

## Supplementary Material:

**Table S1:** Overview of the parent compounds for phthalates and DINCH and their respective metabolites considered for indicators under HBM4EU.

Phthalate/DINCH compounds (acronym)	Full Name	CAS-Number	Metabolite(s) investigated (acronym)	Full Name
<b>BBzP</b>	Butyl benzyl phthalate	85-68-7	MBzP	Mono-benzyl phthalate
<b>DnBP</b>	Di-n-butyl phthalate	84-74-2	MnBP	Mono-n-butyl phthalate
<b>DEHP</b>	Diethylhexyl phthalate	117-81-7	5OH-MEHP	Mono(2-ethyl-5-hydroxyhexyl) phthalate
			5oxo-MEHP	Mono(2-ethyl-5-oxohexyl) phthalate
			5cx-MEPP	Mono(2-ethyl-5-carboxypentyl) phthalate
			MEHP	Mono(2-ethylhexyl) phthalate
<b>DiNP</b>	Diisononyl phthalate	28553-12-0	OH-MiNP	Mono(4-methyl-7-hydroxyoctyl) phthalate
			cx-MiNP	Mono(4-methyl-7-carboxyheptyl) phthalat
<b>DEP</b>	Diethyl phthalate	84-66-2	MEP	Mono-ethyl phthalate
<b>DiDP</b>	Di-isodecyl phthalate (all C10 phthalates including DPHP)	26761-40-0; 68515-49-1	OH-MiDP	Mono-hydroxy-isodecyl phthalate
			cx-MiDP	Mono(2,7-methyl-7-carboxy-heptyl) phthalate

**Table S2:** DEMOCOPHES studies used for the comparison of periods of time.

Children (6-11 years)						
Region	Country (11 countries)	Study (institute)	Sampling Years	N	Age Range	Matrix Type (urine)
North	Denmark	DEMOCOPHES Denmark	2011	143	6-11	First morning
	Sweden	DEMOCOPHES Sweden	2011-2012	98	6-11	First morning
East	Czech Republic	DEMOCOPHES Czech Republic	2011-2012	120	6-11	First morning
	Hungary	DEMOCOPHES Hungary	2011-2012	119	6-11	First morning
	Poland	DEMOCOPHES Poland	2011-2012	120	6-11	First morning
	Slovakia	DEMOCOPHES Slovakia	2011-2012	129	6-11	First morning
South	Slovenia	DEMOCOPHES Slovenia	2011-2012	119; (1)	6-11; (12-19)	First morning
	Spain	DEMOCOPHES Spain	2011-2012	120	6-11	First morning
West	Belgium	DEMOCOPHES Belgium	2011-2012	129	6-11	First morning
	Germany	DEMOCOPHES Germany	2011	119; (1)	6-11 (3-5)	First morning
	Luxembourg	DEMOCOPHES Luxembourg	2011-2012 (N = 1 in 2012)	60	6-11	First morning

N = number of participants

**Table S3:** Overview of available data for phthalates and DINCH from countries within Europe from the HBM4EU Aligned Studies in children (6-11 years).

Children (6-11 years)						
Region	Country (12 countries)	Study (institute)	Sampling Years	N	Age Range <sup>b</sup>	Matrix Type (urine)
North	Denmark	Odense Child Cohort (SDU)	2018-2019	300	6-7	Spot
	Norway	NEB II (NIPH)	2016-2017	300	7-11	Spot
East	Hungary	InAirQ (NPHC)	2017-2018	262	8-11	Spot
	Poland	POLAES (NIOM)	2017	300	7-10	Spot
	Slovakia	PCB cohort (SZU)	2014-2017	300	10-12	Spot
South	Greece	CROME (AUTH)	2020-2021	161	6-11	First Morning
	Italy	NAC II (EPIUD)	2014-2016	300	6-8	Spot
	Slovenia	SLO CRP (JSI)	2018	149	7-10	First Morning
West	Belgium	3xG (VITO)	2019-2020	133	6-8	First Morning
	France	ESTEBAN (ANSP)	2014-2016	286	6-12	First Morning
	Germany	GerES V-sub (unweighted) <sup>a</sup> (UBA)	2015-2017	300	6-12	First Morning
	The Netherlands	SPECIMEn-NL (RIVM)	2020	89	6-11	Spot
Map of regions						


