



# Supplementary Materials: Risk of Abdominal Obesity Associated with Phthalate Exposure of Nurses

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**Table S1.** Associations between phthalate metabolites on the anthropometric parameters adjusted to consumer behavior and consumer practices.

metabolite	Anthropometric parameter												BMI risk	ABSI risk	HI risk	ARI risk		
	BMI	HC	WC	WHR	WhtR	FMI	FFMI	VF	ABSI	HI	z BMIz	ABSI z HI						
MMP	<b>r</b>	-,041	-,041	-,101	-,107	-,020	-,214	,294	-,163	,002	,146	-,074	-,154	,166	,032	-,174	-,121	-,101
	<b>p</b>	,825	,825	,590	,565	,915	,249	,108	,382	,991	,434	,691	,407	,374	,865	,349	,516	,590
MEP	<b>r</b>	,123	-,005	-,032	-,046	-,003	,122	,021	-,124	-,236	-,189	,149	-,147	-,171	,181	-,050	-,039	,070
	<b>p</b>	,509	,978	,866	,805	,986	,514	,913	,508	,201	,310	,423	,429	,357	,329	,791	,837	,709
MBzP	<b>r</b>	<b>,568</b>	<b>,547</b>	<b>,588</b>	<b>,254</b>	<b>,611</b>	<b>,450</b>	<b>,288</b>	<b>,439</b>	<b>,079</b>	<b>,127</b>	<b>,472</b>	<b>,008</b>	<b>,144</b>	<b>,361</b>	<b>,-061</b>	<b>,385</b>	<b>,211</b>
	<b>p</b>	<b>,001</b>	<b>,001</b>	<b>,000</b>	<b>,169</b>	<b>,000</b>	<b>,011</b>	<b>,117</b>	<b>,013</b>	<b>,672</b>	<b>,497</b>	<b>,007</b>	<b>,965</b>	<b>,438</b>	<b>,046</b>	<b>,746</b>	<b>,032</b>	<b>,255</b>
MiBP	<b>r</b>	,071	,115	,228	,243	,215	-,010	,151	,103	,302	,096	-,010	,183	,122	,046	,163	,314	,209
	<b>p</b>	,703	,538	,217	,188	,246	,959	,416	,582	,099	,607	,958	,325	,513	,806	,382	,086	,259
OH-MiBP	<b>r</b>	,062	,073	,194	,244	,148	-,070	,239	,024	,211	-,040	-,010	,202	-,034	-,014	,156	,246	,115
	<b>p</b>	,741	,696	,296	,186	,428	,708	,196	,899	,254	,830	,959	,276	,856	,939	,402	,183	,539
MnBP	<b>r</b>	,083	,064	,253	<b>,361</b>	,240	,023	,117	,160	,328	-,042	-,001	,198	-,013	,032	,175	,303	,207
	<b>p</b>	,658	,733	,169	<b>,046</b>	,193	,903	,531	,391	,071	,822	,995	,285	,946	,863	,345	,098	,264
OH-MnBP	<b>r</b>	-,070	-,003	,103	,199	,058	-,239	,285	-,138	,299	,059	-,130	,280	,064	-,059	,256	,276	,229
	<b>p</b>	,710	,986	,580	,284	,758	,196	,120	,458	,102	,752	,487	,127	,731	,754	,165	,133	,216
MEHP	<b>r</b>	-,038	,006	,174	,294	,145	-,018	-,040	,126	<b>,355</b>	,042	-,110	,244	,070	-,115	,200	<b>,410</b>	,157
	<b>p</b>	,840	,974	,350	,108	,436	,924	,831	,499	<b>,050</b>	,821	,555	,186	,710	,537	,280	<b>,022</b>	,399
OH MEHP	<b>r</b>	,058	,137	,136	,051	,147	-,017	,139	,045	,157	,200	-,027	,051	,248	-,046	,038	,084	-,001
	<b>p</b>	,758	,463	,464	,785	,430	,928	,457	,811	,400	,281	,887	,786	,179	,806	,839	,653	,996
oxo MEHP	<b>r</b>	,088	,175	,264	,213	,239	,016	,138	,046	,338	,204	,021	,347	,209	,140	,297	<b>,377</b>	<b>,395</b>
	<b>p</b>	,636	,347	,151	,251	,194	,930	,458	,805	,063	,271	,911	,056	,260	,454	,104	<b>,036</b>	<b>,028</b>
cx- MEPP	<b>r</b>	,134	,153	,178	,098	,217	,130	,028	,181	,147	,164	,038	,042	,189	,131	,021	,220	,150
	<b>p</b>	,472	,412	,337	,601	,240	,487	,883	,329	,432	,378	,838	,821	,308	,483	,911	,235	,420
oxo MiNP	<b>r</b>	,257	<b>,363</b>	,264	-,072	,222	,085	,336	,169	-,054	,204	,247	-,081	,230	,175	-,137	-,102	-,102
	<b>p</b>	,164	<b>,045</b>	,151	,701	,230	,648	,065	,362	,773	,271	,180	,666	,213	,347	,461	,585	,584
cx-MiNP	<b>r</b>	<b>,366</b>	<b>,400</b>	<b>,354</b>	,040	<b>,376</b>	,216	,315	,194	-,004	,205	,309	-,039	,219	,266	-,089	,140	,103
	<b>p</b>	<b>,043</b>	<b>,026</b>	<b>,051</b>	,830	<b>,037</b>	,244	,084	,295	,984	,268	,091	,836	,236	,148	,634	,451	,580

**Note:** MMP, mono-methyl phthalate; MEP, mono-ethyl phthalate; MBzP, mono-benzyl phthalate, MiBP, mono-isobutyl phthalate; OH-MiBP, mono-hydroxy-iso-butyl phthalate; MnBP, mono-n-butyl phthalate; OH-MnBP, mono-hydroxy-n-butyl phthalate; MEHP, mono-2-ethylhexyl phthalate; OH MEHP, mono(2-ethyl-5-hydroxyhexyl) phthalate; oxo-MEHP, mono(2-ethyl-5-oxohexyl) phthalate; cx- MEPP, mono(2-ethyl-5-carboxypentyl) phthalate; oxo MiNP, mono-oxo-isonyl phthalate; cx MiNP, mono-carboxy-isonyl phthalate; BMI, Body Mass Index; HC, hip circumference; WC, waist circumference; WHR, Waist to Hip Ratio; WhtR, Waist to Height Ratio; FMI, Fat Mass Index; FFMI, Fat-Free Mass Index; VF, visceral fat; ABSI, A Body Shape Index; HI, Hip Index; z BMI, BMI adjusted for age and sex; z ABSI, ABSI adjusted for age and sex; z HI, HI adjusted for age and sex; BMI risk, the risk of premature mortality based on the Body Mass Index; ABSI risk, the risk of premature mortality based on the A Body Shape Index; HI risk, the risk of premature mortality based on the Hip Index; ARI risk, the risk of premature mortality based on the Anthropometric Risk Index; Adjusted to: physical activity; consuming meals heated in plastic containers in the microwave; consuming meals from the plastic container; drinking beverages from plastic cups or plastic bottles; using personal protective equipment (vinyl medical gloves); presence of polyvinyl chloride flooring material; using: hand cream; antiperspirant; perfume; salaams packaged in plastic material; meat products; baguette; salads; biscuits; chocolate during body lotion; nail polish; consuming: margarine; cheese and last 24 hours before sampling.