

SUPPLEMENTAL MATERIALS

Common pregnancy complications and risk of childhood obesity - influence of maternal obesity: An individual participant data meta-analysis

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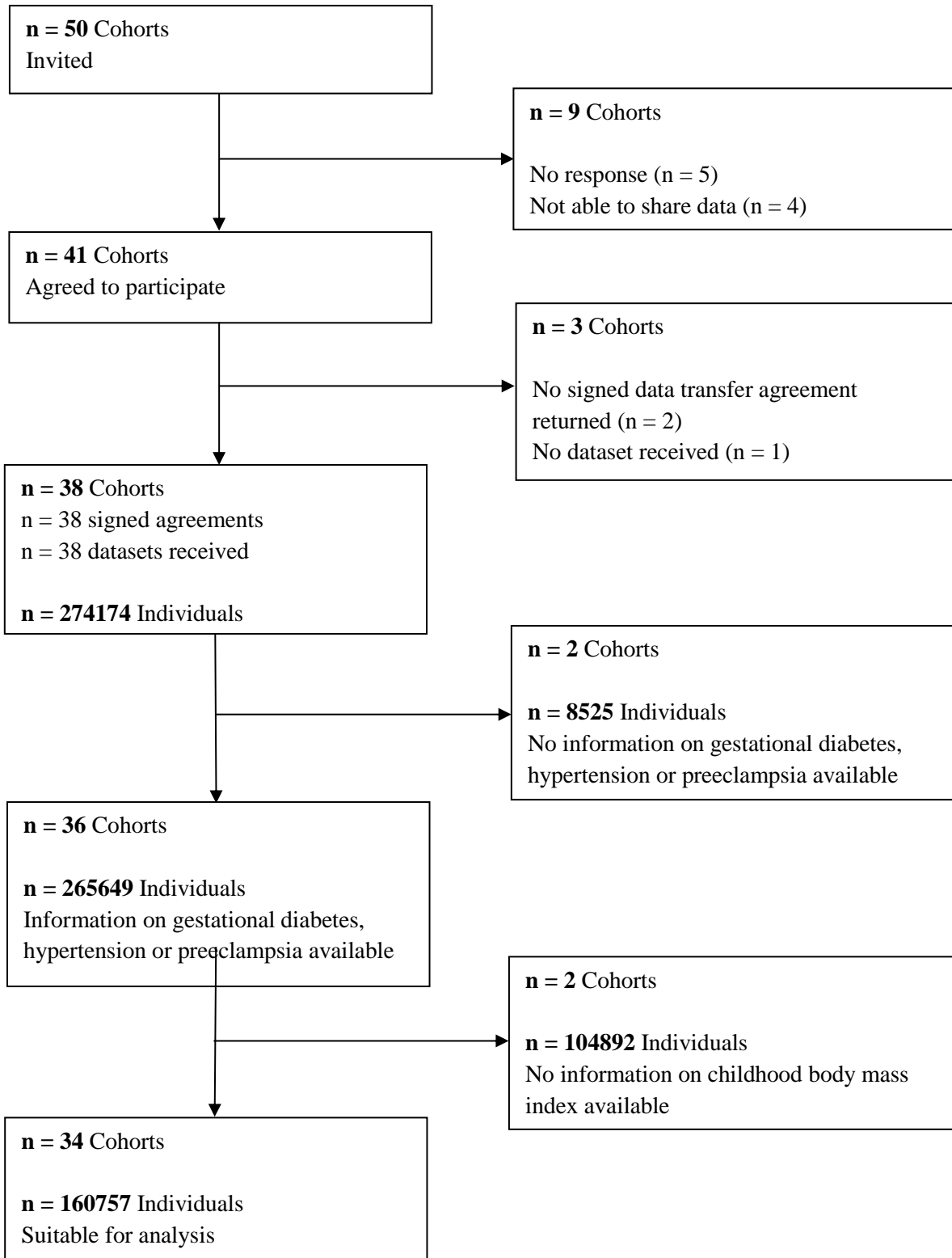


Table S1. Cohort-specific methods of data collection for pregnancy complications, maternal and childhood anthropometrics, and other covariates.^a

Cohort name (country)	Gestational diabetes	Gestational hypertension	Pre-eclampsia	Childhood weight and height	Maternal height	Maternal pre- /early pregnancy weight	Other covariates
ABCD (The Netherlands)	Self-reported or medical records	Self-reported or medical records	Self-reported or medical records	Measured	Self-reported	Self-reported	Self-reported or medical records
ALSPAC (United Kingdom)	Medical records	Medical records	Medical records	Measured	Self-reported	Self-reported	Self-reported/ medical records
AOB/F (Canada)	Medical records	Medical records	Medical records	Reported	Self-reported	Self-reported	Self-reported
BAMSE (Sweden)	National Medical Birth Registry	National Medical Birth Registry	National Medical Birth Registry	Measured	National Medical Birth Registry	National Medical Birth Registry	Self-reported
BIB (United Kingdom)	OGT test at 27-28 weeks	Medical records	Medical records	Measured	Measured	Measured	Self-reported or medical records
Co.N.ER (Italy)	Self-reported	Self-reported	Self-reported	Reported	Self-reported	Self-reported	Self-reported
DNBC (Denmark)	Self-reported	Self-reported	Medical records	Reported or measured	Self-reported	Self-reported	Self-reported
EDEN (France)	OGT test and medical records	Clinical examination at 24 weeks of gestation and medical records	Medical records	Measured or medical records	Measured	Self-reported	Self-reported
FCOU (Ukraine)	Medical records	Medical records	Medical records	Medical records	Medical records	Medical records	Self-reported or medical records
GASPII (Italy)	Self-reported	Self-reported	Self-reported	Measured	Self-reported	Self-reported	Self-reported
GECKO Drenthe (The Netherlands)	Self-reported	Self-reported	Self-reported	Measured	Self-reported	Self-reported	Self-reported
GENERATION R (The Netherlands)	Medical records or self-reported	Medical records or self-reported	Medical records or self-reported	Measured	Measured	Self-reported	Self-reported
GENERATION XXI (Portugal)	Medical records	Medical records	Medical records	Measured	Measured/ ID card	Self-reported	Self-reported
GENESIS (Greece)	Self-reported	Self-reported	NA	Measured Medical records at 4y, measured and reported at 10 and 15y	Self-reported	Self-reported	Self-reported
GINIplus (Germany)	Self-reported	NA	NA		Self-reported	Self-reported	Self-reported
HUMIS (Norway)	Medical birth registry	Medical birth registry	Medical birth registry	Reported	Self-reported	Self-reported	Medical birth registry or self-reported

