

**Table S1.** Relationship between participant characteristics and plasma BPA, BPF, MEHP, DEHP and DBP levels in the PA-restricted diet group.

		BPA (ng/mL)	BPF (ng/mL)	DBP (ng/mL)	DEHP (ng/mL)	MEHP (ng/mL)
<b>Sex</b>						
	Girl (n=18)	16.69 (9.94-30.09)	7.09 (3.37-8.20)	0.20 (0.12-0.36)	0.40 (0.28-0.49)	0.55 (0.13-0.84)
	Boy (n=16)	18.58 (12.25-39.47)	6.80 (5.55-8.15)	0.20 (0.09-0.49)	0.49 (0.31-0.67)	0.37 (0.20-0.54)
	<i>p</i>	0.242	0.286	0.197	0.203	0.183
<b>Age</b>						
	<4 years (n=17)	12.96 (10.00-25.13)	6.67 (2.07-7.60)	0.21 (0.13-0.56)	0.43 (0.34-0.65)	0.54 (0.29-0.88)
	≥4 years (n=17)	20.13 (16.07-36.59)	6.92 (5.58-8.60)	0.18 (0.07-0.27)	0.36 (0.27-0.52)	0.34 (0.12-0.58)
	<i>p</i>	0.170	0.339	0.150	0.182	0.131
<b>Birth order</b>						
	First child (n=14)	16.06 (11.05-25.03)	7.00 (4.83- 8.32)	0.17 (0.11-0.32)	0.36 (0.29-0.61)	0.39 (0.18-0.83)
	≥2. child (n=20)	20.24 (11.52-30.79)	6.75 (4.50-8.27)	0.24 (0.12-0.46)	0.42 (0.32-0.60)	0.54 (0.19-0.71)
	<i>p</i>	0.323	0.569	0.377	0.616	0.877
<b>Number of total children</b>						
	1 (n=11)	12.96 (10.40-18.88)	7.14 (3.84-8.01)	0.15 (0.08-0.53)	0.31 (0.29-0.52)	0.40 (0.12-1.06)
	2 (n=13)	20.13 (13.78-37.28)	6.67 (2.51-8.13)	0.19 (0.11-0.29)	0.38 (0.26-0.67)	0.35 (0.20-0.67)
	3 and more (n=10)	19.32 (10.92-34.55)	7.09 (5.79-8.65)	0.28 (0.17-0.52)	0.44 (0.40-0.63)	0.55 (0.17-0.82)
	<i>p</i>	0.325	0.523	0.379	0.422	0.875
<b>Maternal education level</b>						
	≤8 years (n=23)	19.26 (11.35-30.84)	6.92 (5.79-8.01)	0.21 (0.12-0.37)	0.42 (0.30-0.62)	0.40 (0.18-0.74)
	>8 years (n=11)	15.54 (11.26-20.13)	5.40 (2.16-8.76)	0.18 (0.08-0.53)	0.40 (0.29-0.53)	0.45 (0.20-0.75)
	<i>p</i>	0.188	0.363	0.800	0.942	0.885
<b>Paternal education level</b>						
	≤8 years (n=23)	18.88 (10.40-30.66)	7.25 (5.99-8.45)	0.21 (0.11-0.49)	0.43 (0.30-0.62)	0.56 (0.20-0.77)
	>8 years (n=11)	16.57 (11.35-42.34)	5.40 (1.97-7.14)	0.18 (0.08-0.32)	0.38 (0.29-0.53)	0.31 (0.13-0.46)
	<i>p</i>	0.856	0.098	0.586	0.513	0.153
<b>Plastic baby bottle</b>						
	Yes (n=13)	17.12 (10.48-44.00)	6.83 (3.97-12.04)	0.29 (0.16-0.57)	0.46 (0.40-0.67)	0.45 (0.19-0.88)
	No (n=21)	18.88 (11.33-30.23)	6.86 (4.69-7.88)	0.15 (0.09-0.27)	0.39 (0.19-0.67)	0.39 (0.19-0.67)
	<i>p</i>	0.834	0.807	0.104	0.055	0.675
<b>Frozen food</b>						
	Yes (n=17)	17.12 (10.43-30.70)	6.76 (3.00-7.76)	0.25 (0.17-0.58)	0.43 (0.34-0.58)	0.45 (0.19-0.67)
	No (n=17)	18.29 (11.37-37.28)	7.25 (5.28-8.92)	0.12 (0.09-0.29)	0.38 (0.27-0.59)	0.40 (0.17-0.76)
	<i>p</i>	0.865	0.474	0.041	0.274	0.973
<b>Canned food</b>						
	Yes (n=14)	19.50 (11.05-42.74)	7.29 (4.93-8.84)	0.17 (0.10-0.40)	0.40 (0.30-0.49)	0.43 (0.12-0.60)
	No (n=20)	16.71 (11.36-30.40)	6.72 (4.23-7.50)	0.21 (0.12-0.49)	0.42 (0.29-0.65)	0.40 (0.20-0.76)

