Tables

# Descriptive data

## Study populations

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Table 1: Population description   | **Characteristic** | **Overall**, N = 1,297*1* | **BIB**, N = 204*1* | **EDEN**, N = 198*1* | **KANC**, N = 203*1* | **MOBA**, N = 272*1* | **RHEA**, N = 199*1* | **SAB**, N = 221*1* | | --- | --- | --- | --- | --- | --- | --- | --- | | Hit reaction time standard error (ms) | 300 (231, 368) | 355 (292, 398) | 238 (185, 307) | 368 (324, 407) | 249 (193, 301) | 341 (281, 399) | 256 (197, 314) | | Unknown | 18 | 3 | 11 | 0 | 0 | 1 | 3 | | Age of the child at clinical assessment (years) | 8.06 (6.50, 8.93) | 6.61 (6.45, 6.80) | 10.86 (10.41, 11.23) | 6.40 (6.13, 6.85) | 8.46 (8.17, 8.76) | 6.47 (6.36, 6.62) | 8.82 (8.43, 9.25) | | Child breastfeeding | 1,093 (85%) | 147 (72%) | 128 (65%) | 187 (93%) | 260 (96%) | 176 (88%) | 195 (89%) | | Unknown | 6 | 1 | 1 | 1 | 2 | 0 | 1 | | Height of the child (m) | 1.28 (1.21, 1.36) | 1.19 (1.17, 1.23) | 1.44 (1.39, 1.49) | 1.21 (1.18, 1.26) | 1.34 (1.30, 1.38) | 1.20 (1.17, 1.24) | 1.34 (1.30, 1.37) | | Weight of the child (kg) | 27 (23, 33) | 22 (20, 25) | 36 (32, 41) | 24 (21, 27) | 29 (26, 32) | 23 (21, 27) | 31 (27, 37) | | Visits a fast food restaurant/take away (times / week) | 0.13 (0.13, 0.50) | 0.50 (0.13, 1.00) | 0.13 (0.13, 0.50) | 0.13 (0.00, 0.13) | 0.13 (0.13, 0.50) | 0.50 (0.13, 0.50) | 0.13 (0.13, 0.50) | | Unknown | 7 | 0 | 0 | 2 | 0 | 0 | 5 | | Eats organic food (times / week) | 0.50 (0.00, 3.00) | 0.00 (0.00, 0.50) | 0.50 (0.13, 3.00) | 1.00 (0.13, 3.00) | 1.00 (0.50, 3.00) | 0.00 (0.00, 1.00) | 0.00 (0.00, 0.50) | | Unknown | 7 | 0 | 0 | 2 | 0 | 0 | 5 | | Food group: fish and seafood (times / week) | 2.00 (1.13, 3.53) | 2.00 (1.00, 3.13) | 2.13 (1.39, 3.00) | 1.00 (0.39, 1.63) | 2.63 (1.63, 5.00) | 1.50 (1.00, 2.00) | 3.50 (2.13, 5.00) | | Unknown | 5 | 1 | 0 | 2 | 0 | 0 | 2 | | Food group: fruits (times / week) | 9 (6, 18) | 16 (10, 21) | 7 (3, 14) | 7 (4, 10) | 14 (9, 21) | 9 (6, 14) | 8 (4, 13) | | Unknown | 7 | 2 | 0 | 2 | 1 | 0 | 2 | | Food group: vegetables (times / week) | 7 (4, 10) | 6 (4, 10) | 8 (4, 11) | 6 (4, 9) | 9 (6, 14) | 7 (4, 10) | 6 (3, 9) | | Unknown | 6 | 1 | 0 | 2 | 1 | 0 | 2 | | Which of the following best describes your consumption of tobacco? |  |  |  |  |  |  |  | | Non-smoker and has never smoked | 681 (53%) | 148 (73%) | 87 (44%) | 104 (52%) | 138 (51%) | 101 (51%) | 103 (47%) | | Non-smoker but previously smoked although not daily | 163 (13%) | 12 (5.9%) | 19 (9.6%) | 32 (16%) | 63 (23%) | 14 (7.0%) | 23 (10%) | | Non-smoker but previously smoked daily | 186 (14%) | 11 (5.4%) | 37 (19%) | 21 (10%) | 53 (19%) | 22 (11%) | 42 (19%) | | Smoker but not daily | 64 (4.9%) | 6 (2.9%) | 10 (5.1%) | 20 (10.0%) | 12 (4.4%) | 9 (4.5%) | 7 (3.2%) | | Daily smoker | 200 (15%) | 27 (13%) | 45 (23%) | 24 (12%) | 6 (2.2%) | 53 (27%) | 45 (20%) | | Unknown | 3 | 0 | 0 | 2 | 0 | 0 | 1 | | Child health on the day of assessment |  |  |  |  |  |  |  | | Normal | 1,255 (97%) | 197 (97%) | 192 (97%) | 198 (98%) | 263 (97%) | 190 (95%) | 215 (97%) | | Health problem | 41 (3.2%) | 7 (3.4%) | 5 (2.5%) | 5 (2.5%) | 9 (3.3%) | 9 (4.5%) | 6 (2.7%) | | Unknown | 1 | 0 | 1 | 0 | 0 | 0 | 0 | | Mood of the child in the last few days before assessment |  |  |  |  |  |  |  | | Usual | 1,232 (95%) | 198 (97%) | 176 (89%) | 187 (92%) | 262 (96%) | 195 (98%) | 214 (97%) | | Not usual | 64 (4.9%) | 6 (2.9%) | 21 (11%) | 16 (7.9%) | 10 (3.7%) | 4 (2.0%) | 7 (3.2%) | | Unknown | 1 | 0 | 1 | 0 | 0 | 0 | 0 | | Noise on the day of assessment |  |  |  |  |  |  |  | | No noise | 1,071 (83%) | 3 (1.5%) | 197 (99%) | 202 (100%) | 263 (97%) | 189 (95%) | 217 (98%) | | Some noise | 217 (17%) | 193 (95%) | 1 (0.5%) | 1 (0.5%) | 9 (3.3%) | 10 (5.0%) | 3 (1.4%) | | Noisy | 9 (0.7%) | 8 (3.9%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 1 (0.5%) | | Child rested the night before assessment |  |  |  |  |  |  |  | | Yes | 1,209 (93%) | 192 (94%) | 170 (86%) | 200 (99%) | 259 (95%) | 182 (91%) | 206 (93%) | | Not as well as usual | 87 (6.7%) | 12 (5.9%) | 27 (14%) | 3 (1.5%) | 13 (4.8%) | 17 (8.5%) | 15 (6.8%) | | Unknown | 1 | 0 | 1 | 0 | 0 | 0 | 0 | | Which