**Supplemental Table 1.** Plasma 25(OH)D, vitamin D, calcium and phosphate and urine calcium and creatinine ratio across treatment groups A-D at 20 gestational weeks (GW), 36 GW and 4 weeks postpartum (PP).

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | **Supplementation group** | | | | | |  |  |  |
| **Variable** | **Group** | **n** | **20 GW** | **p-value** | **36 GW** | **p-value** | **4 weeks PP** | **p-value** | **p-value GW20- GW36** | **p-value GW36-**  **4W PP** | **p-value GW20-4WPP** |
| **Plasma** |  |  |  |  |  |  |  |  |  |  |  |
| **25(OH)D** | A | 9# | 72 (48-120) | 0.374 | 82 (55-143) | **0.030** | 65 (43-96) | **0.038** | 0.575 | **0.008** | 0.260 |
| **(nmol/L)** | B | 9 | 86 (55-131) | 111 (94-130) | 86 (76-105) | 0.028 | **0.008** | 0.767 |
|  | C | 11 | 79 (25-111) | 120 (88-157) | 84 (72-127) | **0.005** | **0.005** | 0.445 |
|  | *D*\* | *7* | *104 (61-119)* | *118 (51-148)* | *99 (52-122)* | *0.176* | *0.028* | *0.866* |
|  | D | 6 | 104 (74-119) |  | 125 (106-148) |  | 102 (82-122) |  | 0.116 | 0.028 | 0.917 |
| **Vitamin D** | A | 9# | 11 (nd-35) | 0.154 | nd (nd-9) | **0.001** | 5 (nd-12) | **0.001** | 0.203 | 0.767 | 0.515 |
| **(nmol/L)** | B | 9 | nd (nd-9) | 11 (nd-39) | 14 (nd-34) | **0.011** | 0.859 | **0.008** |
|  | C | 11 | 11 (nd-30) | 34 (19-76) | 31 (8-52) | **0.005** | **0.013** | **0.013** |
|  | *D\** | *7* | *nd (nd-40)* | *88 (nd-100)* | *38 (nd-71)* | *0.028* | *0.091* | *0.043* |
|  | D | 6 | nd (nd-40) |  | 90 (36-100) |  | 46 (26-71) |  | 0.028 | 0.075 | 0.046 |
| **Calcium** | A | 9# | 2.2 (2.0-2.3) | 0.295 | 2.1 (1.8-2.4) | 0.299 | 2.3 (2.1-2.4) | 0.599a with probable non-compliant participant. | 0.109 | 0.021 | 0.182 |
| **mmol/L** | B | 9 | 2.1 (2.1-2.3) | 2.1 (1.8-2.1) | 2.2 (2.1-2.3) | **0.011** | **0.008** | **0.012** |
|  | C | 11 | 2.2 (2.0-2.3) | 2.1 (1.7-2.3) | 2.3 (2.0-2.5) | 0.022 | **0.004** | **0.003** |
|  | *D\** | *7* | *2.2 (2.0-2.3)* | *2.2 (2.0-2.2)* | *2.3 (2.2-2.3)* | *0.044* | *0.018* | *0.018* |
|  | D | 6 | 2.2 (2.1-2.3) |  | 2.2 (2.0-2.2) |  | 2.3 (2.2-2.3) |  | 0.074 | 0.027 | 0.028 |
| **Phosphate** | A | 9# | 0.99 (0.86-1.31) | 0.714 | 0.87 (0.78-1.16) | 0.779 | 1.19 (0.90-1.34) | 0.816 | 0.021 | **0.012** | 0.141 |
| **mmol/L** | B | 9 | 1.07 (0.87-1.32) | 0.96 (0.45-1.30) | 1.15 (0.76-1.44) | 0.058 | **0.011** | 0.314 |
|  | C | 11 | 0.99 (0.82-1.17) | 0.95 (0.67-1.30) | 1.19 (0.86-1.39) | 0.139 | **0.005** | **0.003** |
|  | *D\** | *7* | *0.97 (0.83-1.17)* | *0.86 (0.73-1.07)* | *1.22 (0.93-1.30)* | *0.046* | *0.018* | *0.018* |
|  | D | 6 | 1.05 (0.83-1.17) |  | 0.90 (0.73-1.07) |  | 1.17 (0.93-1.30) |  | 0.078 | 0.028 | 0.028 |
| **Urine** |  |  |  |  |  |  |  |  |  |  |  |
| **Calcium/** | A | 9# | 0.6 (0.3-0.7) | 0.586 | 0.8 (0.3-1.0) | 0.158 | 0.2 (0.1-0.6) | 0.581 | 0.028 | **0.012** | **0.012** |
| **Creatinine** | B | 9 | 0.6 (0.3-0.9) | 0.5 (0.3-1.3) | 0.1 (0.0-0.4) | 0.859 | **0.008** | **0.008** |
| **mol/**  **mol** | C | 11 | 0.5 (0.3-0.7) | 0.5 (0.3-1.2) | 0.1 (0.0 -0.4) | 0.657 | **0.004** | **0.003** |
|  | *D\** | *7* | 0.6 (0.4-0.8) | 0.6 (0.5-0.9) | 0.2 (0.0-0.3) | 0.091 | 0.018 | 0.018 |
|  | D | 6 | 0.6 (0.4-0.8) |  | 0.6 (0.5-0.9) |  | 0.2 (0.0-0.3) |  | 0.173 | 0.028 | 0.028 |

Data are medians (ranges). The total between-group differences were analyzed with the Kruskal Wallis test for continuous data. A p-value < 0.05 was considered significant. Between time points differences were analyzed by using a Wilcoxon signed rank test.Following Bonferroni correction a p value < 0.0167 was considered significant. The mothers took 10 (group A), 35 (group B), 60 (group C) or 85 (group D) µg vitamin D3/day from 20 GW to 4 weeks PP. nd= not detectable. #missing 1 sample at 4 weeks PP. \* data with probable non-compliant participant.