N = number of participants

<sup>a</sup> unweighted subsample of the GerES V; this does not imply that all other data are weighted samples

<sup>b</sup> Originally, children between 6 and 11 years of age were to be sampled. However, 3.9% of the children sampled are 12 years old (Gilles et al., 2022)

**Table S4:** Overview of available data for phthalates and DINCH from countries within Europe from the HBM4EU Aligned Studies in teenagers (12-18 years).

Teenagers (12-18 years)						
Region	Country (11 countries)	Study (institute)	Sampling Years	N	Age Range	Matrix Type (urine)
North	Norway	NEB II (NIPH)	2016-2017	181	12-14	Spot
	Sweden	Riksmaten adolescents (SFA)	2016-2017	300	12-17	Spot
East	Czech Republic	CELSPAC: Teenagers (MU)	2019-2020	300	12-17	First Morning

Teenagers (12-18 years)						
Region	Country (11 countries)	Study (institute)	Sampling Years	N	Age Range	Matrix Type (urine)
	Poland	POLAES (NIOM)	2017	281	12-14	Spot
	Slovakia	PCB cohort (followup) (SZU)	2019-2020	287	15-17	Spot
South	Greece	CROME (AUTH)	2020-2021	150	12-18	First Morning
	Slovenia	SLO CRP (JSI)	2018	96	12-15	First Morning
	Spain	BEA (ISCIII)	2017-2018	300	13-17	First Morning
West	Belgium	FLEHS IV (VITO)	2017-2018	300	13-16	Spot
	France	ESTEBAN (ANSP)	2014-2016	304	12-17	First Morning
	Germany	GerES V-sub (unweighted) <sup>a</sup> (UBA)	2015-2017	300	12-18	First Morning
Map of regions						

N = number of participants

<sup>a</sup> unweighted subsample of the GerES V; this does not imply that all other data are weighted samples

**Table S5:** HBM-GVs derived within HBM4EU for DiBP and DINCH for children (Lange et al., 2021).

Parent compound	Full name	CAS-No.	Metabolite(s)	HBM-GV <sub>GenPop</sub> in $\mu\text{g/L}$ (children)	Sensitive endpoint	Level of confidence (LoC)
<b>DiBP</b>	Diisobutyl phthalate	84-69-5	MiBP	<b>160</b>	Read across with DnBP considering 25% potency difference (Delayed germ cell development and male mammary gland changes after exposure from GD 15 to PND 21)	LoC - Underlying dataset: low; LoC - choice of critical effect: medium; LoC - key studies: medium; LoC - inter- and intraspecies extrapolations: low; <b>Overall LoC: low</b>
<b>DINCH</b>	Diisononyl cyclohexane-1,2-dicarboxylate	166412-78-8	$\Sigma$ (OH-MINCH + cx-MINCH)	<b>3000</b>	Nephrotoxicity	LoC - Underlying dataset: medium; LoC – choice of critical effect: low-medium; LoC - key studies: medium; LoC - inter- and intraspecies extrapolations: low; <b>Overall LoC: medium</b>