Table S1. Cohort-specific methods of data collection for pregnancy complications, maternal and childhood anthropometrics, and other covariates (continued).^a

Cohort name (country)	Gestational diabetes	Gestational hypertension	Pre-eclampsia	Childhood weight and height	Maternal height	Maternal pre-/early pregnancy weight	Other covariables
INMA (Spain)	Medical records	Medical records	Medical records	Measured	Measured or self-reported	Self-reported	Self-reported
KOALA (The Netherlands)	Self-reported or medical records	Self-reported or medical records	Self-reported or medical records	Reported	Self-reported	Self-reported	Self-reported
Krakow Cohort (Poland)	Self-reported	Self-reported	Self-reported	Measured	Self-reported	Self-reported	Self-reported or medical records
LISApplus (Germany)	Self-reported	NA	NA	Medical records at 4y, measured and reported at 10 and 15y	Self-reported	Self-reported	Self-reported
MoBa (Norway)	Medical records	Medical records	Medical records	Reported	Self-reported	Self-reported	Self-reported
NINFEA (Italy)	Self-reported	Self-reported	Self-reported	Reported	Self-reported	Self-reported	Self-reported
PÉLAGIE (France)	Medical records	Medical records	Medical records	Reported	Self-reported	Self-reported	Self-reported
PIAMA (The Netherlands)	Self-reported	Self-reported	Self-reported	Reported and measured (4 and 8y)	Self-reported	Self-reported	Self-reported
Piccolipiù (Italy)	Self-reported	Self-reported	Self-reported	Measured	Self-reported	Self-reported	Self-reported
Project Viva (United States)	Medical records	Medical records	Medical records	Measured	Self-reported	Self-reported	Self-reported
REPRO_PL (Poland)	Medical records	Medical records	Medical records	Measured	Measured	Self-reported	Self-reported or measured
RHEA (Greece)	Self-reported	Measured or self-reported	Self-reported	Medical records or measured	Measured	Self-reported	Self-reported
ROLO (Ireland)	Medical records	NA	NA	Measured	Measured	Measured	Self-reported or measured
SCOPEBASELINE (Ireland)	Measured	Measured	Measured	Measured	Measured	Measured	Self-reported
SEATON (United Kingdom)	NA	NA	Medical records	Measured	Measured	Measured	Self-reported
Slovak PCB study (Slovakia)	Self-reported	Self-reported	Self-reported	Measured	Self-reported	Self-reported	Self-reported
STEPS (Finland)	Medical records	Medical records	Medical records	Measured	Self-reported	Self-reported	Self-reported
SWS (United Kingdom)	Medical records	Medical records	Medical records	Measured	Measured	Measured	Self-reported or medical records

^a Self-reported/reported refers to data obtained either by questionnaire or by interview. NA, not available. OGT, Oral glucose tolerance

Table S2. Characteristics of available covariates per cohort.^a

Cohort name, number of participants, (country)	Maternal Age, (years)		Parity, n (%)		Maternal Education Level, n (%)				Ethnicity, n (%)		Smoking during pregnancy, n (%)		Maternal pre/early- pregnancy BMI, (kg/m ²)		Offspring Sex, n (%)	
	Median (95% range)	Missings	Nulliparous	Missings	Low	Medium	High	Missings	European/ White	Missings	Yes	Missings	Median (95% range)	Missings	Male	Missings
ABCD, n=5512, (The Netherlands)	32·0 (20·0, 40·0)	-	3041 (55·2)	-	1147 (20·8)	2029 (36·8)	2295 (41·6)	41 (0·7)	4095 (74·3)	10 (0·2)	605 (11·0)	269 (4·9)	22·2 (17·9, 33·9)	18 (0·3)	2737 (49·7)	-
ALSPAC, n=9041, (United Kingdom)	29·0 (20·0, 38·0)	635 (7·0)	3969 (43·9)	361 (4·0)	5142 (56·9)	2165 (23·9)	1284 (14·2)	450 (5·0)	8386 (92·8)	477 (5·3)	1849 (20·5)	234 (2·6)	22·2 (18·0, 33·6)	635 (7·0)	4583 (50·7)	-
AOB/F, n=1672, (Canada)	31·0 (22·0, 40·0)	34 (2·0)	844 (50·5)	-	132 (7·9)	1262 (75·5)	275 (16·4)	3 (0·2)	1374 (82·2)	2 (0·1)	144 (8·6)	92 (5·5)	23·0 (18·0, 38·2)	19 (1·1)	884 (52·9)	-
BAMSE, n=3329, (Sweden)	30·0 (22·0, 40·0)	-	1861 (55·9)	-	1103 (33·1)	833 (25·0)	1376 (41·3)	17 (0·5)	2904 (87·2)	233 (7·0)	420 (12·6)	-	22·3 (18·2, 31·6)	399 (12)	1688 (50·7)	-
BIB, n=983, (United Kingdom)	27·0 (18·0, 39·0)	1 (0·1)	384 (39·1)	15 (1·5)	241 (24·5)	371 (37·7)	369 (37·5)	2 (0·2)	401 (40·8)	-	144 (14·6)	1 (0·1)	24·7 (17·6, 39·4)	96 (9·8)	462 (47·0)	-
Co.N.ER, n=528, (Italy)	33·9 (25·5, 42·1)	1 (0·2)	235 (44·5)	2 (0·4)	82 (15·5)	240 (45·5)	205 (38·8)	1 (0·2)	524 (99·2)	-	67 (12·7)	-	21·2 (17·7, 30·4)	6 (1·1)	265 (50·2)	-
DNBC, n=40349, (Denmark)	30·3 (22·9, 39·3)	-	19992 (49·5)	26 (0·1)	3107 (7·7)	14694 (36·4)	22428 (55·6)	120 (0·3)	NA	NA	9641 (23·9)	14 (0·0)	22·5 (18·1, 33·6)	712 (1·8)	20749 (51·4)	-
EDEN, n=1139, (France)	29·9 (21·0, 39·7)	-	727 (53·4)	3 (0·2)	313 (23·0)	248 (18·2)	793 (58·3)	7 (0·5)	NA	NA	310 (22·8)	10 (0·7)	22·1 (17·4, 34·8)	31 (2·3)	721 (53·0)	-
FCOU, n=2332, (Ukraine)	23·0 (17·0, 36·0)	-	1495 (64·1)	181 (7·8)	127 (5·4)	1534 (65·8)	528 (22·6)	143 (6·1)	2332 (100·0)	-	178 (7·6)	138 (5·9)	21·8 (17·3, 32·0)	235 (10·1)	1218 (52·2)	-
GASPII, n=570, (Italy)	33·0 (24·0, 41·0)	-	326 (57·2)	-	78 (13·7)	284 (49·8)	208 (36·5)	-	565 (99·1)	1 (0·2)	64 (11·2)	-	21·3 (17·6, 31·1)	2 (0·4)	294 (51·6)	-
GECKO Drenthe, n=2119 (The Netherlands)	31·0 (22·0, 39·0)	1 (0·0)	793 (37·4)	135 (6·4)	1258 (59·4)	750 (35·4)	-	111 (5·2)	1977 (93·3)	96 (4·5)	288 (13·6)	38 (1·8)	23·7 (18·6, 36·7)	157 (7·4)	1062 (50·1)	-
GENESIS, n=2145, (Greece)	30·2 (20·9, 39·0)	197 (9·2)	1200 (56·0)	-	94 (4·4)	989 (46·2)	804 (37·5)	256 (11·9)	NA	NA	350 (16·3)	207 (9·7)	21·8 (17·6, 30·9)	245 (11·4)	1116 (52·1)	-
GENERATION R n=7550, (The Netherlands)	31·0 (19·8, 39·8)	-	4101 (54·3)	149 (2·0)	667 (8·8)	3025 (40·1)	3138 (41·6)	720 (9·5)	4412 (58·4)	289 (3·8)	1600 (21·2)	942 (12·5)	22·8 (18·1, 34·9)	908 (12·0)	3788 (50·2)	-