is the ethnicity of the child? |  |  |  |  |  |  |  | | African | 7 (0.5%) | 7 (3.4%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | | Asian | 21 (1.6%) | 13 (6.4%) | 1 (0.5%) | 0 (0%) | 7 (2.6%) | 0 (0%) | 0 (0%) | | Caucasian | 1,157 (90%) | 87 (43%) | 196 (99%) | 200 (100%) | 254 (96%) | 199 (100%) | 221 (100%) | | Native\_American | 2 (0.2%) | 0 (0%) | 0 (0%) | 0 (0%) | 2 (0.8%) | 0 (0%) | 0 (0%) | | Other | 19 (1.5%) | 17 (8.3%) | 0 (0%) | 0 (0%) | 2 (0.8%) | 0 (0%) | 0 (0%) | | Pakistani | 80 (6.2%) | 80 (39%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | | White\_notEuropean | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | | Unknown | 11 | 0 | 1 | 3 | 7 | 0 | 0 | | Family affluence scale continuous |  |  |  |  |  |  |  | | 0 | 6 (0.5%) | 2 (1.0%) | 0 (0%) | 1 (0.5%) | 0 (0%) | 2 (1.0%) | 1 (0.5%) | | 1 | 12 (0.9%) | 4 (2.0%) | 0 (0%) | 4 (2.0%) | 1 (0.4%) | 1 (0.5%) | 2 (0.9%) | | 2 | 28 (2.2%) | 16 (7.8%) | 0 (0%) | 4 (2.0%) | 0 (0%) | 7 (3.5%) | 1 (0.5%) | | 3 | 92 (7.1%) | 34 (17%) | 2 (1.0%) | 22 (11%) | 3 (1.1%) | 20 (10%) | 11 (5.0%) | | 4 | 174 (13%) | 40 (20%) | 13 (6.6%) | 38 (19%) | 16 (5.9%) | 45 (23%) | 22 (10%) | | 5 | 325 (25%) | 48 (24%) | 29 (15%) | 69 (34%) | 57 (21%) | 57 (29%) | 65 (30%) | | 6 | 410 (32%) | 34 (17%) | 64 (32%) | 50 (25%) | 142 (52%) | 45 (23%) | 75 (34%) | | 7 | 248 (19%) | 26 (13%) | 90 (45%) | 14 (6.9%) | 53 (19%) | 22 (11%) | 43 (20%) | | Unknown | 2 | 0 | 0 | 1 | 0 | 0 | 1 | | How well would you say your family is managing financially these days? |  |  |  |  |  |  |  | | Living comfortably | 412 (32%) | 59 (29%) | 49 (25%) | 48 (24%) | 202 (74%) | 25 (13%) | 29 (13%) | | Doing alright | 414 (32%) | 73 (36%) | 94 (47%) | 61 (31%) | 64 (24%) | 58 (29%) | 64 (29%) | | Getting by | 331 (26%) | 59 (29%) | 36 (18%) | 70 (35%) | 4 (1.5%) | 80 (40%) | 82 (37%) | | Finding it quite difficult | 86 (6.7%) | 8 (3.9%) | 9 (4.5%) | 12 (6.0%) | 1 (0.4%) | 27 (14%) | 29 (13%) | | Finding it very difficult | 40 (3.1%) | 5 (2.5%) | 10 (5.1%) | 2 (1.0%) | 0 (0%) | 8 (4.0%) | 15 (6.8%) | | Does not wish to answer | 8 (0.6%) | 0 (0%) | 0 (0%) | 7 (3.5%) | 1 (0.4%) | 0 (0%) | 0 (0%) | | Unknown | 6 | 0 | 0 | 3 | 0 | 1 | 2 | | Marital status |  |  |  |  |  |  |  | | living with the father | 39 (3.0%) | 0 (0%) | 2 (1.0%) | 31 (16%) | 3 (1.1%) | 3 (1.5%) | 0 (0%) | | Living alone | 1,212 (95%) | 178 (87%) | 193 (98%) | 168 (84%) | 260 (98%) | 194 (98%) | 219 (99%) | | Other situation | 31 (2.4%) | 26 (13%) | 2 (1.0%) | 0 (0%) | 1 (0.4%) | 0 (0%) | 2 (0.9%) | | Unknown | 15 | 0 | 1 | 4 | 8 | 2 | 0 | | Maternal active smoking during pregnancy | 1,067 (85%) | 157 (86%) | 151 (76%) | 187 (94%) | 252 (97%) | 156 (79%) | 164 (75%) | | Unknown | 40 | 22 | 0 | 4 | 11 | 1 | 2 | | Maternal passive smoking during pregnancy | 762 (60%) | 145 (73%) | 154 (78%) | 102 (51%) | 250 (95%) | 19 (9.6%) | 92 (42%) | | Unknown | 21 | 4 | 1 | 4 | 8 | 1 | 3 | | Any previous child neuropsychological diagnosis? | 95 (7.3%) | 3 (1.5%) | 58 (29%) | 1 (0.5%) | 1 (0.4%) | 8 (4.0%) | 24 (11%) | | Date of test (dd/mm/yyyy) |  |  |  |  |  |  |  | | autumn | 300 (23%) | 49 (24%) | 1 (0.5%) | 77 (38%) | 105 (39%) | 38 (19%) | 30 (14%) | | spring | 358 (28%) | 48 (24%) | 64 (32%) | 61 (30%) | 37 (14%) | 77 (39%) | 71 (32%) | | summer | 297 (23%) | 67 (33%) | 72 (36%) | 27 (13%) | 57 (21%) | 53 (27%) | 21 (9.6%) | | winter | 339 (26%) | 40 (20%) | 61 (31%) | 38 (19%) | 73 (27%) | 30 (15%) | 97 (44%) | | Unknown | 3 | 0 | 0 | 0 | 0 | 1 | 2 | | Child’s sex |  |  |  |  |  |  |  | | Male | 587 (45%) | 92 (45%) | 85 (43%) | 92 (45%) | 129 (47%) | 88 (44%) | 101 (46%) | | Female | 710 (55%) | 112 (55%) | 113 (57%) | 111 (55%) | 143 (53%) | 111 (56%) | 120 (54%) | | Imputed difference between blood time extraction and last meal time | 3.33 (2.80, 4.00) | 3.33 (2.75, 4.10) | 3.17 (2.80, 3.67) | 3.33 (2.83, 3.83) | 3.38 (2.83, 3.84) | 4.00 (3.29, 4.75) | 3.00 (2.58, 3.75) | | Creatinine in child (µmol / l) | 1.69 (0.88, 2.96) | 0.81 (0.57, 1.11) | 3.33 (1.98, 4.32) | 1.68 (0.95, 2.69) | 2.01 (1.19, 3.05) | 0.76 (0.40, 1.31) | 2.47 (1.52, 3.81) | | Unknown | 321 | 72 | 64 | 23 | 72 | 71 | 19 | | *1*Median (IQR); n (%) | | | | | | | | |

