80±1 2.40	55.80± 11.00	0.537	54.39± 12.80	53.50± 10.08	0.707	54.89± 12.02	53.97± 11.62	0.913	54.45± 11.34	54.03± 11.42	0.951
DSM-Oriented Scales																					
Depressive problems	56.67± 7.01	56.48± 6.70	0.961	55.70± 6.77	56.95± 7.64	0.557	56.16± 6.87	55.86± 6.42	0.407	55.64±6. 86	57.11± 6.84	0.485	56.00± 7.15	55.63± 6.11	0.170	56.52± 7.11	56.27± 6.91	0.946	55.92± 6.81	56.02± 6.82	0.360
Anxiety problems	57.30± 7.84	58.09± 8.31	0.726	57.20± 8.56	57.56± 8.05	0.956	57.00± 7.70	57.33± 8.26	0.767	56.92±8. 37	58.33± 8.24	0.572	57.03± 8.00	57.34± 7.82	0.798	57.23± 8.17	57.58± 8.66	0.966	56.75± 7.50	57.28± 8.44	0.539
Autism spectrum problems	57.48± 7.16	58.03± 7.03	0.394	57.91± 7.77	57.17± 6.67	0.664	57.08± 7.17	57.34± 7.08	0.961	57.48±7. 59	57.64± 6.55	0.742	57.19± 7.65	56.66± 6.22	0.570	57.08± 7.23	57.39± 7.20	0.963	57.22± 7.02	57.34± 7.21	0.995
Attention- deficit/Hyperactivity problems	58.27± 8.17	57.52± 7.93	0.299	57.75± 7.69	57.70± 8.50	0.573	58.42± 7.68	55.94± 7.21	0.202	56.73±7. 23	57.39± 7.38	0.761	58.20± 8.20	56.13± 7.02	0.319	58.53± 7.82	56.44± 7.80	0.298	58.05± 7.78	56.48± 7.85	0.540
Oppositional defiant problems	55.23± 6.90	55.30± 7.22	0.764	55.05± 6.85	55.94± 7.86	0.301	55.22± 6.80	53.89± 5.35	0.250	54.97±6. 99	55.95± 7.33	0.319	55.06± 7.27	54.28± 6.17	0.528	55.41± 7.17	54.42± 6.25	0.704	55.00± 6.53	54.77± 6.58	0.926

P-value for comparisons among categories was calculated by one-factor ANOVA tests for categorical variables, respectively. Abbreviations: T, tertile; As, arsenic; Cd, cadmium; MeHg, methylmercury; Pb, lead; PCDD/Fs, polychlorinated dibenzo-p-dioxins and dibenzofurans; DL-PCBs, dioxin-like polychlorinated biphenyls; NDL-PCBs, non-dioxin-like polychlorinated biphenyls; d, day.