	<i>p</i>	0.478	0.323	0.478	0.522	0.616
<b>Canned beverage</b>						
Yes (n=19)		17.12 (11.35-30.56)	6.86 (5.40-8.01)	0.19 (0.11-0.37)	0.46 (0.31-0.62)	0.40 (0.18-0.60)
No (n=15)		18.88 (10.40-30.84)	6.67 (4.21-9.07)	0.21 (0.11-0.53)	0.40 (0.26-0.52)	0.53 (0.31-0.77)
	<i>P</i>	0.918	0.891	0.758	0.271	0.271
<b>Room freshener/spray/ deodorant</b>						
Yes (n=19)		27.04 (11.26-43.91)	7.25 (5.79-8.76)	0.21 (0.12-0.53)	0.42 (0.31-0.52)	0.40 (0.12-0.77)
No (n=15)		16.61 (11.39-20.13)	5.99 (1.97-7.45)	0.18 (0.07-0.32)	0.40 (0.25-0.80)	0.45 (0.26-0.74)
	<i>p</i>	0.286	0.056	0.336	0.656	0.656
<b>Using plastic when preparing and/or eating food</b>						
Yes (n=22)		17.71 (11.11-44.35)	7.06 (5.69-8.88)	0.20 (0.11-0.41)	0.43 (0.31-0.63)	0.29 (0.12-0.64)
No (n=12)		17.74 (11.29-27.51)	6.23 (3.93-7.38)	0.20 (0.07-0.44)	0.36 (0.27-0.51)	0.54 (0.40-1.28)
	<i>p</i>	0.444	0.204	0.709	0.292	0.063
<b>Water used for cooking and/or drinking</b>						
Tap water						
Yes (n=17)		20.13 (11.35-43.91)	7.25 (4.21-9.07)	0.21 (0.11- 0.37)	0.43 (0.29- 0.53)	0.56 (0.18- 0.77)
No (n=17)		16.57 (11.26- 27.04)	6.67 (5.17 -7.45)	0.19 (0.11- 0.49)	0.40 (0.30- 0.66)	0.35 (0.20- 0.56)
	<i>P</i>	0.357	0.838	0.734	0.274	0.610
Bottled water						
Yes (n=12)		16.57 (11.70- 38.25)	5.40 (3.00- 7.11)	0.19 (0.13- 0.47)	0.40 (0.34-0.52)	0.39 (0.28-1.21)
No (n=22)		18.29 (10.83-30.61)	7.14 (5.79-8.60)	0.21 (0.11- 0.43)	0.43 (0.29-0.64)	0.46 (0.12- 0.67)
	<i>p</i>	0.511	0.383	0.958	0.958	0.845
<b>Toys</b>						
Painted wood						
Yes (n=11)		16.57 (11.26- 20.13)	5.79 (4.21 -7.14)	0.15 (0.08-0.21)	0.40 (0.3-0.43)	0.34 (0.20- 0.53)
No (n=23)		19.26 (11.39-42.34)	7.25 (5.78-8.76)	0.25 (0.11-0.53)	0.46 (0.29-0.66)	0.54 (0.18-0.75)
	<i>p</i>	0.274	0.176	0.091	0.612	0.383
Unpainted wood						
Yes (n=18)		18.74 (12.72-44.35)	6.80 (2.12-8.53)	0.20 (0.11-0.50)	0.41 (0.29-0.52)	0.40 (0.17-0.75)
No (n=16)		17.45 (10.02-25.31)	7.03 (5.78-7.89)	0.20 (0.09-0.36)	0.41 (0.30-0.67)	0.43 (0.22-0.59)
	<i>p</i>	0.224	0.670	0.746	0.484	0.986