**Table S6:** P50 values for DiBP (MiBP) in urine in children with the corresponding 95% confidence intervals.

Region	Country	Study Name	N	Sampling Years	P50 [µg/L]	P50_95CI_Lower	P50_95CI_Upper
North	Norway	NEB II	300	2016 - 2017	26.9	25.3	31.3
North	Denmark	OCC	300	2018 - 2019	12.4	11.1	13.4
East	Hungary	InAirQ	262	2017 - 2018	29.6	26.7	34.5
East	Slovakia	PCB cohort	296	2014 - 2017	58.8	51.6	67.3
South	Italy	NAC II	299	2014 - 2016	31.9	28.7	34.1
South	Slovenia	SLO CRP	149	2018	26.7	23.2	31.5
South	Greece	CROME	161	2020 - 2021	33.3	28.8	35.6
West	Germany	GerES V-sub (unweighted) <sup>a</sup>	300	2015 - 2017	27.9	24.7	30.0
West	France	ESTEBAN	286	2014 - 2016	40.8	36.1	46.2
West	The Netherlands	SPECIMEn	89	2020	18.0	15.1	22.4
West	Belgium	3xG	133	2019 - 2020	23.1	19.5	29.8

N = number of participants

<sup>a</sup> unweighted subsample of the GerES V; this does not imply that all other data are weighted samples

**Table S7:** P50 values for DINCH ( $\Sigma$  OH-MINCH + cx-MINCH) in urine [µg/L] in children with the corresponding 95% confidence intervals.

Region	Country	Study Name	N	Sampling Years	P50 [µg/L]	P50_95CI_Lower	P50_95CI_Upper
North	Denmark	OCC	300	2018 - 2019	4.9	4.3	5.8
East	Hungary	InAirQ	262	2017 - 2018	1.9	1.7	2.1
East	Poland	POLAES	300	2017	2.0	1.8	2.2
East	Slovakia	PCB cohort	300	2014 - 2017	3.1	2.8	3.6
South	Italy	NAC II	300	2014 - 2016	5.3	4.8	6.1
South	Slovenia	SLO CRP	149	2018	4.4	4.0	5.1
South	Greece	CROME	161	2020 - 2021	3.8	3.3	4.0
West	Germany	GerES V-sub (unweighted) <sup>a</sup>	299	2015 - 2017	3.6	3.1	4.0
West	France	ESTEBAN	286	2014 - 2016	3.8	3.5	4.3

Region	Country	Study Name	N	Sampling Years	P50 [µg/L]	P50_95CI_Lower	P50_95CI_Upper
West	The Netherlands	SPECIMEn	89	2020	3.0	2.4	3.4
West	Belgium	3xG	133	2019 - 2020	2.4	2.0	2.9

N = number of participants

<sup>a</sup> unweighted subsample of the GerES V; this does not imply that all other data are weighted samples

**Table S8:** P50 values for DiBP (MiBP) in urine [µg/L] in children stratified by sex with the corresponding 95% confidence intervals.

Region	Country	Study name	Sex	N	Sampling years	P50 [µg/L]	P50_95CI_Lower	P50_95CI_Upper
North	Norway	NEB II	boys	160	2016 - 2017	25.9	22.2	29.0
North	Norway	NEB II	girls	140	2016 - 2017	33.5	25.4	40.0
North	Denmark	OCC	boys	165	2018 - 2019	13.0	11.1	15.1
North	Denmark	OCC	girls	135	2018 - 2019	12.0	9.8	13.4
East	Hungary	InAirQ	boys	131	2017 - 2018	33.9	28.3	42.7
East	Hungary	InAirQ	girls	131	2017 - 2018	26.6	19.6	32.3
East	Slovakia	PCB cohort	boys	132	2014 - 2017	52.8	41.3	65.4
East	Slovakia	PCB cohort	girls	164	2014 - 2017	62.4	53.0	72.3
South	Italy	NAC II	boys	149	2015 - 2016	32.9	28.2	37.1
South	Italy	NAC II	girls	150	2014 - 2016	31.6	27.3	33.9
South	Slovenia	SLO CRP	boys	67	2018	24.0	19.0	29.8
South	Slovenia	SLO CRP	girls	82	2018	31.9	23.8	38.5
South	Greece	CROME	boys	78	2020 - 2021	29.6	24.3	33.9
South	Greece	CROME	girls	83	2020 - 2021	35.5	29.7	38.8
West	Germany	GerES V-sub	boys	150	2015 - 2017	27.8	22.9	30.8

