**Supplement table 1.** **Prevalence of osteopenia and osteoporosis in three areas**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | Total |  | IFA |  | IAA |  | IEA | *P* valuea | *P* valueb |
|  |  | N | % |  | N | % |  | N | % |  | N | % |  |  |
| Osteopenia (-2.5 SD <T< -1.0 SD) | Total | 470/1207 | 38.9 |  | 159/391 | 40.7 |  | 123/395 | 31.1 |  | 188/421 | 44.7 | 0.005\*\* | <0.001\*\* |
|  | Male | 141/372 | 37.9 |  | 48/121 | 39.7 |  | 32/113 | 28.3 |  | 61/138 | 43.8 | 0.067 | 0.010\* |
|  | Female | 329/835 | 39.4 |  | 111/270 | 41.1 |  | 91/282 | 32.3 |  | 127/283 | 44.9 | 0.031\* | 0.002\*\* |
| Osteoporosis (T≤ -2.5 SD) | Total | 38/1207 | 3.2 |  | 13/391 | 3.3 |  | 11/395 | 2.8 |  | 14/421 | 3.3 | 0.660 | 0.654 |
|  | Male | 10/372 | 2.7 |  | 3/121 | 2.5 |  | 4/113 | 3.5 |  | 3/138 | 2.2 | 0.634 | 0.513 |
|  | Female | 28/835 | 3.4 |  | 10/270 | 3.7 |  | 7/282 | 2.5 |  | 11/283 | 3.9 | 0.406 | 0.342 |

IFA, Iodine fortification areas; IAA, iodine adequate areas; IEA, iodine excess areas. *P* valuea indicates IFA compared with the IAA; *P* valueb indicates IEA compared with the IAA. \* indicates *P* < 0.050; \*\* indicates *P* < 0.010.