

Supplementary Material

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Table S1. Descriptive statistics of PBDEs in placenta and maternal/fetal plasma from the same cohort, from (Frederiksen et al., 2009; Frederiksen et al., 2010).

Chemical	Placenta (n = 50) pg/g lipid				Maternal Plasma (n = 51) pg/g lipid				Fetal Plasma (n = 40) pg/g lipid			
	% Detect	Mean	Median	Range	% Detect	Mean	Median	Range	% Detect	Mean	Median	Range
BDE-17	6	n.a.	n.a.	n.a.								
BDE-28	22	35.1	n.a.	<7.73 – 324	88	57.7	32.9	<6.09 – 397	75	59.9	50.7	<17.5 – 271
BDE-49	40	38.7	n.a.	<21.7 – 178								
BDE-47	100	473	325	62.8 – 2210	81	861	381	<11.0 – 7880	50	708	67.9	<21.4 – 5260
BDE-66	16	26.4	n.a.	<11.4 – 194								
BDE-100	72	85.2	54.4	<18.3 – 1140	28	324	n.a.	<53.4 – 6220	5	n.a.	n.a.	n.a.
BDE-99	98	221	231	<22.6 – 661	37	580	n.a.	<53.4 – 18600	28	791	n.a.	128 – 7020
BDE-85	16	20.0	n.a.	<15.0 – 74.3								
BDE-154	88*	93.1	84.2	<26.6 – 273	45	72.8	n.a.	<8.91 – 2010	20	74.8	n.a.	<21.4 – 651
BDE-153	100	608	345	173 – 11600	98	1920	1120	<13.0 – 36000	100	808	506	202 – 9470
BDE-183	16	67.9	n.a.	<57.1 – 175								
BDE-209	90	1280	1140	<279 – 5440	94 [#]	1980	1720	<664 – 5230	8 [§]	n.a.	n.a.	n.a.