Region	Country	Study name	Sex	N	Sampling years	P50 [µg/L]	P50_95CI_Lower	P50_95CI_Upper
		(unweighted) <sup>a</sup>						
West	Germany	GerES V-sub (unweighted) <sup>a</sup>	girls	150	2015 - 2017	28.2	23.7	32.3
West	France	ESTEBAN	boys	145	2014 - 2016	42.2	37.2	50.1
West	France	ESTEBAN	girls	141	2014 - 2016	38.2	32.4	48.4
West	Belgium	3xG	boys	66	2019 - 2020	21.1	17.6	28.4
West	Belgium	3xG	girls	67	2019 - 2020	26.1	19.3	32.8

N = number of participants

<sup>a</sup> unweighted subsample of the GerES V; this does not imply that all other data are weighted samples

**Table S9:** P50 values for DINCH ( $\Sigma$  OH-MINCH + cx-MINCH) in urine [µg/L] in children stratified by sex with the corresponding 95% confidence intervals.

Region	Country	Study Name	Sex	N	Sampling Years	P50 [µg/L]	P50_95CI_Lower	P50_95CI_Upper
North	Denmark	OCC	boys	165	2018 - 2019	5.2	4.1	5.9
North	Denmark	OCC	girls	135	2018 - 2019	4.8	3.9	7.2
East	Hungary	InAirQ	boys	131	2017 - 2018	1.8	1.5	2.1
East	Hungary	InAirQ	girls	131	2017 - 2018	2.0	1.6	2.4
East	Poland	POLAES	boys	150	2017	1.9	1.5	2.1
East	Poland	POLAES	girls	150	2017	2.1	1.9	2.5
East	Slovakia	PCB cohort	boys	133	2014 - 2017	3.4	2.8	4.1
East	Slovakia	PCB cohort	girls	167	2014 - 2017	2.9	2.5	3.5
South	Italy	NAC II	boys	150	2015 - 2016	5.4	4.6	6.3

Region	Country	Study Name	Sex	N	Sampling Years	P50 [µg/L]	P50_95CI_Lower	P50_95CI_Upper
South	Italy	NAC II	girls	150	2014 - 2016	5.3	4.2	6.5
South	Slovenia	SLO CRP	boys	67	2018	4.3	3.9	5.8
South	Slovenia	SLO CRP	girls	82	2018	4.5	3.5	5.4
South	Greece	CROME	boys	78	2020 - 2021	3.8	3.1	4.3
South	Greece	CROME	girls	83	2020 - 2021	3.8	3.1	4.2
West	Germany	GerES V-sub(unweighted) <sup>a</sup>	boys	149	2015 - 2017	3.4	2.8	4.0
West	Germany	GerES V-sub (unweighted) <sup>a</sup>	girls	150	2015 - 2017	3.6	3.0	4.6
West	France	ESTEBAN	boys	145	2014 - 2016	4.0	3.2	4.9
West	France	ESTEBAN	girls	141	2014 - 2016	3.8	3.4	4.2
West	Belgium	3xG	boys	66	2019 - 2020	2.1	1.7	2.6
West	Belgium	3xG	girls	67	2019 - 2020	2.7	2.2	3.6

N = number of participants

<sup>a</sup> unweighted subsample of the GerES V; this does not imply that all other data are weighted samples

**Table S10:** P50 values for DiBP (MiBP) in urine [µg/L] stratified by age groups with the corresponding 95% confidence intervals.

