**Supplementary Table 1. Associations of Percent African Ancestry with Measures of Vitamin D Metabolism among Hispanic Participants in the Multi-Ethnic Study of Atherosclerosis**

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| --- | --- | --- | --- | --- | --- |
|  | Quartile 1 | Quartile 2 | Quartile 3 | Quartile 4 | p-valueα |
| Percent African Ancestry, % | 0.2 – 1.9 | 2.0 – 4.9 | 5.0 – 16.2 | 16.3 – 98.1 |  |
| Total 25(OH)D, ng/mL | 25.6 (+10.1) | 24.7 (+9.7) | 25.4 (+9.6) | 23.4 (+10.7) | 0.002 |
| 25(OH)D3, ng/mL | 23.2 (+9.5) | 22.2 (+9.1) | 23.0 (+9.2) | 21.4 (+9.8) | 0.010 |
| Bioavailable 25(OH)Dβ, ng/mL | 4.0 (+1.4) | 4.4 (+2.0) | 4.3 (+1.7) | 3.8 (+2.0) | 0.117 |
| Bioavailable 25(OH)Dδ, ng/mL | 3.8 (+1.9) | 4.0 (+2.0) | 4.1 (+2.0) | 3.7 (+2.6) | 0.482 |
| Total 1,25(OH)2D, pg/mL | 52.5 (+17.6) | 47.2 (+14.8) | 51.7 (+16.6) | 53.6 (+15.7) | 0.267 |
| Bioavailable 1,25(OH)2D, pg/mL | 16.0 (+5.8) | 15.1 (+7.2) | 16.6 (+8.5) | 15.4 (+7.5) | 0.746 |
| VDBG, μg/mL | 251.8 (+28.2) | 257.4 (+41.8) | 256.4 (+30.3) | 254.0 (+41.9) | 0.786 |
| 24,25(OH)2D3, mg/dL | 1.6 (1.05,2.5) | 1.55 (1,2.35) | 1.65 (1.05,2.5) | 1.55 (.85,2.35) | 0.047 |
| Calcium, mg/dL | 9.6 (+0.4) | 9.6 (+0.4) | 9.6 (+0.4) | 9.7 (+0.4) | <0.001 |
| Phosphorus, mg/dL | 3.67 (+0.54) | 3.64 (+0.52) | 3.68 (+0.51) | 3.74 (+0.54) | 0.022 |
| Albumin, g/dL | 4.1 (+0.2) | 4.2 (+0.3) | 4.2 (+0.3) | 4.2 (+0.3) | 0.611 |
| Fibroblast Growth Factor-23, pg/ml | 37.4 (30.3,44.1) | 34.2 (29,42.7) | 37.1 (29.1,45) | 35.3 (27.5,43.8) | 0.077 |
| Parathyroid Hormone, pg/mL | 40.9 (32.2,53.4) | 41.25 (31.8,54.2) | 42.45 (33.2,56) | 45.5 (34.2,61.1) | <0.001 |
| 24,25(OH)2D3/25(OH)D3 | 7.6 (+2.1) | 7.4 (+1.9) | 7.6 (+2.0) | 7.7 (+2.5) | 0.782 |
| 1,25(OH)2D/25(OH)D | 2.8 (2.1,4.1) | 2.6 (2.1,3.6) | 2.8 (2.1,3.8) | 3.1 (2.2,4.9) | 0.060 |
| Urine Calcium/Creatinine (mg/g) | .09 (.05,.13) | .08 (.05,.12) | .09 (.06,.14) | .07 (.04,.11) | <0.001 |
| Urine Phosphorus/Creatinine (mg/g) | 0.5 (+0.2) | 0.5 (+0.2) | 0.5 (+0.2) | 0.4 (+0.2) | <0.001 |
| Fractional Excretion of Phosphorus | 11.9 (+5.7) | 11.8 (+6.0) | 11.5 (+4.9) | 10.5 (+4.6) | <0.001 |
| VDBG Haplotype |  |  |  |  | <0.001 |
| Gc1f/Gc1f | 3 (7.9) | 3 (7.3) | 3 (10.0) | 20 (38.5) |  |
| Gc1f/Gc1s | 10 (26.3) | 12 (29.3) | 10 (33.3) | 5 (9.6) |  |
| Gc1s/Gc1s | 14 (36.8) | 12 (29.3) | 11 (36.7) | 12 (23.1) |  |
| Gc2/Gc1f | 6 (15.8) | 5 (12.2) | 1 (3.3) | 5 (9.6) |  |
| Gc2/Gc1s | 5 (13.2) | 7 (17.1) | 3 (10.0) | 7 (13.5) |  |
| Gc2/Gc2 | 0 (0.0) | 2 (4.9) | 2 (6.7) | 3 (5.8) |  |

Continuous variables are presented as mean (±SD) or median (25th,50th percentile) and categorical variables as n (%). αP-value is from Wald test on percent African ancestry modeled continuously and log-transformed. βBioavailable 25(OH)D estimated from published equations with six affinity coefficients based on VDBG isoforms (1-3). δBioavailable 25(OH)D estimated from equation with a single binding coefficient. VDBG = Vitamin D Binding Globulin

**References**

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