## Endocrine disruptors

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Table 2: Levels of unprocessed chemicals   | **Characteristic** | **Overall**, N = 976*1* | **BIB**, N = 132*1* | **EDEN**, N = 134*1* | **KANC**, N = 180*1* | **MOBA**, N = 200*1* | **RHEA**, N = 128*1* | **SAB**, N = 202*1* | | --- | --- | --- | --- | --- | --- | --- | --- | | mep | 33 (15, 76) | 44 (19, 114) | 46 (24, 89) | 27 (14, 55) | 13 (8, 21) | 27 (13, 54) | 91 (42, 169) | | mibp | 38 (23, 66) | 63 (38, 104) | 44 (27, 70) | 71 (42, 116) | 21 (13, 34) | 41 (29, 61) | 28 (18, 44) | | mnbp | 22 (14, 38) | 24 (16, 45) | 19 (13, 30) | 41 (26, 62) | 20 (14, 32) | 23 (13, 38) | 15 (10, 23) | | mbzp | 5 (3, 9) | 3 (1, 5) | 7 (5, 12) | 6 (3, 11) | 4 (2, 6) | 5 (3, 9) | 5 (3, 9) | | mehp | 2.8 (1.5, 5.0) | 3.2 (1.6, 5.9) | 2.2 (1.2, 3.8) | 3.2 (1.8, 4.8) | 1.7 (1.1, 2.7) | 4.7 (2.6, 7.6) | 3.4 (2.0, 6.0) | | Unknown | 32 | 5 | 3 | 5 | 16 | 3 | 0 | | mehhp | 19 (12, 32) | 22 (13, 38) | 13 (9, 21) | 26 (17, 38) | 11 (7, 17) | 33 (18, 57) | 21 (14, 37) | | Unknown | 3 | 0 | 0 | 0 | 3 | 0 | 0 | | meohp | 12 (7, 20) | 14 (8, 25) | 8 (5, 13) | 17 (11, 26) | 7 (4, 10) | 20 (12, 35) | 13 (9, 21) | | Unknown | 1 | 0 | 0 | 0 | 1 | 0 | 0 | | mecpp | 33 (20, 57) | 41 (23, 66) | 22 (15, 32) | 46 (33, 74) | 20 (14, 31) | 60 (30, 96) | 35 (24, 61) | | ohminp | 5 (3, 9) | 8 (4, 14) | 5 (3, 9) | 5 (3, 8) | 5 (3, 8) | 5 (3, 9) | 5 (3, 10) | | oxominp | 2.8 (1.7, 5.0) | 3.2 (1.9, 5.8) | 2.5 (1.5, 4.2) | 2.5 (1.5, 4.5) | 2.1 (1.3, 3.9) | 3.4 (2.1, 6.4) | 3.1 (2.1, 5.3) | | mepa | 6 (3, 25) | 10 (4, 59) | 6 (3, 22) | 7 (3, 31) | 3 (2, 7) | 5 (2, 9) | 14 (5, 63) | | Unknown | 2 | 0 | 0 | 0 | 2 | 0 | 0 | | etpa | 0.66 (0.40, 1.23) | 0.72 (0.39, 1.30) | 0.71 (0.49, 1.03) | 0.65 (0.34, 1.46) | 0.60 (0.39, 1.07) | 0.54 (0.30, 1.03) | 0.78 (0.45, 1.54) | | Unknown | 2 | 0 | 1 | 0 | 0 | 0 | 1 | | prpa | 0 (0, 2) | 1 (0, 6) | 0 (0, 0) | 0 (0, 1) | 0 (0, 0) | 0 (0, 1) | 1 (0, 8) | | Unknown | 11 | 4 | 2 | 2 | 0 | 1 | 2 | | bpa | 4 (2, 7) | 5 (2, 10) | 3 (2, 4) | 3 (2, 6) | 4 (3, 8) | 4 (2, 7) | 4 (2, 7) | | Unknown | 8 | 0 | 1 | 2 | 2 | 0 | 3 | | bupa | 0.08 (0.05, 0.14) | 0.06 (0.04, 0.10) | 0.05 (0.03, 0.07) | 0.09 (0.06, 0.19) | 0.08 (0.06, 0.13) | 0.07 (0.04, 0.14) | 0.10 (0.06, 0.23) | | Unknown | 4 | 1 | 1 | 0 | 2 | 0 | 0 | | oxbe | 2 (1, 6) | 4 (1, 12) | 1 (0, 2) | 2 (1, 6) | 3 (1, 7) | 2 (1, 9) | 2 (1, 6) | | trcs | 0.6 (0.3, 1.5) | 1.1 (0.6, 2.8) | 0.7 (0.4, 1.3) | 0.7 (0.4, 1.5) | 0.2 (0.1, 0.4) | 0.4 (0.2, 0.8) | 1.0 (0.4, 2.4) | | dmp | 0.4 (0.3, 4.4) | 0.3 (0.3, 3.3) | 0.4 (0.3, 6.2) | 0.3 (0.3, 2.3) | 1.4 (0.3, 4.4) | 2.1 (0.3, 5.7) | 0.4 (0.3, 5.8) | | Unknown | 4 | 0 | 0 | 1 | 1 | 1 | 1 | | dmtp | 2.8 (1.2, 6.2) | 2.1 (0.9, 5.2) | 4.0 (1.4, 8.9) | 2.5 (0.9, 4.6) | 2.3 (0.9, 5.0) | 3.2 (1.6, 6.4) | 3.4 (1.6, 7.9) | | Unknown | 1 | 0 | 0 | 1 | 0 | 0 | 0 | | dep | 1.5 (0.3, 4.1) | 3.2 (0.9, 8.9) | 1.7 (0.1, 3.4) | 0.7 (0.1, 2.1) | 1.6 (0.4, 4.8) | 1.5 (0.4, 5.5) | 1.6 (0.6, 3.6) | | Unknown | 2 | 0 | 0 | 0 | 0 | 1 | 1 | | detp | 0.12 (0.10, 1.52) | 0.12 (0.10, 1.27) | 0.13 (0.10, 1.74) | 0.12 (0.09, 0.35) | 0.12 (0.10, 1.26) | 0.63 (0.11, 3.05) | 0.13 (0.10, 1.96) | | Unknown | 14 | 4 | 5 | 2 | 1 | 2 | 0 | | *1*Median (IQR) | | | | | | | | |