Region	Country	Study Name	Age Group	N	Sampling Years	P50 [µg/L]	P50_95CI_Lower	P50_95CI_Upper
North	Norway	NEB II	children	300	2016 - 2017	26.9	25.3	31.3
North	Norway	NEB II	teenagers	181	2016 - 2017	29.2	24.9	33.1
North	Denmark	OCC	children	300	2018 - 2019	12.4	11.1	13.4
East	Hungary	InAirQ	children	262	2017 - 2018	29.6	26.7	34.5

Region	Country	Study Name	Age Group	N	Sampling Years	P50 [µg/L]	P50_95CI_Lower	P50_95CI_Upper
East	Slovakia	PCB cohort	children	296	2014 - 2017	58.8	51.6	67.3
East	Slovakia	PCB cohort	teenagers	287	2019 - 2020	29.7	26.4	33.6
East	Czech Republic	CELSPAC: TE	teenagers	300	2019 - 2020	27.1	23.0	32.2
South	Italy	NAC II	children	299	2014 - 2016	31.9	28.7	34.1
South	Slovenia	SLO CRP	children	149	2018	26.7	23.2	31.5
South	Slovenia	SLO CRP	teenagers	96	2018	25.3	20.0	29.0
South	Greece	CROME	children	161	2020 - 2021	33.3	28.8	35.6
South	Greece	CROME	teenagers	150	2020 - 2021	22.6	19.6	26.0
South	Spain	BEA	teenagers	300	2017 - 2018	20.0	18.3	22.9
West	Germany	GerES V-sub (unweighted) <sup>a</sup>	children	300	2015 - 2017	27.9	24.7	30.0
West	Germany	GerES V-sub (unweighted) <sup>a</sup>	teenagers	300	2015 - 2017	22.6	20.3	25.8
West	France	ESTEBAN	children	286	2014 - 2016	40.8	36.1	46.2
West	France	ESTEBAN	teenagers	304	2014 - 2016	37.8	34.9	41.7
West	The Netherlands	SPECIMEn	children	89	2020	18.0	15.1	22.4
West	Belgium	3xG	children	133	2019 - 2020	23.1	19.5	29.8
West	Belgium	FLEHS IV	teenagers	300	2017 - 2018	21.0	19.4	23.2

N = number of participants

<sup>a</sup> unweighted subsample of the GerES V; this does not imply that all other data are weighted samples

**Table S11:** P50 DINCH ( $\Sigma$  OH-MINCH + cx-MINCH) in urine [µg/L] stratified by age groups with the corresponding 95% confidence intervals.

Region	Country	Study Name	Age Group	N	Sampling Years	P50 [µg/L]	P50_95CI_Lower	P50_95CI_Upper
North	Denmark	OCC	children	300	2018 - 2019	4.9	4.3	5.8
North	Sweden	Riksmaten Adolescents	teenagers	300	2016 - 2017	1.6	1.4	1.9
East	Hungary	InAirQ	children	262	2017 - 2018	1.9	1.7	2.1
East	Poland	POLAES	children	300	2017	2.0	1.8	2.2
East	Poland	POLAES	teenagers	281	2017	1.6	1.3	1.8
East	Slovakia	PCB cohort	children	300	2014 - 2017	3.1	2.8	3.6
East	Slovakia	PCB cohort	teenagers	287	2019 - 2020	2.4	2.0	2.9
South	Italy	NAC II	children	300	2014 - 2016	5.3	4.8	6.1
South	Slovenia	SLO CRP	children	149	2018	4.4	4.0	5.1
South	Slovenia	SLO CRP	teenagers	96	2018	3.1	2.5	3.8
South	Greece	CROME	children	161	2020 - 2021	3.8	3.3	4.0
South	Greece	CROME	teenagers	150	2020 - 2021	2.9	2.5	3.2
South	Spain	BEA	teenagers	300	2017 - 2018	2.8	2.5	3.2
West	Germany	GerES V-sub (unweighted) <sup>a</sup>	children	299	2015 - 2017	3.6	3.1	4.0
West	Germany	GerES V-sub (unweighted) <sup>a</sup>	teenagers	299	2015 - 2017	2.2	1.9	2.5
West	France	ESTEBAN	children	286	2014 - 2016	3.8	3.5	4.3
West	France	ESTEBAN	teenagers	304	2014 - 2016	3.4	3.1	4.0
West	The Netherlands	SPECIMEn	children	89	2020	3.0	2.4	3.4
West	Belgium	3xG	children	133	2019 - 2020	2.4	2.0	2.9