Table S2. Characteristics of available covariates per cohort (continued).^a

Cohort name, number of participants, (country)	Maternal Age, (years)		Parity, n (%)		Maternal Education Level, n (%)				Ethnicity, n (%)		Smoking during Pregnancy, n (%)		Maternal pre/early- pregnancy BMI, (kg/m ²)		Offspring Sex, n (%)	
	Median (95% range)	Missings	Nulliparous	Missings	Low	Medium	High	Missings	European/ White	Missings	Yes	Missings	Median (95% range)	Missings	Male	Missings
GENERATION XXI, n=5921, (Portugal)	30·0 (18·0, 40·0)	-	3395 (57·3)	88 (1·5)	1768 (29·9)	2588 (43·7)	1537 (26·0)	28 (0·5)	NA	NA	1285 (21·7)	58 (1·0)	23·0 (18·2, 34·7)	8 (0·1)	3027 (51·1)	-
GINIplus, n=2313, (Germany)	31·0 (24·0, 40·0)	-	NA	NA	276 (11·9)	977 (42·4)	1054 (45·6)	6 (0·3)	NA	NA	257 (11·1)	28 (1·2)	22·0 (18·0, 31·4)	6 (0·3)	1137 (49·2)	-
HUMIS, n=970, (Norway)	30·0 (22·0, 39·0)	-	425 (43·8)	-	96 (9·9)	153 (15·8)	568 (58·6)	153 (15·8)	723 (74·5)	159 (16·4)	97 (10·0)	43 (4·4)	23·3 (18·3, 35·0)	25 (2·6)	488 (50·30)	-
INMA, n=1933, (Spain)	30·0 (22·0, 39·0)	1 (0·1)	1056 (54·6)	2 (0·1)	583 (30·2)	736 (38·1)	594 (30·7)	20 (1·0)	1846 (95·5)	3 (0·2)	341 (17·6)	14 (0·7)	22·5 (18·0, 34·6)	22 (1·1)	992 (51·3)	-
KOALA, n=2061, (The Netherlands)	32·0 (25·0, 40·0)	2 (0·1)	899 (43·6)	43 (2·1)	178 (8·6)	760 (36·9)	1026 (49·8)	97 (4·7)	1993 (96·7)	6 (0·3)	122 (5·9)	6 (0·3)	22·8 (18·5, 33·5)	10 (0·5)	1059 (51·4)	-
Krakov Cohort, n=424, (Poland)	27·5 (20·0, 34·0)	-	270 (63·7)	-	40 (9·4)	161 (38·0)	223 (52·6)	-	424 (100)	-	-	-	21·1 (17·3, 28·0)	2 (0·5)	217 (51·2)	-
LISApplus, n=1584, (Germany)	32·0 (23·0, 40·0)	-	687 (43·4)	5 (0·3)	96 (6·2)	565 (35·7)	908 (57·3)	13 (0·8)	NA	NA	202 (12·8)	7 (0·4)	21·7 (17·8, 32·2)	2 (0·1)	829 (52·3)	-
MoBa, n=55008, (Norway)	30·0 (22·0, 39·0)	-	25506 (46·4)	-	14936 (27·2)	24284 (44·1)	14739 (26·8)	1049 (1·9)	NA	NA	3955 (7·2)	5445 (9·9)	23·1 (18·4, 34·7)	98 (0·2)	28200 (51·30)	-
NINFEA, n=1726, (Italy) ^b	33·0 (25·0, 41·0)	-	1172 (67·9)	1 (0·1)	65 (3·8)	575 (33·3)	1067 (61·8)	19 (1·1)	1703 (98·7)	-	137 (7·9)	25 (1·4)	21·4 (17·3, 31·9)	50 (2·9)	880 (51·0)	-
PÉLAGIE, n=738, (France)	30·1 (22·7, 39·5)	-	326 (44·2)	2 (0·3)	106 (14·4)	128 (17·3)	503 (68·2)	1 (0·1)	NA	NA	198 (26·8)	1 (0·1)	21·7 (17·5, 32·4)	6 (0·8)	381 (51·6)	-
PIAMA, n=1815, (The Netherlands)	31·0 (24·0, 38·0)	5 (0·3)	926 (51·0)	-	300 (16·5)	757 (41·7)	754 (41·5)	4 (0·2)	1745 (96·1)	24 (1·3)	243 (13·4)	11 (0·6)	22·2 (18·3, 30·8)	113 (6·2)	918 (50·6)	-
Piccolipiù, n=687, (Italy)	34·0 (24·0, 43·0)	-	430 (62·6)	-	69 (10·0)	263 (38·3)	354 (51·5)	1 (0·1)	678 (98·7)	1 (0·1)	156 (22·7)	-	21·6 (17·6, 31·8)	2 (0·3)	361 (52·5)	-
Project Viva, n=1389, (United States)	32·4 (18·9, 41·2)	-	664 (47·8)	-	437 (31·5)	487 (35·1)	458 (33·0)	7 (0·5)	954 (68·7)	7 (0·5)	144 (10·4)	31 (2·2)	23·5 (18·3, 38·2)	10 (0·7)	711 (51·2)	-

