## Table 1

| Nutrition Biomarkers | Outcome | N | 25th Percentile | 75th Percentile | Outcome, 75th Percentile v. 25th Percentile | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  | Adjusted | | | |
|  |  |  |  |  | Predicted Outcome at 25th Percentile | Predicted Outcome at 75th Percentile | Coefficient (95% CI) | P-value |
| Vitamin D | Telomere Length Year 1 | 456 | 32.57 | 54.79 | 0 | -0.04 | -0.05 (-0.17, 0.07) | 0.44 |
|  | Telomere Length Year 2 | 514 | 32.55 | 55.48 | -0.21 | -0.24 | -0.03 (-0.15, 0.09) | 0.64 |
|  | Change in Telomere Length Year 1 and Year 2 | 391 | 32.56 | 55.39 | 0.2 | 0.14 | -0.06 (-0.2, 0.07) | 0.36 |
|  |  |  |  |  |  |  |  |  |
| Ferritin | Telomere Length Year 1 | 456 | 2.57 | 3.91 | -0.02 | -0.03 | -0.01 (-0.17, 0.15) | 0.89 |
|  | Telomere Length Year 2 | 514 | 2.53 | 3.82 | -0.45 | -0.23 | 0.22 (-0.03, 0.47) | 0.08 |
|  | Change in Telomere Length Year 1 and Year 2 | 391 | 2.54 | 3.84 | 0.19 | 0.16 | -0.03 (-0.19, 0.13) | 0.73 |
|  |  |  |  |  |  |  |  |  |
| sTfR | Telomere Length Year 1 | 456 | 1.28 | 1.67 | -0.17 | -0.06 | 0.11 (-0.19, 0.42) | 0.48 |
|  | Telomere Length Year 2 | 514 | 1.3 | 1.7 | -0.22 | -0.26 | -0.04 (-0.15, 0.06) | 0.39 |
|  | Change in Telomere Length Year 1 and Year 2 | 391 | 1.3 | 1.68 | 0.17 | 0.18 | 0.01 (-0.1, 0.13) | 0.84 |
|  |  |  |  |  |  |  |  |  |
| RBP | Telomere Length Year 1 | 456 | 0.13 | 0.52 | -0.08 | 0.06 | 0.14 (-0.06, 0.33) | 0.18 |
|  | Telomere Length Year 2 | 514 | 0.12 | 0.51 | -0.26 | -0.21 | 0.05 (-0.22, 0.32) | 0.73 |
|  | Change in Telomere Length Year 1 and Year 2 | 391 | 0.14 | 0.52 | 0.28 | 0.18 | -0.1 (-0.22, 0.02) | 0.1 |
|  |  |  |  |  |  |  |  |  |
| Vitamin A Deficiency | Telomere Length Year 1 | 456 | 0 | 1 | -0.02 | -0.38 | -0.36 (-0.78, 0.06) | 0.1 |
|  | Telomere Length Year 2 | 514 | 0 | 1 | -0.22 | -0.66 | -0.44 (-0.81, -0.07) | 0.02 |
|  | Change in Telomere Length Year 1 and Year 2 | 391 | 0 | 1 | 0.19 | 0.2 | 0.01 (-0.46, 0.48) | 0.97 |
|  |  |  |  |  |  |  |  |  |
| Iron Deficiency | Telomere Length Year 1 | 456 | 0 | 1 | 0 | -0.13 | -0.12 (-0.34, 0.09) | 0.27 |
|  | Telomere Length Year 2 | 514 | 0 | 1 | -0.21 | -0.38 | -0.17 (-0.36, 0.03) | 0.09 |
|  | Change in Telomere Length Year 1 and Year 2 | 391 | 0 | 1 | 0.17 | 0.23 | 0.06 (-0.17, 0.29) | 0.62 |
|  |  |  |  |  |  |  |  |  |
| Vitamin D Deficiency | Telomere Length Year 1 | 456 | 0 | 1 | -0.03 | 0.01 | 0.04 (-0.2, 0.28) | 0.75 |
|  | Telomere Length Year 2 | 514 | 0 | 1 | -0.22 | -0.25 | -0.03 (-0.25, 0.19) | 0.8 |
|  | Change in Telomere Length Year 1 and Year 2 | 391 | 0 | 1 | 0.16 | 0.22 | 0.06 (-0.2, 0.32) | 0.66 |
| N, 25th Percentile, and 75th Percentile are from the adjusted analyses | | | | | | | | |
| \* P-value < 0.2 after adjusting for multiple comparisons using the Benjamini-Hochberg procedure | | | | | | | | |