West	Belgium	FLEHS IV	teenagers	300	2017 - 2018	2.1	1.8	2.3
------	---------	----------	-----------	-----	-------------	-----	-----	-----

N= number of participants

<sup>a</sup> unweighted subsample of the GerES V; this does not imply that all other data are weighted samples

**Table S12:** P50 values for DiBP (MiBP) in urine [ $\mu\text{g/L}$ ] in children at different time points with the corresponding 95% confidence intervals.

Region	Country	Study Name	N	Sampling Years	P50 [ $\mu\text{g/L}$ ]	P50_95CI_Lower	P50_95CI_Upper
North	Norway	NEB II	300	2016 - 2017	26.9	25.3	31.3
North	Denmark	OCC	300	2018 - 2019	12.4	11.1	13.4
East	Hungary	InAirQ	262	2017 - 2018	29.6	26.7	34.5
East	Slovakia	PCB cohort	296	2014 - 2017	58.8	51.6	67.3
South	Italy	NAC II	299	2014 - 2016	31.9	28.7	34.1
South	Slovenia	SLO CRP	149	2018	26.7	23.2	31.5
South	Greece	CROME	161	2020 - 2021	33.3	28.8	35.6
West	Germany	GerES V-sub (unweighted) <sup>a</sup>	300	2015 - 2017	27.9	24.7	30.0
West	France	ESTEBAN	286	2014 - 2016	40.8	36.1	46.2
West	The Netherlands	SPECIMEn	89	2020	18.0	15.1	22.4
West	Belgium	3xG	133	2019 - 2020	23.1	19.5	29.8
North	Denmark	DEMOCOPHES Denmark	143	2011	53.8	48.2	63.7
East	Poland	DEMOCOPHES Poland	120	2011 - 2012	104.0	89.0	111.0
East	Czech Republic	DEMOCOPHES Czech Republic	118	2011 - 2012	52.0	41.1	65.2
South	Spain	DEMOCOPHES Spain	120	2011 - 2012	55.6	47.8	64.9
South	Slovenia	DEMOCOPHES Slovenia	120	2011 - 2012	55.5	50.0	67.3
West	Luxembourg	DEMOCOPHES Luxembourg	60	2011 - 2012	34.5	27.0	45.0
West	Germany	DEMOCOPHES Germany	120	2011 -	37.7	33.9	46.4
West	Belgium	DEMOCOPHES Belgium	129	2011 - 2012	48.0	41.0	63.1

N = number of participants

<sup>a</sup> unweighted subsample of the GerES V; this does not imply that all other data are weighted samples

**Table S13:** P50 values for DINCH ( $\Sigma$  OH-MINCH + cx-MINCH) in urine [ $\mu\text{g/L}$ ] in children at different time points with the corresponding 95% confidence intervals.

Region	Country	Study Name	N	Sampling Years	P50 [ $\mu\text{g/L}$ ]	P50_95CI_Lower	P50_95CI_Upper
North	Denmark	OCC	300	2018 - 2019	4.9	4.3	5.8
East	Hungary	InAirQ	262	2017 - 2018	1.9	1.7	2.1
East	Poland	POLAES	300	2017	2.0	1.8	2.2
East	Slovakia	PCB cohort	300	2014 - 2017	3.1	2.8	3.6
South	Italy	NAC II	300	2014 - 2016	5.3	4.8	6.1
South	Slovenia	SLO CRP	149	2018	4.4	4.0	5.1
South	Greece	CROME	161	2020 - 2021	3.8	3.3	4.0
West	Germany	GerES V-sub (unweighted) <sup>a</sup>	299	2015 - 2017	3.6	3.1	4.0
West	France	ESTEBAN	286	2014 - 2016	3.8	3.5	4.3
West	The Netherlands	SPECIMEn	89	2020	3.0	2.4	3.4
West	Belgium	3xG	133	2019 - 2020	2.4	2.0	2.9
North	Sweden	DEMOCOPHES Sweden	99	2011 - 2012	1.6	n. a.	n. a.
North	Denmark	DEMOCOPHES Denmark	143	2011	1.9	n. a.	n. a.
South	Spain	DEMOCOPHES Spain	120	2011 - 2012	1.9	n. a.	n. a.
West	Luxembourg	DEMOCOPHES Luxembourg	59	2011 - 2012	1.6	n. a.	n. a.
West	Germany	DEMOCOPHES Germany	113	2011	2.3	n. a.	n. a.
West	Belgium	DEMOCOPHES Belgium	117	2011 - 2012	1.3	n. a.	n. a.