## Corticosteroids

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Table 3: Levels of unprocessed corticosteroids   | **Characteristic** | **Overall**, N = 976*1* | **BIB**, N = 132*1* | **EDEN**, N = 134*1* | **KANC**, N = 180*1* | **MOBA**, N = 200*1* | **RHEA**, N = 128*1* | **SAB**, N = 202*1* | | --- | --- | --- | --- | --- | --- | --- | --- | | F | 5.4 (3.1, 9.3) | 6.3 (3.9, 10.3) | 7.8 (4.2, 11.2) | 4.9 (2.7, 8.2) | 5.2 (3.0, 9.1) | 6.2 (3.4, 13.1) | 4.5 (2.8, 7.1) | | Unknown | 2 | 0 | 0 | 1 | 1 | 0 | 0 | | 20aDHF | 7 (3, 13) | 7 (4, 14) | 10 (6, 19) | 5 (2, 11) | 7 (4, 14) | 7 (3, 14) | 5 (3, 10) | | Unknown | 7 | 4 | 0 | 3 | 0 | 0 | 0 | | 20bDHF | 15 (9, 25) | 17 (11, 26) | 20 (12, 32) | 14 (9, 25) | 14 (8, 24) | 14 (8, 28) | 13 (8, 18) | | 5bDHF | 1.37 (0.90, 2.02) | 1.35 (0.92, 2.06) | 1.84 (1.26, 2.55) | 1.47 (1.08, 1.92) | 1.06 (0.59, 1.71) | 1.49 (1.02, 2.13) | 1.10 (0.62, 1.79) | | Unknown | 2 | 0 | 0 | 0 | 1 | 0 | 1 | | 5aTHF | 2,845 (1,660, 4,350) | 3,368 (2,216, 5,272) | 3,453 (1,842, 5,224) | 2,907 (1,656, 4,621) | 2,283 (1,260, 3,455) | 3,002 (1,652, 4,614) | 2,719 (1,548, 3,749) | | 5bTHF | 904 (543, 1,405) | 1,131 (656, 1,603) | 1,212 (723, 1,565) | 754 (389, 1,259) | 860 (493, 1,261) | 882 (565, 1,441) | 883 (542, 1,195) | | Unknown | 2 | 2 | 0 | 0 | 0 | 0 | 0 | | 6OHF | 42 (22, 76) | 52 (30, 92) | 55 (29, 79) | 37 (20, 69) | 46 (28, 83) | 42 (21, 93) | 32 (18, 53) | | 5a20acortol | 88 (52, 140) | 106 (57, 174) | 102 (57, 151) | 85 (47, 146) | 89 (54, 138) | 72 (47, 130) | 83 (46, 118) | | Unknown | 8 | 8 | 0 | 0 | 0 | 0 | 0 | | 5a20bcortol | 122 (70, 184) | 133 (67, 176) | 147 (107, 223) | 115 (63, 189) | 115 (68, 173) | 105 (73, 175) | 123 (69, 179) | | Unknown | 5 | 5 | 0 | 0 | 0 | 0 | 0 | | 5b20acortol | 147 (83, 223) | 178 (98, 297) | 169 (90, 251) | 143 (80, 230) | 144 (87, 204) | 138 (80, 220) | 140 (76, 187) | | Unknown | 10 | 10 | 0 | 0 | 0 | 0 | 0 | | 5b20bcortol | 192 (118, 300) | 243 (153, 357) | 224 (141, 357) | 156 (88, 270) | 186 (115, 269) | 178 (114, 302) | 198 (129, 288) | | Unknown | 3 | 3 | 0 | 0 | 0 | 0 | 0 | | 11OHAndros | 227 (128, 380) | 245 (141, 347) | 404 (221, 616) | 163 (81, 298) | 254 (152, 408) | 165 (96, 304) | 249 (141, 350) | | Unknown | 3 | 0 | 0 | 3 | 0 | 0 | 0 | | CortisoneE | 23 (13, 38) | 26 (14, 43) | 28 (14, 42) | 21 (12, 34) | 23 (14, 38) | 29 (19, 59) | 17 (10, 27) | | 20aDHE | 16 (10, 27) | 14 (7, 26) | 25 (15, 37) | 15 (8, 26) | 17 (12, 26) | 15 (9, 28) | 16 (10, 23) | | Unknown | 11 | 7 | 0 | 4 | 0 | 0 | 0 | | 20bDHE | 9 (6, 14) | 9 (5, 14) | 13 (10, 17) | 9 (5, 14) | 9 (6, 14) | 9 (5, 15) | 9 (7, 12) | | Unknown | 16 | 13 | 0 | 3 | 0 | 0 | 0 | | 5aTHE | 73 (39, 123) | 80 (52, 136) | 84 (41, 133) | 71 (40, 122) | 65 (36, 104) | 108 (51, 183) | 61 (32, 97) | | Unknown | 1 | 0 | 0 | 0 | 0 | 1 | 0 | | 5bTHE | 3,112 (1,868, 4,672) | 3,553 (2,323, 4,791) | 3,591 (2,235, 5,287) | 2,755 (1,448, 3,989) | 3,070 (1,785, 4,638) | 3,542 (2,010, 5,901) | 2,880 (1,605, 4,011) | | 6OHE | 12 (6, 18) | 13 (8, 21) | 12 (6, 17) | 13 (7, 20) | 11 (6, 18) | 14 (9, 24) | 9 (5, 14) | | 5b20acortolone | 641 (364, 969) | 637 (377, 1,008) | 877 (566, 1,277) | 518 (261, 870) | 581 (318, 902) | 629 (401, 962) | 654 (397, 888) | | 5b20bcortolone | 545 (335, 829) | 561 (334, 889) | 677 (452, 995) | 505 (272, 769) | 496 (289, 761) | 563 (328, 881) | 531 (367, 780) | | 5aTHB | 132 (75, 222) | 158 (104, 247) | 144 (88, 255) | 148 (83, 246) | 106 (61, 185) | 140 (75, 260) | 116 (73, 172) | | 5bTHB | 49 (28, 82) | 54 (28, 100) | 60 (34, 92) | 44 (28, 90) | 40 (25, 66) | 53 (28, 77) | 50 (29, 74) | | Unknown | 1 | 0 | 0 | 1 | 0 | 0 | 0 | | A | 4 (2, 8) | 5 (3, 9) | 5 (3, 9) | 4 (2, 7) | 4 (3, 8) | 6 (4, 15) | 3 (2, 6) | | Unknown | 1 | 0 | 0 | 0 | 0 | 0 | 1 | | 17DOcortolone | 57 (29, 100) | 54 (33, 96) | 76 (45, 133) | 44 (15, 93) | 56 (26, 92) | 51 (28, 94) | 61 (32, 102) | | Unknown | 2 | 0 | 0 | 1 | 0 | 1 | 0 | | S | 0.45 (0.26, 0.76) | 0.52 (0.29, 0.94) | 0.42 (0.25, 0.73) | 0.32 (0.22, 0.47) | 0.44 (0.25, 0.67) | 0.45 (0.22, 0.77) | 0.58 (0.37, 0.94) | | Unknown | 94 | 6 | 5 | 9 | 51 | 11 | 12 | | 5bDHS | 0.26 (0.17, 0.40) | 0.25 (0.17, 0.40) | 0.29 (0.19, 0.46) | 0.23 (0.18, 0.30) | 0.25 (0.17, 0.41) | 0.32 (0.18, 0.51) | 0.27 (0.16, 0.35) | | Unknown | 131 | 4 | 20 | 0 | 57 | 7 | 43 | | 5bTHS | 31 (18, 50) | 37 (21, 59) | 34 (19, 49) | 31 (19, 55) | 26 (14, 41) | 34 (20, 58) | 27 (17, 43) | | Unknown | 2 | 0 | 0 | 0 | 1 | 0 | 1 | | 17HP | 22 (15, 33) | 17 (11, 27) | 33 (24, 44) | 20 (11, 33) | 23 (17, 31) | 22 (16, 32) | 20 (13, 32) | | Unknown | 1 | 0 | 0 | 0 | 0 | 1 | 0 | | PT | 201 (114, 342) | 150 (87, 239) | 373 (230, 539) | 142 (82, 274) | 176 (113, 283) | 189 (105, 306) | 252 (149, 403) | | T | 0.53 (0.31, 0.95) | 0.66 (0.54, 0.92) | 1.00 (0.49, 1.86) | 0.35 (0.18, 0.57) | 0.41 (0.28, 0.74) | 0.38 (0.26, 0.69) | 0.57 (0.31, 1.01) | | Unknown | 75 | 0 | 5 | 29 | 24 | 14 | 3 | | Andros | 184 (78, 392) | 140 (70, 255) | 550 (297, 971) | 98 (40, 227) | 135 (63, 293) | 110 (62, 226) | 295 (131, 508) | | Unknown | 1 | 0 | 0 | 1 | 0 | 0 | 0 | | Etio | 111 (51, 237) | 73 (30, 138) | 369 (223, 555) | 75 (38, 123) | 91 (46, 184) | 76 (41, 147) | 168 (84, 304) | | Unknown | 1 | 0 | 0 | 1 | 0 | 0 | 0 | | *1*Median (IQR) | | | | | | | | |