Table S2. Characteristics of available covariates per cohort (continued)^a

Cohort name, number of participants, (country)	Maternal Age, (years)		Parity, n (%)		Maternal Education Level, n (%)				Ethnicity, n (%)		Smoking during Pregnancy, n (%)		Maternal pre/early- pregnancy BMI, (kg/m ²)		Offspring Sex, n (%)	
	Median (95% range)	Missings	Nulliparous	Missings	Low	Medium	High	Missings	European/ White	Missings	Yes	Missings	Median (95% range)	Missings	Male	Missings
REPRO_PL, n=291, (Poland)	28·0 (20·0, 37·0)	3 (1·0)	167 (57·4)	-	32 (11·0)	102 (35·1)	157 (54·0)	-	291 (100)	-	34 (11·7)	-	21·6 (17·2, 32·8)	8 (2·7)	139 (47·8)	-
RHEA, n=740, (Greece)	30·0 (20·0, 40·0)	3 (0·4)	NA	NA	105 (14·2)	386 (52·2)	242 (32·7)	7 (0·9)	739 (99·9)	1 (0·1)	256 (34·6)	-	23·4 (18·0, 36·4)	10 (1·4)	396 (53·5)	-
ROLO, n=283, (Ireland)	33·3 (24·7, 40·4)	-	-	-	-	50 (17·7)	204 (72·1)	29 (10·2)	280 (98·8)	-	6 (2·1)	-	25·2 (20·0, 38·7)	3 (1·1)	131 (46·3)	-
SCOPEBASELINE , n=1046, (Ireland)	31·0 (22·0, 39·0)	-	1046 (100·0)	-	-	122 (11·7)	921 (88·3)	3 (0·3)	1033 (98·8)	-	229 (21·9)	-	24·0 (19·2, 34·7)	1 (0·1)	531 (50·8)	-
SEATON, n=872, (United Kingdom)	30·4 (19·5, 39·6)	-	324 (37·2)	-	185 (21·2)	251 (28·8)	340 (39·0)	96 (11·0)	NA	NA	317 (36·4)	-	23·9 (18·8, 37·7)	1 (0·1)	439 (50·3)	-
Slovak PCB study, n=524, (Slovakia)	26·0 (19·0, 38·0)	-	208 (39·7)	1 (0·2)	235 (44·8)	254 (48·5)	31 (5·9)	4 (0·8)	436 (83·2)	-	81 (15·5)	20 (3·8)	21·2 (16·7, 31·6)	44 (8·4)	260 (49·6)	-
STEPS, n=297, (Finland)	31·5 (24·2, 40·4)	-	179 (60·3)	-	15 (5·1)	87 (29·3)	193 (65·0)	2 (0·7)	NA	NA	10 (3·4)	2 (0·7)	22·6 (18·3, 34·3)	1 (0·3)	148 (49·8)	-
SWS, n=2646, (United Kingdom)	30·2 (22·7, 36·4)	738 (27·9)	1394 (52·7)	3 (0·1)	292 (11·0)	1578 (59·6)	769 (29·1)	7 (0·3)	2545 (96·2)	1 (0·0)	335 (12·7)	287 (10·8)	24·1 (18·9, 37·4)	25 (0·9)	1367 (51·7)	-

^aNA, not available; “-” for missings refers to data available in all participants (no missings); ^bSubset of participants with 4-years follow-up completed. ^cDistinguishes between those born in Italy and those born outside Italy.

Table S3. Characteristics of the participating pregnancy and birth cohorts (n=160757).^a