N = number of participants

n. a. = not available

<sup>a</sup> unweighted subsample of the GerES V; this does not imply that all other data are weighted samples

**Table S14:** P95 values for DiBP (MiBP) in urine [ $\mu\text{g/L}$ ] in children with the corresponding 95% confidence intervals.

Region	Country	Study name	N	Sampling Years	P95 [ $\mu\text{g/L}$ ]	P95_95CI_Lower	P95_95CI_Upper
North	Norway	NEB II	300	2016 - 2017	140.6	114.3	190.0
North	Denmark	OCC	300	2018 - 2019	56.9	47.1	66.8
East	Hungary	InAirQ	262	2017 - 2018	148.0	113.3	216.0
East	Slovakia	PCB cohort	296	2014 - 2017	245.7	209.7	411.9
South	Italy	NAC II	299	2014 - 2016	96.4	87.8	107.4
South	Slovenia	SLO CRP	149	2018	129.8	91.2	312.4
South	Greece	CROME	161	2020 - 2021	160.6	84.9	215.9
West	Germany	GerES V-sub (unweighted) <sup>a</sup>	300	2015 - 2017	111.0	87.3	158.8
West	France	ESTEBAN	286	2014 - 2016	180.2	136.5	255.8
West	The Netherlands	SPECIMEn	89	2020	56.6	45.8	128.7
West	Belgium	3xG	133	2019 - 2020	123.5	98.7	187.1

N = number of participants

<sup>a</sup> unweighted subsample of the GerES V; this does not imply that all other data are weighted

**Table S15:** P95 values for DINCH ( $\Sigma$  OH-MINCH + cx-MINCH) in urine [ $\mu\text{g/L}$ ] in children with the corresponding 95% confidence intervals.

Region	Country	Study Name	N	Sampling Years	P95 [ $\mu\text{g/L}$ ]	P95_95CI_Lower	P95_95CI_Upper
North	Denmark	OCC	300	2018 - 2019	41.8	28.4	49.8
East	Hungary	InAirQ	262	2017 - 2018	13.3	10.0	27.5
East	Poland	POLAES	300	2017	9.4	7.8	14.8
East	Slovakia	PCB cohort	300	2014 - 2017	22.2	17.7	34.9
South	Italy	NAC II	300	2014 - 2016	44.6	28.9	106.1
South	Slovenia	SLO CRP	149	2018	18.8	12.5	25.4
South	Greece	CROME	161	2020 - 2021	16.9	10.3	50.0

Region	Country	Study Name	N	Sampling Years	P95 [µg/L]	P95_95CI_Lower	P95_95CI_Upper
West	Germany	GerES V-sub (unweighted) <sup>a</sup>	299	2015 - 2017	25.7	17.7	41.9
West	France	ESTEBAN	286	2014 - 2016	23.2	16.5	40.7
West	The Netherlands	SPECIMEn	89	2020	14.4	11.0	48.1
West	Belgium	3xG	133	2019 - 2020	10.6	8.0	12.3

N = number of participants

<sup>a</sup> unweighted subsample of the GerES V; this does not imply that all other data are weighted samples