# Main results

## Balancing weights

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Table 4: Weights   |  | Median (IQR) | Range | | --- | --- | --- | | **Characteristic***1* | **N = 1,297***1* | **N = 1,297***1* | | mep | 0.94 (0.61, 1.27) | 0.28, 1.74 | | mibp | 0.92 (0.46, 1.38) | 0.06, 1.89 | | mnbp | 0.98 (0.60, 1.33) | 0.20, 1.72 | | mbzp | 0.98 (0.66, 1.28) | 0.34, 1.63 | | mehp | 0.99 (0.65, 1.28) | 0.31, 1.67 | | mehhp | 0.96 (0.53, 1.36) | 0.17, 1.75 | | meohp | 0.96 (0.53, 1.35) | 0.15, 1.77 | | mecpp | 0.95 (0.49, 1.35) | 0.15, 1.83 | | ohminp | 1.00 (0.74, 1.23) | 0.48, 1.50 | | oxominp | 1.01 (0.78, 1.20) | 0.53, 1.43 | | mepa | 1.01 (0.90, 1.13) | 0.74, 1.25 | | etpa | 1.01 (0.96, 1.07) | 0.89, 1.14 | | prpa | 1.01 (0.92, 1.12) | 0.79, 1.24 | | bpa | 0.99 (0.70, 1.27) | 0.39, 1.55 | | bupa | 1.01 (0.91, 1.10) | 0.81, 1.22 | | oxbe | 1.01 (0.92, 1.10) | 0.79, 1.22 | | trcs | 1.01 (0.87, 1.14) | 0.67, 1.29 | | dmp | 0.99 (0.72, 1.25) | 0.49, 1.52 | | dmtp | 1.00 (0.80, 1.20) | 0.58, 1.39 | | dep | 1.01 (0.81, 1.19) | 0.60, 1.38 | | detp | 0.99 (0.82, 1.19) | 0.61, 1.40 | | *1*Truncated weights. | | | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Table 5: Weights   |  | Median (IQR) | Range | | --- | --- | --- | | **Characteristic***1* | **N = 976***1* | **N = 976***1* | | mep | 0.92 (0.60, 1.27) | 0.28, 1.74 | | mibp | 0.88 (0.44, 1.38) | 0.08, 1.99 | | mnbp | 0.98 (0.53, 1.34) | 0.14, 1.84 | | mbzp | 0.95 (0.67, 1.29) | 0.35, 1.69 | | mehp | 0.98 (0.65, 1.29) | 0.33, 1.64 | | mehhp | 0.98 (0.56, 1.35) | 0.21, 1.70 | | meohp | 0.98 (0.52, 1.35) | 0.17, 1.77 | | mecpp | 0.96 (0.55, 1.36) | 0.19, 1.76 | | ohminp | 0.99 (0.73, 1.26) | 0.46, 1.49 | | oxominp | 1.01 (0.71, 1.25) | 0.45, 1.52 | | mepa | 1.00 (0.90, 1.13) | 0.75, 1.26 | | etpa | 1.02 (0.90, 1.14) | 0.73, 1.25 | | prpa | 1.00 (0.92, 1.12) | 0.76, 1.25 | | bpa | 0.99 (0.70, 1.25) | 0.41, 1.58 | | bupa | 1.01 (0.90, 1.13) | 0.75, 1.27 | | oxbe | 1.01 (0.92, 1.10) | 0.78, 1.21 | | trcs | 1.01 (0.86, 1.14) | 0.68, 1.29 | | dmp | 0.98 (0.75, 1.23) | 0.51, 1.46 | | dmtp | 1.00 (0.79, 1.23) | 0.56, 1.41 | | dep | 0.99 (0.81, 1.20) | 0.64, 1.42 | | detp | 0.99 (0.82, 1.18) | 0.62, 1.41 | | *1*Truncated weights. | | | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Table 6: Weights   |  | Median (IQR) | Range | | --- | --- | --- | | **Characteristic***1* | **N = 976***1* | **N = 976***1* | | cortisol\_production | 0.99 (0.53, 1.41) | 0.15, 1.82 | | cortisol\_metabolism | 1.01 (0.73, 1.27) | 0.44, 1.53 | | cortisone\_production | 1.01 (0.57, 1.39) | 0.20, 1.72 | | X11bHSD | 0.99 (0.70, 1.26) | 0.45, 1.57 | | *1*Truncated weights. | | | |