Cohort name, number of participants, (country)	Age (months)			Body mass index (kg/m ²)		
	Early childhood (2·0-4·9y)	Mid childhood (5·0-9·9y)	Late childhood (10·0-17·9y)	Early childhood (2·0-4·9y)	Mid childhood (5·0-9·9y)	Late childhood (10·0-17·9y)
ABCD, n=5512, (The Netherlands)	47·2 (25·5, 54·3)	68·2 (61·6, 82·2)	NA	15·7 (13·5, 19·1)	15·4 (13·2, 19·7)	NA
ALSPAC, n=9041, (United Kingdom)	48·7 (30·8, 49·6)	115·0 (88·0, 119·0)	165·0 (125·0, 171·0)	16·2 (14·0, 19·2)	16·5 (13·7, 23·8)	19·4 (15·1, 29·0)
AOB/F, n=1672, (Canada)	36·0 (35·0, 42·0)	NA	NA	15·7 (12·9, 19·5)	NA	NA
BAMSE, n=3329, (Sweden)	51·4 (48·2, 57·6)	101·0 (89·0, 109·0)	201·3 (191·7, 210·3)	16·1 (14·0, 19·3)	16·7 (14·1, 22·4)	21·2 (17·1, 28·9)
BIB, n=983, (United Kingdom)	36·8 (35·7, 39·2)	NA	NA	16·1 (13·8, 19·3)	NA	NA
Co.N.ER, n=528, (Italy)	43·9 (34·7, 54·7)	95·0 (86·6, 111·1)	NA	15·7 (12·9, 20·0)	16·9 (14·0, 23·0)	NA
DNBC, n=40349, (Denmark)	NA	85·0 (75·5, 89·5)	NA	NA	15·5 (13·0, 19·6)	NA
EDEN, n=1361, (France)	38·0 (36·9, 39·9)	67·7 (65·0, 72·4)	NA	15·8 (13·8, 18·2)	15·2 (13·3, 18·5)	NA
FCOU, n=2332, (Ukraine)	35·0 (24·0, 40·0)	84·0 (75·0, 93·0)	193·0 (183·0, 209·1)	16·3 (13·1, 20·5)	15·4 (12·9, 19·4)	20·4 (16·3, 27·5)
GASPII, n=570, (Italy)	50·0 (43·0, 53·0)	104·0 (98·0, 113·0)	NA	16·3 (14·0, 20·0)	17·1 (13·8, 23·5)	NA
GECKO Drenthe, n=2119, (The Netherlands)	NA	70·4 (62·5, 78·6)	NA	NA	15·8 (13·8, 19·7)	NA
GENESIS, n=2145, (Greece)	43·9 (26·2, 58·1)	62·1 (60·0, 72·1)	NA	16·5 (13·9, 21·4)	16·6 (13·5, 23·2)	NA
GENERATION R, n=7550, (The Netherlands)	45·8 (44·5, 48·6)	115·2 (69·4, 119·4)	122·1 (120·1, 137·8)	15·7 (13·5, 19·2)	16·5 (13·8, 23·8)	17·4 (14·3, 25·5)
GENERATION XXI, n=5921, (Portugal)	50·0 (46·0, 58·0)	85·0 (83·0, 95·0)	NA	16·0 (13·7, 20·6)	16·5 (13·7, 23·5)	NA
GINIplus, n=2313, (Germany)	48·0 (44·0, 52·0)	62·9 (60·1, 75·0)	182·0 (177·0, 191·0)	15·4 (13·2, 18·2)	15·3 (13·1, 18·6)	20·1 (16·0, 27·7)
HUMIS, n=970, (Norway)	25·6 (24·0, 37·3)	84·0 (60·0, 92·0)	NA	16·1 (13·5, 19·2)	15·5 (12·8, 19·7)	NA
INMA, n=1933, (Spain)	52·9 (49·0, 56·5)	83·7 (75·2, 94·5)	174·5 (171·9, 181·5)	16·0 (13·7, 20·0)	16·4 (13·6, 23·5)	20·6 (16·4, 30·3)
KOALA, n=2061, (The Netherlands)	55·5 (48·1, 59·8)	106·0 (61·5, 119·3)	121·4 (120·0, 126·7)	15·1 (12·8, 18·1)	15·6 (13·0, 20·2)	16·2 (13·1, 22·7)
Krakow Cohort, n=424, (Poland)	48·0 (36·0, 51·2)	108·0 (60·0, 111·0)	NA	15·3 (12·9, 18·7)	16·2 (13·5, 22·4)	NA
LISApplus, n=1584, (Germany)	48·0 (44·0, 52·0)	62·7 (60·1, 73·5)	181·0 (173·0, 190·0)	15·4 (13·2, 18·2)	15·1 (13·1, 18·1)	19·9 (16·0, 28·0)
MoBa, n=55008, (Norway)	36·4 (25·4, 59·9)	86·9 (60·9, 100·9)	121·9 (120·9, 122·9)	15·9 (13·2, 19·2)	15·7 (12·9, 20·6)	NA
NINFEA, n=1726, (Italy)	49·7 (48·3, 57·0)	86·1 (84·8, 93·0)	NA	15·4 (12·6, 19·5)	15·4 (12·8, 20·8)	NA
PÉLAGIE, n=738, (France)	24·4 (24·0, 26·4)	NA	NA	16·0 (13·9, 18·7)	NA	NA
PIAMA, n=1815, (The Netherlands)	49·1 (44·3, 54·2)	97·5 (90·8, 109·8)	195·9 (192·4, 203·1)	16·2 (13·9, 19·4)	16·0 (13·5, 21·7)	20·3 (16·8, 27·4)
Piccolipiù, n=687, (Italy)	24·0 (24·0, 28·0)	NA	NA	16·2 (13·4, 19·6)	NA	NA
Project Viva, n=1389, (United States)	37·9 (36·1, 50·2)	92·2 (82·5, 116·5)	123·8 (120·6, 131·1)	16·3 (14·2, 19·5)	16·4 (13·7, 24·4)	18·0 (14·3, 32·9)
REPRO_PL, n=291, (Poland)	25·0 (24·0, 31·0)	88·0 (84·2, 94·0)	NA	16·2 (13·2, 19·6)	16·7 (13·3, 25·2)	NA
RHEA, n=740, (Greece)	49·8 (48·0, 57·8)	NA	NA	16·1 (13·8, 21·3)	NA	NA
ROLO, n=283, (Ireland)	24·7 (24·0, 34·9)	NA	NA	16·0 (13·8, 19·9)	NA	NA
SCOPE BASELINE, n=1046, (Ireland)	25·5 (24·5, 28·9)	NA	NA	16·6 (14·5, 19·3)	NA	NA
SEATON, n=872, (United Kingdom)	58·6 (55·9, 59·9)	61·2 (60·0, 119·7)	180·1 (121·5, 186·1)	16·2 (14·1, 19·6)	16·2 (13·9, 20·0)	20·7 (15·2, 31·0)
Slovak PCB study, n=524, (Slovakia)	45·4 (44·8, 49·7)	93·0 (85·0, 101·0)	NA	18·1 (12·5, 24·9)	16·1 (13·3, 24·1)	NA
STEPS, n=297, (Finland)	36·8 (35·7, 38·4)	NA	NA	16·2 (14·2, 18·8)	NA	NA
SWS, n=2646, (United Kingdom)	38·4 (35·6, 50·7)	80·4 (74·7, 87·1)	NA	16·0 (13·8, 19·3)	15·7 (13·4, 20·8)	NA