BPA: bisphenol A, BPF: bisphenol F, DBP: di-buthyl phthalate, DEHP: di-ethylhexyl phthalate, MEHP: mono-ethylhexyl phthalate, PA: phenylalanine, PVC: polyvinyl chloride

PA-restricted diet group includes 34 subjects.

A p-value of less than 0.05 was considered to be statistically significant.

**Table S2.** Relationship between participant characteristics and plasma BPA, BPF, MEHP, DEHP and DBP levels in free diet group.

		BPA (ng/mL)	BPF (ng/mL)	DBP (ng/mL)	DEHP (ng/mL)	MEHP (ng/mL)
<b>Sex</b>						
	Girl (n=38)	17.46 (13.86-33.18)	4.89 (1.40-8.50)	0.33 (0.10-0.65)	0.56 (0.42-0.78)	0.53 (0.34-0.77)
	Boy (n=33)	30.69 (13.09-44.59)	6.05 (2.91-14.28)	0.23 (0.06-0.43)	0.46 (0.27-0.74)	0.57 (0.39-1.06)
	<i>p</i>	0.242	0.286	0.197	0.203	0.183
<b>Age</b>						
	<4 years (n=42)	23.02 (12.29-35.22)	5.18 (2.69-14.94)	0.34 (0.08-0.64)	0.56 (0.38-0.76)	0.57 (0.39-0.97)
	≥4 years (n=29)	29.35 (15.89-45.45)	5.80 (1.54-6.87)	0.20 (0.09-0.43)	0.56 (0.28-0.79)	0.50 (0.31-0.79)
	<i>P</i>	0.184	0.346	0.287	0.939	0.124
<b>Birth order</b>						
	First child (n=36)	23.02 (13.14-31.90)	5.07 (1.49-7.96)	0.30 (0.09-0.49)	0.56 (0.34-0.81)	0.57 (0.36-0.93)
	≥2. child (n=35)	30.38 (15.52-41.33)	6.06 (3.07-14.33)	0.22 (0.09- 0.54)	0.56 (0.32- 0.73)	0.45 (0.38-0.74)
	<i>p</i>	0.277	0.320	0.739	0.713	0.198
<b>Number of total children</b>						
	1 (n=32)	24.22 (13.14-31.90)	4.73 (1.39-6.73)	0.28 (0.09-0.48)	0.53 (0.38-0.86)	0.62 (0.36-0.93)
	2 (n=25)	25.51 (13.84-40.36)	6.05 (3.50-12.72)	0.22 (0.08-0.68)	0.50 (0.30-0.68)	0.57 (0.43-1.03)
