

Supporting Table 4. Day and nighttime specific differences in urinary excretion of steroid hormone metabolites in men and women.

| Metabolite, µg/hour | Men | | | | | Women | | | | |
|-----------------------------------|-----|---|-------|---|--------|-------|---|-------|---|--------|
| | Day | | Night | | p | Day | | Night | | p |
| | N | Median;25 th -75 th | N | Median;25 th -75 th | | N | Median;25 th -75 th | N | Median;25 th -75 th | |
| 17α-OH-pregnanolone | 455 | 7.33;4.88-10.6 | 451 | 6.91;4.7-10.2 | 0.013 | 379 | 2.41;1.44-5 | 375 | 1.83;1.12-4.03 | <0.001 |
| pregnanetriol | 422 | 27.7;20.6-39.3 | 410 | 28.4;19.5-39.3 | 0.51 | 370 | 14.7;9.38-22.7 | 365 | 14.1;9.39-21.3 | 0.015 |
| pregnenetriol | 453 | 8.31;4.1-16.3 | 449 | 7.24;3.61-13 | <0.001 | 379 | 3.21;1.23-6.05 | 378 | 2.51;1.05-5.08 | <0.001 |
| pregnanetriolone | 456 | 0.766;0.518-1.12 | 456 | 0.509;0.358-0.847 | <0.001 | 379 | 0.548;0.368-0.908 | 379 | 0.373;0.234-0.685 | <0.001 |
| pregnane diol | 456 | 8.31;5.9-12.3 | 456 | 8.16;5.49-12.8 | 0.13 | 379 | 8.77;4.89-17.7 | 376 | 8.01;4.76-15.4 | 0.0018 |
| dehydroepiandrosterone | 443 | 6.78;2.32-28.9 | 443 | 4.71;1.94-16.5 | <0.001 | 378 | 2.37;1.05-6.47 | 378 | 1.85;0.83-4.45 | <0.001 |
| 16α-OH-dehydroepiandrosterone | 449 | 10.8;3.71-21.6 | 449 | 8.97;3.04-20.7 | <0.001 | 379 | 4.03;1.74-9.33 | 379 | 3.71;1.69-7.67 | <0.001 |
| androstenediol | 455 | 5.05;2.16-11.7 | 452 | 4.84;2.13-10.1 | <0.001 | 379 | 1.8;0.897-3.35 | 378 | 1.6;0.884-2.94 | <0.001 |
| androstetriol | 456 | 16.8;9.78-25.8 | 455 | 16.3;9.28-26.3 | 0.61 | 379 | 6.8;3.63-11.3 | 378 | 7.07;3.77-11.5 | 0.30 |
| testosterone | 453 | 1.85;1.17-2.86 | 451 | 1.96;1.26-3.08 | 0.0087 | 374 | 0.3;0.173-0.558 | 369 | 0.291;0.173-0.526 | 0.055 |
| 5α-DH-testosterone | 455 | 1.03;0.61-1.5 | 456 | 0.871;0.548-1.45 | <0.001 | 378 | 0.43;0.261-0.744 | 378 | 0.338;0.195-0.621 | <0.001 |
| androstanediol | 449 | 3.47;2.35-4.66 | 447 | 3.5;2.34-5.2 | 0.18 | 375 | 0.917;0.57-1.4 | 374 | 0.896;0.502-1.49 | 0.0097 |
| androsterone | 404 | 76.7;49.4-113 | 400 | 73.2;47.9-108 | 0.029 | 362 | 26.9;15.2-47 | 359 | 24.6;13.8-45.1 | <0.001 |
| 11β-OH-androsterone | 450 | 38.5;28.6-50.6 | 450 | 27.6;19.9-39 | <0.001 | 376 | 20.9;15.3-28.5 | 378 | 15.4;10.8-21.1 | <0.001 |
| etiocholanolone | 407 | 65.6;40-98.9 | 413 | 63.3;41.8-96.1 | 0.83 | 369 | 38.1;21.7-56.9 | 359 | 37.5;19.6-58.4 | 0.042 |
| 17β-estradiol | 456 | 0.097;0.069-0.132 | 456 | 0.103;0.071-0.147 | 0.0056 | 377 | 0.082;0.041-0.17 | 379 | 0.08;0.038-0.182 | 0.78 |
| estriol | 455 | 0.251;0.172-0.348 | 456 | 0.261;0.172-0.363 | 0.29 | 377 | 0.186;0.081-0.473 | 375 | 0.189;0.083-0.479 | 0.98 |
| TH-11-deoxycorticosterone | 455 | 0.315;0.215-0.447 | 455 | 0.272;0.181-0.385 | <0.001 | 379 | 0.263;0.154-0.446 | 378 | 0.225;0.13-0.408 | <0.001 |
| TH-11-dehydrocorticosterone | 451 | 4.74;3.26-6.34 | 455 | 3.36;2.35-5.18 | <0.001 | 379 | 3.38;2.31-4.82 | 379 | 2.52;1.69-4.05 | <0.001 |