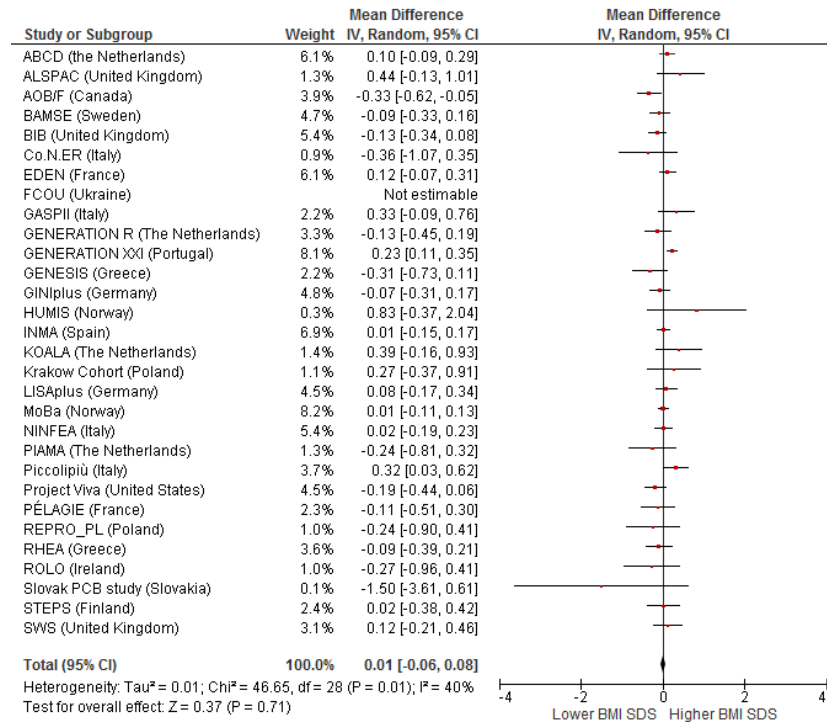
^aValues are expressed as medians (95% range). NA, not available.

Table S4. Gestational diabetes, gestational hypertension, preeclampsia, and the odds ratios of underweight (compared with normal weight) in early, mid, and late childhood.^a

	Underweight vs normal weight Odds Ratios (95% Confidence Interval)		
	Early childhood 2·0-4·9y	Mid childhood 5·0-9·9y	Late childhood 10·0-17·9y
Basic model			
No gestational hypertension and preeclampsia	Reference n _{cases/total} = 1099/64157	Reference n _{cases/total} = 2057/82925	Reference n _{cases/total} = 175/7166
Gestational hypertension	0·83 (0·57, 1·21) n _{cases/total} = 29/2487	0·65 (0·49, 0·86) n _{cases/total} = 50/3650	0·60 (0·35, 1·05) n _{cases/total} = 14/871
Preeclampsia	1·33 (1·01, 1·75) cases/total = 55/2297	1·10 (0·88, 1·38) n _{cases/total} = 80/2806	0·35 (0·09, 1·43) n _{cases/total} = 2/230
No gestational diabetes	Reference n _{cases/total} = 1255/76340	Reference n _{cases/total} = 2237/94444	Reference n _{cases/total} = 287/13029
Gestational diabetes	0·76 (0·48, 1·21) n _{cases/total} = 19/1681	0·80 (0·49, 1·32) n _{cases/total} = 16/1192	0·72 (0·23, 2·26) n _{cases/total} = 3/197

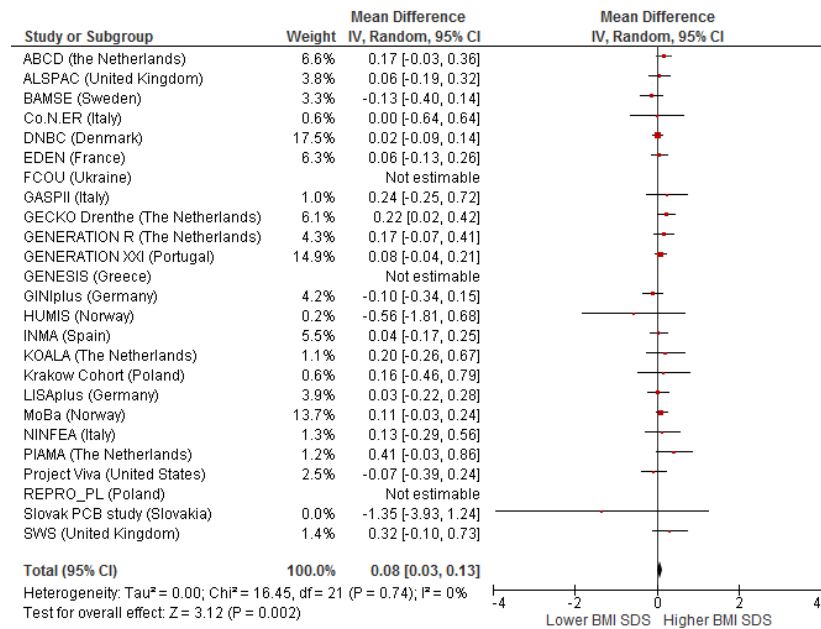
^aValues are odds ratios (95% confidence intervals) from multilevel binary logistic mixed effects models that reflect the odds of underweight in early, mid and late childhood for offspring exposed to gestational diabetes, gestational hypertension or pre-eclampsia, compared with the reference group (no gestational diabetes/ no gestational hypertension and pre-eclampsia). Results are unadjusted (Basic model).