## Table 2

| Serum stress biomarker | Outcome | N | 25th Percentile | 75th Percentile | Outcome, 75th Percentile v. 25th Percentile | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  | Adjusted | | | |
|  |  |  |  |  | Predicted Outcome at 25th Percentile | Predicted Outcome at 75th Percentile | Coefficient (95% CI) | P-value |
| Cortisol | Telomere Length Year 1 | 452 | 2.5 | 3.3 | -0.08 | -0.29 | -0.21 (-0.52, 0.1) | 0.19 |
|  | Telomere Length Year 2 | 509 | 2.5 | 3.3 | -0.20 | -0.32 | -0.13 (-0.27, 0.01) | 0.07 |
|  | Change in Telomere Length Year 1 and Year 2 | 387 | 2.5 | 3.3 | 0.16 | 0.09 | -0.07 (-0.29, 0.15) | 0.56 |
| N, 25th Percentile, and 75th Percentile are from the adjusted analyses | | | | | | | | |
| \* P-value < 0.2 after adjusting for multiple comparisons using the Benjamini-Hochberg procedure | | | | | | | | |

## Table 3

| Inflammation Biomarkers | Outcome | N | 25th Percentile | 75th Percentile | Outcome, 75th Percentile v. 25th Percentile | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  | Adjusted | | | |
|  |  |  |  |  | Predicted Outcome at 25th Percentile | Predicted Outcome at 75th Percentile | Coefficient (95% CI) | P-value |
| CRP | Telomere Length Year 1 | 456 | -0.12 | 1.41 | -0.01 | -0.04 | -0.03 (-0.15, 0.1) | 0.71 |
|  | Telomere Length Year 2 | 514 | -0.09 | 1.41 | -0.27 | -0.24 | 0.03 (-0.09, 0.14) | 0.66 |
|  | Change in Telomere Length Year 1 and Year 2 | 391 | -0.13 | 1.41 | 0.16 | 0.18 | 0.02 (-0.11, 0.16) | 0.74 |
|  |  |  |  |  |  |  |  |  |
| AGP | Telomere Length Year 1 | 456 | -1.11 | -0.54 | 0.01 | -0.07 | -0.08 (-0.19, 0.02) | 0.13 |
|  | Telomere Length Year 2 | 514 | -1.13 | -0.58 | -0.22 | -0.22 | -0.01 (-0.11, 0.09) | 0.88 |
|  | Change in Telomere Length Year 1 and Year 2 | 391 | -1.11 | -0.58 | 0.21 | 0.16 | -0.06 (-0.17, 0.05) | 0.33 |
|  |  |  |  |  |  |  |  |  |
| IFNG | Telomere Length Year 1 | 382 | 5.28 | 9.96 | -0.08 | -0.1 | -0.02 (-0.16, 0.11) | 0.77 |
|  | Telomere Length Year 2 | 486 | 5.17 | 10.02 | -0.27 | -0.26 | 0.01 (-0.15, 0.17) | 0.93 |
|  | Change in Telomere Length Year 1 and Year 2 | 371 | 5.26 | 9.72 | 0.22 | 0.23 | 0.01 (-0.13, 0.15) | 0.88 |
|  |  |  |  |  |  |  |  |  |
| Sum Score | Telomere Length Year 1 | 382 | -0.63 | 0.64 | -0.09 | -0.09 | 0 (-0.13, 0.13) | 0.97 |
|  | Telomere Length Year 2 | 486 | -0.64 | 0.64 | -0.26 | -0.22 | 0.04 (-0.07, 0.16) | 0.45 |
|  | Change in Telomere Length Year 1 and Year 2 | 371 | -0.64 | 0.62 | 0.41 | 0.14 | -0.28 (-0.57, 0.01) | 0.06 |
| N, 25th Percentile, and 75th Percentile are from the adjusted analyses | | | | | | | | |
| \* P-value < 0.2 after adjusting for multiple comparisons using the Benjamini-Hochberg procedure | | | | | | | | |

## Table 4

| Estriol | Outcome | N | 25th Percentile | 75th Percentile | Outcome, 75th Percentile v. 25th Percentile | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  | Adjusted | | | |
|  |  |  |  |  | Predicted Outcome at 25th Percentile | Predicted Outcome at 75th Percentile | Coefficient (95% CI) | P-value |
| Estriol | Telomeres Year 1 | 452 | 0.71 | 1.7 | -0.04 | -0.05 | -0.01 (-0.14, 0.13) | 0.94 |
|  | Telomeres Year 2 | 509 | 0.76 | 1.7 | -0.09 | -0.28 | -0.19 (-0.5, 0.12) | 0.24 |
|  | Telomere Change Year 1 and Year 2 | 387 | 0.78 | 1.7 | 0.19 | 0.10 | -0.08 (-0.22, 0.05) | 0.23 |
| N, 25th Percentile, and 75th Percentile are from the adjusted analyses | | | | | | | | |
| \* P-value < 0.2 after adjusting for multiple comparisons using the Benjamini-Hochberg procedure | | | | | | | | |