## Marginal comparisons

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Table 7: Average comparisons   |  | hitrtse | | --- | --- | | **OP pesticide metabolites** | | | dmtp | 0.003 (-0.066, 0.073) | | dmp | 0.01 (-0.037, 0.056) | | detp | -0.026 (-0.052, 0) | | dep | -0.007 (-0.045, 0.031) | | **Phenols** | | | trcs | 0.018 (-0.027, 0.063) | | prpa | 0.01 (-0.038, 0.059) | | oxbe | 0.019 (-0.018, 0.056) | | mepa | **0.042 (0.014, 0.069)\*** | | etpa | 0.008 (-0.028, 0.044) | | bupa | 0.001 (-0.025, 0.028) | | bpa | 0.01 (-0.014, 0.034) | | **Phthalate metabolites** | | | oxominp | **0.023 (0.003, 0.042)\*** | | ohminp | **0.038 (0.001, 0.075)\*** | | mnbp | 0.008 (-0.033, 0.049) | | mibp | 0.02 (-0.045, 0.086) | | mep | -0.002 (-0.028, 0.023) | | meohp | 0.033 (-0.002, 0.068) | | mehp | **0.035 (0.007, 0.062)\*** | | mehhp | 0.024 (-0.006, 0.053) | | mecpp | 0.014 (-0.015, 0.042) | | mbzp | 0.025 (-0.001, 0.051) | | \*Significant results. | | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Table 8: Average comparisons   |  | 11bhsd | cortisol metabolism | cortisol production | cortisone production | | --- | --- | --- | --- | --- | | **OP pesticide metabolites** | | | | | | dmtp | **0.073 (0.035, 0.111)\*** | 0.022 (-0.041, 0.084) | **0.079 (0.024, 0.135)\*** | **0.138 (0.072, 0.203)\*** | | dmp | **0.067 (0.029, 0.106)\*** | 0.004 (-0.053, 0.06) | 0.051 (-0.031, 0.132) | **0.109 (0.046, 0.172)\*** | | detp | 0.034 (-0.017, 0.085) | 0.014 (-0.024, 0.053) | -0.002 (-0.091, 0.088) | 0.033 (-0.066, 0.131) | | dep | 0.005 (-0.023, 0.034) | **0.087 (0.045, 0.129)\*** | **0.159 (0.067, 0.251)\*** | **0.135 (0.057, 0.214)\*** | | **Phenols** | | | | | | trcs | -0.005 (-0.069, 0.058) | 0.057 (-0.044, 0.157) | 0.094 (-0.037, 0.225) | 0.072 (-0.031, 0.176) | | prpa | 0.015 (-0.045, 0.076) | 0.031 (-0.007, 0.069) | 0.034 (-0.039, 0.106) | 0.043 (-0.031, 0.117) | | oxbe | -0.003 (-0.025, 0.02) | 0.006 (-0.033, 0.044) | 0.015 (-0.089, 0.119) | 0.01 (-0.083, 0.103) | | mepa | **0.055 (0.017, 0.092)\*** | 0.004 (-0.037, 0.045) | **0.064 (0.012, 0.116)\*** | **0.108 (0.032, 0.183)\*** | | etpa | 0.041 (-0.012, 0.093) | 0.046 (-0.002, 0.093) | **0.15 (0.077, 0.224)\*** | **0.164 (0.097, 0.232)\*** | | bupa | -0.022 (-0.075, 0.031) | -0.01 (-0.065, 0.045) | -0.02 (-0.11, 0.07) | -0.039 (-0.118, 0.041) | | bpa | **0.037 (0.016, 0.059)\*** | **0.137 (0.041, 0.233)\*** | **0.274 (0.11, 0.439)\*** | **0.264 (0.135, 0.393)\*** | | **Phthalate metabolites** | | | | | | oxominp | -0.006 (-0.044, 0.031) | **0.123 (0.065, 0.18)\*** | **0.094 (0.004, 0.184)\*** | **0.071 (0.004, 0.139)\*** | | ohminp | 0.017 (-0.019, 0.054) | **0.151 (0.069, 0.234)\*** | **0.143 (0.018, 0.268)\*** | **0.136 (0.041, 0.231)\*** | | mnbp | 0.011 (-0.036, 0.058) | **0.153 (0.029, 0.277)\*** | 0.111 (-0.078, 0.301) | 0.103 (-0.042, 0.249) | | mibp | **-0.083 (-0.145, -0.022)\*** | **0.102 (0.056, 0.148)\*** | 0.065 (-0.058, 0.188) | -0.029 (-0.13, 0.072) | | mep | 0.006 (-0.036, 0.048) | 0.024 (-0.047, 0.095) | 0.034 (-0.076, 0.144) | 0.033 (-0.077, 0.143) | | meohp | -0.004 (-0.052, 0.045) | **0.121 (0.002, 0.24)\*** | 0.11 (-0.068, 0.289) | 0.089 (-0.056, 0.233) | | mehp | **0.036 (0.009, 0.062)\*** | **0.117 (0.022, 0.212)\*** | **0.2 (0.043, 0.357)\*** | **0.2 (0.08, 0.321)\*** | | mehhp | 0.021 (-0.013, 0.056) | **0.127 (0.004, 0.251)\*** | 0.124 (-0.081, 0.33) | 0.125 (-0.043, 0.293) | | mecpp | 0.017 (-0.026, 0.06) | **0.127 (0.02, 0.234)\*** | 0.144 (-0.05, 0.338) | 0.138 (-0.041, 0.317) | | mbzp | 0.008 (-0.05, 0.067) | 0.064 (-0.036, 0.164) | 0.055 (-0.13, 0.24) | 0.054 (-0.103, 0.211) | | \*Significant results. | | | | | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Table 9: Average comparisons   |  | hitrtse | | --- | --- | | **TMP** | | | X11bHSD | 0.012 (-0.012, 0.037) | | cortisone production | 0.001 (-0.038, 0.04) | | cortisol production | -0.001 (-0.05, 0.048) | | cortisol metabolism | 0.003 (-0.037, 0.043) | | \*Significant results. | | |