Figure S2. 2-stage meta-analysis – association of gestational diabetes with BMI SDS in early childhood.^a



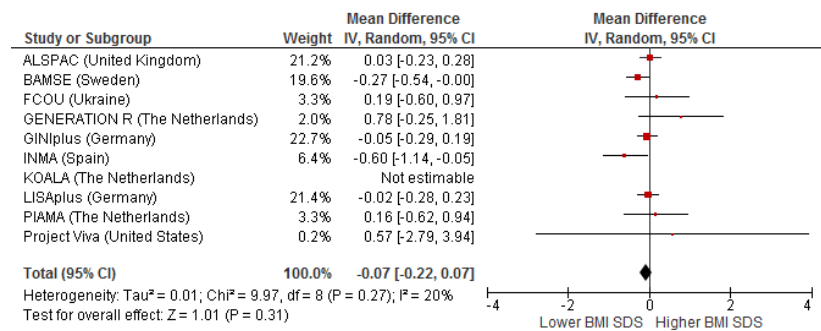
^aValues are pooled differences (95% Confidence Interval, CI) in early childhood (2.0-4.9 years) BMI SDS in offspring exposed to gestational diabetes as compared to reference group (no gestational diabetes), expressed by regression coefficients. Analyses are based on maternal BMI model.

Figure S3. 2-stage meta-analysis – association of gestational diabetes with BMI SDS in mid childhood.



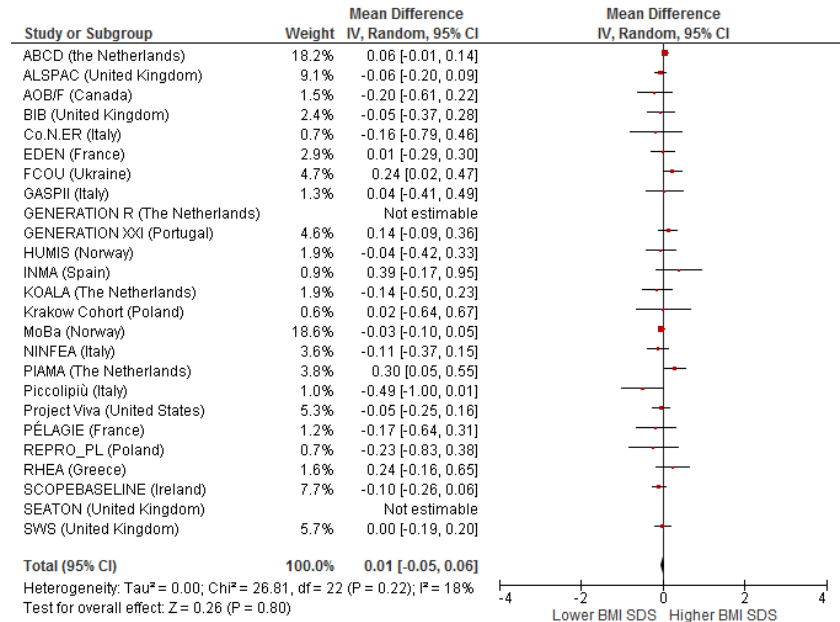
^aValues are pooled differences (95% Confidence Interval, CI) in mid childhood (5.0-9.9 years) BMI SDS in offspring exposed to gestational diabetes as compared to reference group (no gestational diabetes), expressed by regression coefficients. Analyses are based on maternal BMI model.

Figure S4. 2-stage meta-analysis – association of gestational diabetes with BMI SDS in late childhood.^a



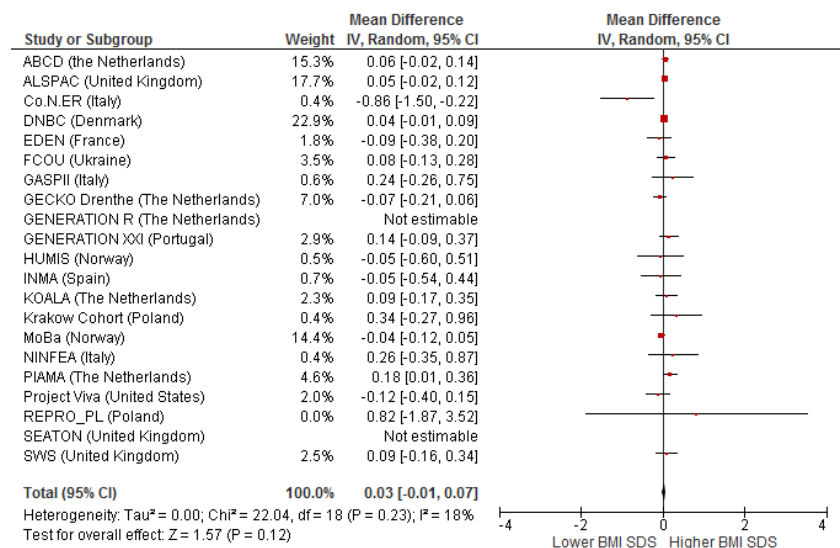
^aValues are pooled differences (95% Confidence Interval, CI) in late childhood (10.0-17.9 years) BMI SDS in offspring exposed to gestational diabetes as compared to reference group (no gestational diabetes), expressed by regression coefficients. Analyses are based on maternal BMI model.

Figure S5. 2-stage meta-analysis – association of gestational hypertension with BMI SDS in early childhood.^a



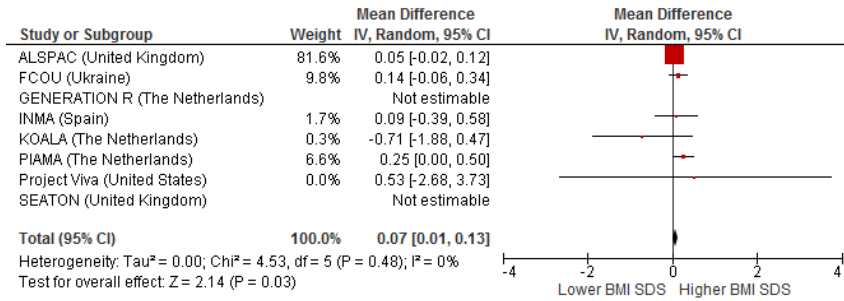
^aValues are pooled differences (95% Confidence Interval, CI) in early childhood (2.0-4.9 years) BMI SDS in offspring exposed to gestational hypertension as compared to reference group (no gestational hypertension and pre-eclampsia), expressed by regression coefficients. Analyses are based on maternal BMI model.