* BDE-154 overlap with BB-153 in placenta analyses

[#] Measured in 18 total

[§] Measured in 13 total

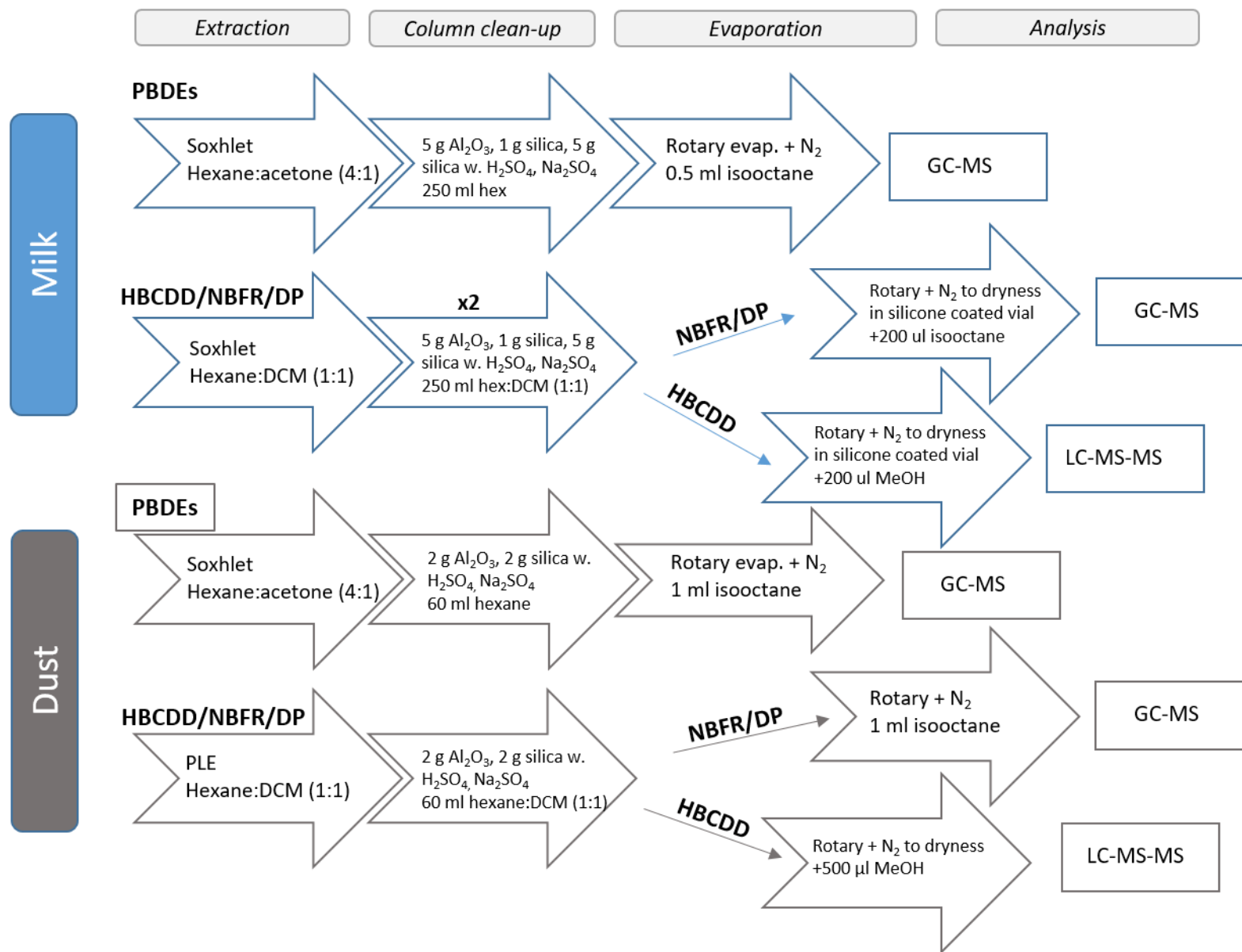


Figure S1. Flowchart of steps of the chemical analyses for PBDE, NBFR/DP and HBCDD.

Table S2. Description of study population, reported for participants for whom breast milk samples were collected (n=40, PBDEs)

	Mean	Median	Range
Age (years)	32.7	32.5	24.0 – 43.0
Parity	1.2	1	0 – 3
BMI, pre-pregnancy	22.7	21.9	17.3 – 33.3
BMI, term-pregnancy	27.6	27.7	20.8 – 37.2
Weight gain	13.8	14.0	3.0 – 22.0
Previous breastfeeding (months)	11.0	9.8	0 – 30

Table S3. Spearman correlations (r_s) between milk and dust for NBFRs (detection >65% in both), n=37. Shading represents the same compound in each matrix. $p > 0.05$ for all correlations.

		Breast Milk				
House Dust	NBFRs	<i>DPTE</i>	<i>BTBPE</i>	<i>Anti-DP</i>	α – <i>HBCDD</i>	γ – <i>HBCDD</i>
	<i>DPTE</i>	-0.32	-0.21	-0.20	-0.05	-0.04
	<i>BTBPE</i>	-0.14	0.16	0.08	0.06	-0.05
	<i>Anti-DP</i>	0.13	0.11	0.16	0.02	0.01
	α – <i>HBCDD</i>	-0.08	0.14	0.00	0.14	-0.01
	γ – <i>HBCDD</i>	-0.15	-0.23	-0.06	-0.07	0.24

References

Frederiksen, M., Thomsen, C., Frøshaug, M., Vorkamp, K., Thomsen, M., Becher, G., Knudsen, L.E., 2010. Polybrominated diphenyl ethers in paired samples of maternal and umbilical cord blood plasma and associations with house dust in a Danish cohort. *International journal of hygiene and environmental health* 213, 233-242.

Frederiksen, M., Thomsen, M., Vorkamp, K., Knudsen, L.E., 2009. Patterns and concentration levels of polybrominated diphenyl ethers (PBDEs) in placental tissue of women in Denmark. *Chemosphere* 76, 1464-1469.