

Supplementary Materials

Vitamin D Status Is Associated with Modifiable Lifestyle Factors in Pre-Adolescent Children Living in Urban Kuala Lumpur, Malaysia

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Table S1. Associations between 25(OH)D and bone parameters.

| | Variables | 25OH(D) | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|----|-------------|---------|---------|---------|---------|---------|---------|---------|-------|
| 1. | TBBMD | 0.062 | 1.000 | . | | | | | |
| 2. | TBLHBMD | −0.002 | 0.943** | 1.000 | | | | | |
| 3. | TBBMC | 0.059 | 0.879** | 0.937** | 1.000 | | | | |
| 4. | TBLHBMC | −0.068 | 0.843** | 0.944** | 0.979** | 1.000 | | | |
| 5. | LSBMD | −0.084 | 0.774** | 0.791** | 0.750** | 0.732** | 1.000 | | |
| 6. | LSBMC | −0.012 | 0.777** | 0.853** | 0.889** | 0.888** | 0.867** | 1.000 | |
| 7. | BMD Z-score | −0.041 | 0.902** | 0.819** | 0.724** | 0.681** | 0.710** | 0.648** | 1.000 |

Correlation coefficients, ** $p = 0.000$.**Table S2.** Associations between 25OH(D) and variables in the study (Correlation coefficients).

| | Variables | 25OH(D) | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|-----|------------------|---------|--------|--------|--------|--------|--------|-------|-------|-------|-------|-------|
| 1. | Age | 0.006 | 1.000 | | | | | | | | | |
| 2. | Height | −0.090 | 0.611 | 1.000 | | | | | | | | |
| 3. | Lean Mass | −0.045 | 0.472 | 0.860 | 1.000 | | | | | | | |
| 4. | Fat Mass | −0.122 | 0.242 | 0.643 | 0.837 | 1.000 | | | | | | |
| 5. | PAQ.MET | 0.262 | 0.178 | 0.185 | 0.213 | 0.091 | −0.161 | | | | | |
| 6. | Calcium | 0.007 | −0.066 | −0.080 | −0.048 | −0.009 | −0.033 | 1.000 | | | | |
| 7. | Vit D | 0.211 | −0.052 | −0.177 | −0.154 | −0.115 | −0.205 | 0.266 | 1.000 | | | |
| 8. | Hours of sun exp | 0.173 | 0.076 | 0.127 | 0.138 | 0.044 | −0.084 | 0.054 | 0.190 | 1.000 | | |
| 9. | BSA | 0.338 | 0.138 | 0.106 | 0.125 | 0.072 | −0.165 | 0.041 | 0.166 | 0.171 | 1.000 | |
| 10. | Sun Index | 0.351 | 0.110 | 0.149 | 0.167 | 0.057 | −0.151 | 0.042 | 0.213 | 0.743 | 0.573 | 1.000 |

Among the tested variables, p -values for all variables, except for Age and Calcium were < 0.25 .The association between Lean Mass and Fat Mass was high ($r = 0.837$), indication a possible multicollinearity. In the analysis only Fat Mass was included.

Table S3. Associations between 25OH(D) and variables in the study (*p*-values).

| | Variables | 25OH(D) | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|-----|------------------|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----|
| 1. | Age | 0.464 | . | | | | | | | | | |
| 2. | Height | 0.081 | 0.000 | . | | | | | | | | |
| 3. | Lean Mass | 0.243 | 0.000 | 0.000 | . | | | | | | | |
| 4. | Fat Mass | 0.029 | 0.000 | 0.000 | 0.000 | . | | | | | | |
| 5. | PAQ.MET | 0.000 | 0.003 | 0.002 | 0.000 | 0.079 | 0.006 | | | | | |
| 6. | Calcium | 0.458 | 0.153 | 0.108 | 0.228 | 0.443 | 0.303 | . | | | | |
| 7. | Vit D | 0.000 | 0.209 | 0.003 | 0.008 | 0.037 | 0.001 | 0.000 | . | | | |
| 8. | Hours of sun exp | 0.004 | 0.121 | 0.024 | 0.016 | 0.250 | 0.095 | 0.201 | 0.001 | . | | |
| 9. | BSA | 0.000 | 0.016 | 0.050 | 0.026 | 0.132 | 0.005 | 0.262 | 0.005 | 0.004 | . | |
| 10. | Sun Index | 0.000 | 0.044 | 0.010 | 0.005 | 0.189 | 0.009 | 0.258 | 0.000 | 0.000 | 0.000 | . |

Among the tested variables, *p*-values for all variables, except for Age and Calcium were < 0.25.

The association between Lean Mass and Fat Mass was high ($r = 0.837$), indication a possible multicollinearity. In the analysis only Fat Mass was included.