Figure S6. 2-stage meta-analysis – association of gestational hypertension with BMI SDS in mid childhood.^a



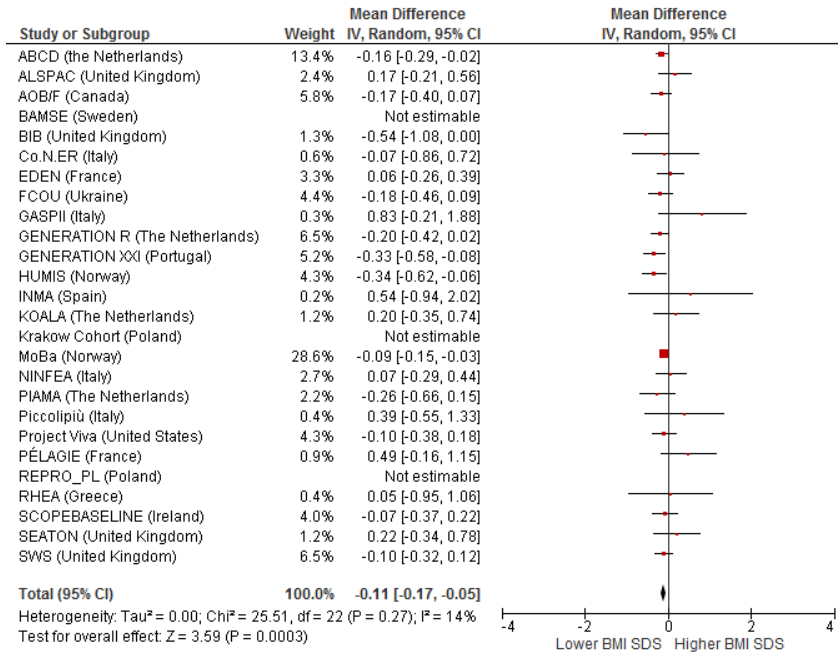
^aValues are pooled differences (95% Confidence Interval, CI) in mid childhood (5.0-9.9 years) BMI SDS in offspring exposed to gestational hypertension as compared to reference group (no gestational hypertension and pre-eclampsia), expressed by regression coefficients. Analyses are based on maternal BMI model.

Figure S7. 2-stage meta-analysis – association of gestational hypertension with BMI SDS in late childhood.^a



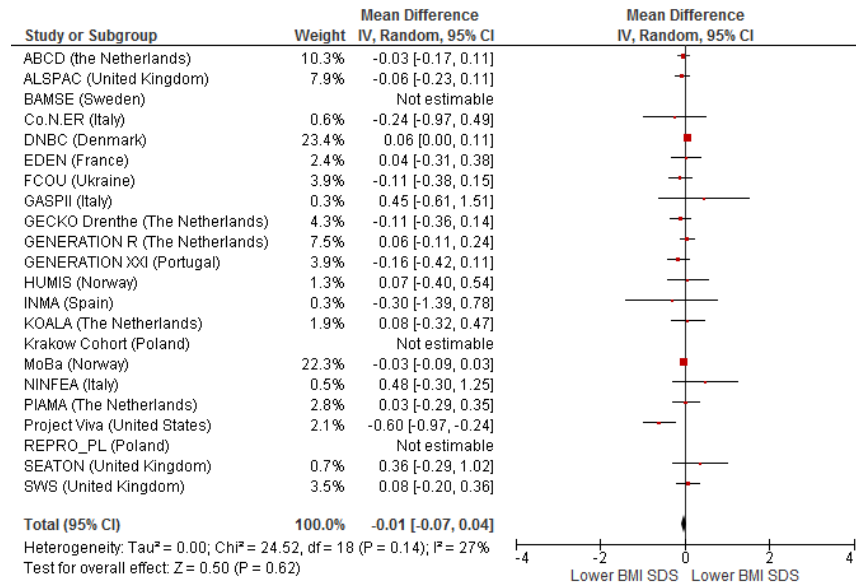
^aValues are pooled differences (95% Confidence Interval, CI) in late childhood (10.0-17.9 years) BMI SDS in offspring exposed to gestational hypertension as compared to reference group (no gestational hypertension and pre-eclampsia), expressed by regression coefficients. Analyses are based on maternal BMI model.

Figure S8. 2-stage meta-analysis – association of pre-eclampsia with BMI SDS in early childhood.^a



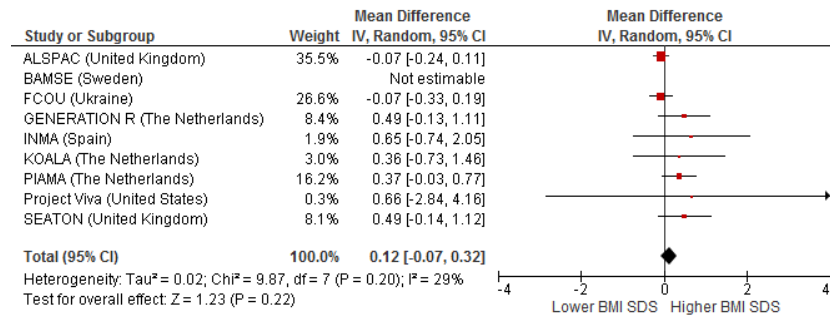
^aValues are pooled differences (95% Confidence Interval, CI) in early childhood (2.0-4.9 years) BMI SDS in offspring exposed to pre-eclampsia as compared to reference group (no gestational hypertension and pre-eclampsia), expressed by regression coefficients. Analyses are based on maternal BMI model.

Figure S9. 2-stage meta-analysis – association of pre-eclampsia with BMI SDS in mid childhood.^a



^aValues are pooled differences (95% Confidence Interval, CI) in mid childhood (5.0-9.9 years) BMI SDS in offspring exposed to pre-eclampsia as compared to reference group (no gestational hypertension and pre-eclampsia), expressed by regression coefficients. Analyses are based on maternal BMI model.

Figure S10. 2-stage meta-analysis – association of pre-eclampsia with BMI SDS in late childhood.^a



^aValues are pooled differences (95% Confidence Interval, CI) in late childhood (10.0-17.9 years) BMI SDS in offspring exposed to pre-eclampsia as compared to reference group (no gestational hypertension and pre-eclampsia), expressed by regression coefficients. Analyses are based on maternal BMI model.