	≥3 (n=14)	25.87 (14.36-43.23)	6.51 (2.79-17.65)	0.34 (0.09-0.60)	0.59 (0.30-0.74)	0.39 (0.14-0.53)
	<i>p</i>	0.667	0.372	0.963	0.604	0.017
<b>Family structure</b>						
	Nuclear (n=59)	22.88 (13.20-40.35)	5.80 (2.81-9.35)	0.23 (0.09-0.46)	0.56 (0.30-0.81)	0.54 (0.36-0.92)
	Extended (n=12)	28.93 (14.84-40.83)	4.10 (1.64-11.99)	0.42 (0.17-0.92)	0.53 (0.46-0.67)	0.53 (0.39-0.65)
	<i>p</i>	0.485	0.581	0.143	0.957	0.701
<b>Perception of economic level</b>						
	Income is less than expenses (n=22)	26.38 (13.73-44.25)	6.06 (1.37-11.72)	0.16 (0.06-0.39)	0.57 (0.31-0.82)	0.44 (0.34-0.58)
	Income is equal to expenses (n=36)	21.48 (13.03-38.97)	4.78 (3.33-14.54)	0.35 (0.09-0.77)	0.50 (0.39-0.75)	0.56 (0.30-0.93)
	Income is more than expenses (n=13)	25.90 (14.13-41.87)	5.80 (1.37-8.95)	0.33 (0.10-0.54)	0.62 (0.27-0.92)	0.69 (0.51-0.91)
	<i>p</i>	0.693	0.887	0.075	0.900	0.189
<b>Total breastfeeding time, month</b>						
	0-5 (n=12)	29.91 (15.11-42.44)	4.68 (1.17-7.54)	0.28 (0.07-0.45)	0.59 (0.43-0.84)	0.42 (0.35-0.52)
	6-11 (n=12)	21.68 (13.23-45.70)	5.01 (3.28-8.82)	0.47 (0.20-0.79)	0.56 (0.38-0.89)	0.56 (0.39-0.92)
	12-23 (n=18)	29.08 (15.98-43.23)	4.39 (1.29-9.67)	0.30 (0.09-0.70)	0.59 (0.29-0.76)	0.57 (0.41-0.94)
	24 and more (n=29)	21.37 (13.00-31.75)	6.28 (3.16-14.59)	0.20 (0.06-0.45)	0.47 (0.26-0.75)	0.57 (0.15-0.99)
	<i>p</i>	0.648	0.403	0.172	0.565	0.320
<b>Maternal education level</b>						
	≤8 years (n=40)	24.20 (13.25-40.05)	5.01 (3.13-11.32)	0.28 (0.07-0.46)	0.56 (0.38-0.75)	0.51 (0.38-0.69)
	>8 years (n=31)	25.57 (13.53-40.37)	6.05 (1.38-9.35)	0.28 (0.09-0.53)	0.47 (0.28-0.81)	0.64 (0.34-1.26)