# Other analyses

## Marginal hypothesis

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Table 10: Hypothesis testing for effect modification   |  | hitrtse | | --- | --- | | **TMP** | | | trcs | -0.001 (-0.032, 0.029) | | prpa | -0.021 (-0.083, 0.042) | | oxominp | 0.023 (-0.011, 0.057) | | oxbe | **-0.032 (-0.061, -0.003)\*** | | ohminp | -0.047 (-0.106, 0.011) | | mnbp | 0.027 (-0.086, 0.141) | | mibp | 0.029 (-0.079, 0.136) | | mepa | -0.032 (-0.092, 0.028) | | mep | **0.095 (0.02, 0.17)\*** | | meohp | -0.004 (-0.08, 0.072) | | mehp | -0.01 (-0.103, 0.082) | | mehhp | -0.018 (-0.11, 0.074) | | mecpp | -0.004 (-0.078, 0.071) | | mbzp | **0.061 (0.005, 0.118)\*** | | etpa | -0.015 (-0.055, 0.026) | | dmtp | 0.002 (-0.089, 0.093) | | dmp | 0.027 (-0.028, 0.083) | | detp | -0.023 (-0.12, 0.073) | | dep | -0.008 (-0.034, 0.018) | | bupa | 0.022 (-0.023, 0.067) | | bpa | -0.033 (-0.092, 0.025) | | \*Significant results. | | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Table 11: Hypothesis testing for effect modification   |  | 11bhsd | cortisol metabolism | cortisol production | cortisone production | | --- | --- | --- | --- | --- | | **TMP** | | | | | | trcs | 0.051 (-0.027, 0.129) | -0.004 (-0.096, 0.087) | 0.049 (-0.087, 0.186) | **0.091 (0.04, 0.143)\*** | | prpa | 0.039 (-0.058, 0.135) | -0.064 (-0.135, 0.006) | 0.085 (-0.1, 0.269) | 0.109 (-0.005, 0.223) | | oxominp | 0.002 (-0.121, 0.125) | 0.017 (-0.113, 0.147) | 0.108 (-0.064, 0.279) | 0.091 (-0.017, 0.199) | | oxbe | 0.003 (-0.11, 0.115) | -0.001 (-0.126, 0.124) | 0.078 (-0.145, 0.302) | 0.067 (-0.13, 0.265) | | ohminp | 0.016 (-0.06, 0.091) | 0.018 (-0.082, 0.118) | **0.147 (0.008, 0.286)\*** | **0.138 (0.004, 0.271)\*** | | mnbp | 0.066 (-0.048, 0.18) | 0.003 (-0.138, 0.144) | 0.053 (-0.181, 0.286) | 0.11 (-0.048, 0.268) | | mibp | -0.018 (-0.148, 0.112) | 0.042 (-0.133, 0.218) | 0.047 (-0.181, 0.276) | 0.021 (-0.119, 0.162) | | mepa | -0.015 (-0.072, 0.043) | -0.022 (-0.122, 0.078) | **0.142 (0.016, 0.268)\*** | **0.103 (0.019, 0.187)\*** | | mep | 0.064 (-0.043, 0.171) | -0.025 (-0.126, 0.076) | **-0.116 (-0.196, -0.037)\*** | -0.029 (-0.18, 0.122) | | meohp | -0.07 (-0.171, 0.03) | **0.078 (0.011, 0.144)\*** | **0.1 (0.011, 0.189)\*** | 0.013 (-0.063, 0.089) | | mehp | -0.003 (-0.117, 0.11) | **0.076 (0.028, 0.125)\*** | **0.179 (0.086, 0.272)\*** | **0.144 (0.034, 0.255)\*** | | mehhp | -0.066 (-0.158, 0.026) | 0.079 (-0.004, 0.161) | 0.106 (-0.005, 0.216) | 0.022 (-0.052, 0.097) | | mecpp | -0.044 (-0.145, 0.057) | 0.052 (-0.013, 0.117) | **0.072 (0.007, 0.138)\*** | 0.016 (-0.074, 0.106) | | mbzp | 0.067 (-0.062, 0.196) | **-0.078 (-0.131, -0.025)\*** | 0.004 (-0.11, 0.118) | 0.071 (-0.039, 0.18) | | etpa | 0.046 (-0.047, 0.139) | -0.009 (-0.126, 0.108) | 0.09 (-0.104, 0.283) | 0.12 (-0.097, 0.336) | | dmtp | -0.023 (-0.145, 0.099) | **0.132 (0.035, 0.229)\*** | **0.212 (0.093, 0.331)\*** | 0.15 (-0.034, 0.335) | | dmp | 0.037 (-0.078, 0.152) | -0.025 (-0.106, 0.056) | 0.034 (-0.061, 0.128) | 0.064 (-0.097, 0.225) | | detp | **0.068 (0.01, 0.125)\*** | 0.045 (-0.074, 0.165) | 0.179 (-0.017, 0.375) | **0.215 (0.053, 0.377)\*** | | dep | **-0.038 (-0.074, -0.002)\*** | 0.034 (-0.052, 0.119) | 0.102 (-0.118, 0.322) | 0.046 (-0.159, 0.251) | | bupa | **-0.097 (-0.161, -0.033)\*** | 0.061 (-0.003, 0.125) | **0.125 (0.042, 0.209)\*** | 0.007 (-0.094, 0.107) | | bpa | -0.017 (-0.155, 0.121) | -0.018 (-0.121, 0.086) | 0.112 (-0.019, 0.243) | 0.075 (-0.056, 0.207) | | \*Significant results. | | | | | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Table 12: Hypothesis testing for effect modification   |  | hitrtse | | --- | --- | | **TMP** | | | X11bHSD | -0.108 (-0.24, 0.023) | | cortisone production | **-0.128 (-0.228, -0.028)\*** | | cortisol production | -0.097 (-0.231, 0.036) | | cortisol metabolism | -0.001 (-0.13, 0.127) | | \*Significant results. | | |