| 18-OH-TH-11-dehydrocorticosterone | 447 | 2.31;1.49-3.49 | 437 | 1.84;1.17-3.16 | <0.001 | 359 | 1.49;1-2.49 | 351 | 1.11;0.655-1.91 | <0.001 |
| TH-corticosterone | 456 | 6.24;4.44-8.65 | 456 | 5.19;3.72-7.83 | <0.001 | 379 | 4.68;3.45-6.49 | 379 | 4.07;2.8-6.02 | <0.001 |
| 5α-TH-corticosterone | 456 | 15.4;10.9-21.7 | 456 | 9.53;6.64-13.4 | <0.001 | 379 | 8.43;5.77-12.3 | 379 | 5.31;3.22-7.89 | <0.001 |
| TH-aldosterone | 456 | 0.828;0.506-1.44 | 455 | 0.667;0.431-1.11 | <0.001 | 379 | 0.769;0.47-1.32 | 378 | 0.63;0.342-1.06 | <0.001 |
| TH-11-deoxycortisol | 456 | 2.99;2.18-3.82 | 456 | 2.3;1.61-3.28 | <0.001 | 379 | 2.29;1.64-3.22 | 379 | 1.76;1.25-2.61 | <0.001 |
| cortisol | 456 | 4.99;3.6-6.93 | 456 | 3.82;2.64-5.58 | <0.001 | 379 | 3.69;2.6-5.39 | 379 | 2.8;2.04-4.05 | <0.001 |
| 6β-OH-cortisol | 456 | 4.84;3.13-6.75 | 456 | 3.58;2.22-5.37 | <0.001 | 379 | 4.28;2.53-6.09 | 378 | 2.95;1.8-4.61 | <0.001 |
| 18-OH-cortisol | 446 | 8.08;5.05-12.8 | 429 | 4.78;3.13-8.32 | <0.001 | 367 | 7.84;4.88-11.1 | 349 | 4.96;2.79-8.03 | <0.001 |
| 20α-DH-cortisol | 456 | 2.4;1.69-3.51 | 456 | 1.62;1.05-2.56 | <0.001 | 379 | 1.98;1.39-2.9 | 379 | 1.51;0.833-2.34 | <0.001 |
| TH-cortisol | 386 | 82.6;66.5-107 | 411 | 51.9;38-72.2 | <0.001 | 354 | 56;41-70.2 | 355 | 34.2;24.5-48 | <0.001 |
| α-cortol | 453 | 15;11.8-19.6 | 453 | 10.4;7.38-13.9 | <0.001 | 379 | 10.2;7.61-13.7 | 379 | 6.6;4.76-9.48 | <0.001 |
| β-cortol | 453 | 20.6;15.6-27.9 | 454 | 16.3;11.5-24.3 | <0.001 | 379 | 12.2;9.31-17 | 378 | 9.09;6.17-13.8 | <0.001 |
| 11β-OH-etiocholanolone | 454 | 13.7;7.62-22.5 | 455 | 14.8;8.09-23.7 | 0.42 | 378 | 12;6.82-19 | 379 | 11.9;6.26-18.7 | 0.12 |
| allo-TH-cortisol | 393 | 68.8;49-92.6 | 419 | 43.6;30.3-63.2 | <0.001 | 370 | 28.3;19.5-40.6 | 369 | 17.3;11.6-26.9 | <0.001 |
| cortisone | 456 | 7.33;5.46-10.2 | 455 | 6.09;4.49-8.49 | <0.001 | 379 | 6.09;4.13-8.21 | 379 | 4.59;3.09-6.83 | <0.001 |
| 20α-DH-cortisone | 456 | 1.13;0.84-1.57 | 456 | 0.709;0.499-1.07 | <0.001 | 379 | 0.81;0.584-1.04 | 379 | 0.477;0.336-0.69 | <0.001 |
| 20β-DH-cortisone | 456 | 2.82;2-3.86 | 456 | 1.75;1.21-2.5 | <0.001 | 379 | 2.24;1.61-3.02 | 379 | 1.49;1.03-2.19 | <0.001 |
| TH-cortisone | 423 | 148;113-193 | 432 | 93.5;69.7-130 | <0.001 | 368 | 94.6;71-125 | 368 | 62.9;44.2-88 | <0.001 |
| α-cortolone | 431 | 57.5;45.3-74 | 444 | 35.6;26.1-47.6 | <0.001 | 368 | 41.9;30.9-54.7 | 370 | 26.2;19.6-37.5 | <0.001 |
| β-cortolone | 433 | 29.3;22.1-38 | 442 | 21.4;16.2-28.7 | <0.001 | 372 | 16.6;12.7-22.6 | 376 | 12.3;8.96-16.9 | <0.001 |
| 11-keto-etiocholanolone | 455 | 16;9.98-23.5 | 455 | 15.2;9.02-22.4 | <0.001 | 379 | 13.8;8.48-19.6 | 379 | 12.3;7-18.8 | <0.001 |

The available number of participants is indicated for each metabolite stratified for sex. Metabolites in the unit µg/hour are described by their median;25th-75th percentile. Within-sex differences were determined by Wilcoxon signed-rank test, and the corresponding *p* values are indicated.