<i>p</i>	0.912	0.889	0.685	0.715	0.085
<b>Paternal education level</b>					
≤8 years (n=41)	29.35 (13.00-40.49)	5.80 (3.34-11.15)	0.28 (0.07-0.48)	0.56 (0.33-0.79)	0.50 (0.35-0.68)
>8 years (n=30)	18.73 (15.02-33.18)	4.90 (1.30-10.28)	0.26 (0.09-0.65)	0.50 (0.29-0.74)	0.75 (0.39-1.27)
<i>p</i>	0.930	0.364	0.744	0.684	0.021
<b>Sources of plastic exposure</b>					
<b>Plastic food container</b>					
Yes (n=47)	29.88 (14.49-41.39)	4.90 (1.69-9.35)	0.32 (0.09-0.62)	0.56 (0.33-0.81)	0.57 (0.40-0.92)
No (n=24)	17.41 (9.13-29.44)	6.53 (2.44-11.99)	0.22 (0.08-0.45)	0.48 (0.32-0.71)	0.44 (0.28-0.66)
<i>p</i>	0.041	0.391	0.412	0.519	0.058
<b>Plastic water heater</b>					
Yes (n=12)	23.03 (13.83-51.34)	4.26 (3.33-5.66)	0.22 (0.09-0.82)	0.43 (0.30-0.77)	0.73 (0.42-0.90)
No (n=59)	25.51 (13.20-39.16)	6.06 (1.69-12.39)	0.28 (0.08-0.49)	0.56 (0.33-0.77)	0.52 (0.36-0.82)
<i>p</i>	0.902	0.300	0.771	0.452	0.369
<b>Frozen food</b>					
Yes (n=27)	25.97 (13.53-41.33)	6.06 (3.31-14.24)	0.28 (0.09-0.75)	0.56 (0.28-0.73)	0.56 (0.38-0.91)
No (n=44)	20.27 (13.39-38.97)	5.28 (1.40-10.35)	0.28 (0.08-0.46)	0.50 (0.32-0.81)	0.54 (0.36-0.80)
<i>p</i>	0.394	0.488	0.804	0.740	0.785
<b>Canned food</b>					
Yes (n=43)	25.51 (13.01-39.16)	5.44 (3.31-10.81)	0.28 (0.09-0.49)	0.57 (0.32-0.77)	0.57 (0.43-0.88)
No (n=28)	24.43 (16.16-41.13)	5.44 (1.21-14.73)	0.25 (0.09-0.52)	0.47 (0.34-0.77)	0.40 (0.26-0.88)
<i>p</i>	0.394	0.659	0.837	0.689	0.044
<b>Canned beverage</b>					
Yes (n=21)	36.54 (14.35-49.72)	4.90 (1.40-13.31)	0.22 (0.09-0.45)	0.56 (0.29-0.68)	0.52 (0.39-0.65)
No (n=50)	20.68 (13.15-32.44)	5.61 (2.69-9.07)	0.28 (0.08-0.55)	0.53 (0.36-0.81)	0.56 (0.35-0.93)
<i>P</i>	0.066	0.701	0.920	0.504	0.579
<b>Plastic shower curtain</b>					
Yes (n=25)	25.97 (13.36-40.24)	2.81 (1.20-6.53)	0.22 (0.04-0.57)	0.62 (0.35-0.81)	0.67 (0.44-1.22)
No (n=46)	22.12 (13.68-40.36)	6.18 (3.83-11.72)	0.29 (0.11- 0.47)	0.49 (0.32- 0.74)	0.51 (0.33-0.77)
<i>P</i>	0.718	0.011	0.496	0.496	0.017
<b>Plastic tablecloth</b>					
Yes (n=47)	25.57 (13.01-40.35)	5.44 (2.81-10.81)	0.36 (0.09-0.62)	0.56 (0.41-0.81)	0.57 (0.38-0.98)
No (n=24)	24.20 (15.08-45.50)	5.52 (1.28-10.96)	0.18 (0.09-0.38)	0.41 (0.26-0.73)	0.47 (0.30-0.63)
<i>p</i>	0.766	0.827	0.234	0.106	0.056
<b>Room freshener/spray/ deodorant</b>					
Yes (n=30)	17.32 (13.40-40.43)	4.78 (1.62-9.07)	0.27 (0.10-0.50)	0.53 (0.32-0.74)	0.60 (0.37-0.91)
No (n=41)	25.57 (14.73-39.75)	6.06 (2.57-13.65)	0.28 (0.07-0.55)	0.56 (0.35-0.79)	0.52 (0.37-0.80)
<i>P</i>	0.697	0.481	0.629	0.641	0.545
<b>Buying a new carpet in the last year</b>					
Yes (n=13)	25.57 (15.83-34.59)	4.90 (1.08-7.16)	0.28 (0.09-0.59)	0.46 (0.40-0.83)	0.75 (0.39-1.17)
No (n=58)	24.20	5.91	0.28	0.56	0.52

		(13.00-40.43)	(2.69-11.72)	(0.09-0.50)	(0.31-0.77)	(0.35-0.82)
	<i>P</i>	0.911	0.384	0.994	0.829	0.117
<b>Buying a new furniture in the last year</b>						
	Yes (n=15)	31.14	6.06	0.27	0.46	0.69
		(16.26-40.61)	(4.56-18.38)	(0.11-0.40)	(0.32-0.70)	(0.51-0.98)
	No (n=56)	20.95	4.89	0.30	0.56	0.47
		(12.99-38.97)	(1.49-10.35)	(0.08-0.60)	(0.34-0.77)	(0.34-0.82)
	<i>P</i>	0.202	0.155	0.554	0.637	0.053
<b>Using plastic when preparing and/or eating food</b>						
	Yes (n=34)	17.41	5.93	0.33	0.50	0.52
		(13.45-32.05)	(3.53-8.65)	(0.09-0.48)	(0.30-0.67)	(0.33-0.80)
	No (n=37)	29.35	4.65	0.23	0.57	0.56
		(13.49-48.85)	(1.39-13.36)	(0.08-0.52)	(0.35-0.81)	(0.38-0.94)
	<i>p</i>	0.120	0.769	0.734	0.207	0.573
<b>Water used for cooking and/or drinking</b>						
Tap water						
	Yes (n=47)	25.90	6.05	0.33	0.57	0.54
		(13.53-39.16)	(1.42-14.24)	(0.09-0.62)	(0.38-0.82)	(0.40-0.92)
	No (n=24)	24.20	4.45	0.23	0.50	0.55
		(13.41-42.62)	(3.03-6.45)	(0.06-0.42)	(0.28-0.68)	(0.15-0.77)
	<i>p</i>	0.589	0.408	0.231	0.293	0.395
Bottled water						
	Yes (n=27)	25.57	6.05	0.40	0.62	0.68
		(16.26-32.65)	(1.42-8.55)	(0.23-0.81)	(0.45-0.82)	(0.40-1.09)
	No (n=44)	24.20	5.01	0.15	0.47	0.52
		(13.28-41.37)	(2.86-11.32)	(0.06-0.43)	(0.28-0.75)	(0.34-0.73)
	<i>p</i>	0.670	0.896	0.004	0.073	0.058
Purified water						
	Yes (n=21)	25.51	5.12	0.16	0.47	0.54
		(11.76-44.59)	(3.04-8.85)	(0.05-0.39)	(0.27-0.78)	(0.15-0.83)
	No (n=50)	23.22	5.61	0.35	0.56	0.55
		(13.86-39.46)	(1.41-12.55)	(0.09-0.64)	(0.38-0.77)	(0.39-0.91)
	<i>p</i>	0.753	0.945	0.064	0.623	0.488
<b>Toys</b>						
Painted wood						
	Yes (n=33)	17.46	5.77	0.23	0.62	0.54
		(11.95-37.85)	(1.85-8.66)	(0.07-0.63)	(0.31-0.77)	(0.31-0.99)
	No (n=38)	25.73	4.90	0.28	0.53	0.55
		(14.54-40.43)	(2.72-11.72)	(0.11-0.46)	(0.32-0.77)	(0.39-0.76)
	<i>P</i>	0.493	0.831	0.876	0.818	0.936
Unpainted wood						
	Yes (n=41)	25.57	5.77	0.23	0.62	0.57
		(15.12-40.49)	(3.19-8.76)	(0.08-0.51)	(0.35-0.79)	(0.35-0.91)
	No (n=30)	24.20	5.01	0.29	0.49	0.51
		(9.98-39.46)	(1.35-14.26)	(0.13-0.52)	(0.31-0.76)	(0.39-0.78)
	<i>P</i>	0.526	0.609	0.522	0.334	0.572
Plush						
	Yes (n=60)	22.12	5.34	0.29	0.56	0.54
		(13.28-36.10)	(2.86-11.32)	(0.09-0.54)	(0.32-0.80)	(0.39-0.82)
	No (n=11)	40.37	6.05	0.21	0.57	0.56
		(16.26-54.72)	(1.38-8.55)	(0.07-0.40)	(0.27-0.71)	(0.36-1.09)
	<i>p</i>	0.150	0.836	0.321	0.721	0.727

BH4: Tetrahydrobiopterin, BPA: bisphenol A, BPF: bisphenol F, BAZ: BMI for age z-score, DBP: di-buthyl phthalate, DEHP: di-ethylhexyl phthalate, HPA: hyperphenylalaninemia (who blood phenylalanine levels within 2-6 mg/dL without any treatment), MEHP: mono-ethylhexyl phthalate, PA: phenylalanine, PKU: Phenylketonuria, PVC: polyvinyl chloride

Free diet group includes 71 subjects.

A p-value of less than 0.05 was considered to be statistically significant.