**Appendix 1: Overall Mortality Rates**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | **Overall Mortality** |  |  |  |  |  |
|  |  | **Age <60** | **Age >60** | **p-value** | **Age <70** | **Age >70** | **p-value** |
| **Overall Cohort** | **1322 (12.0)** | **235 (4.4)** | **1087 (38.3)** | **<0.001** | **500 (6.5)** | **822 (53.5)** | **<0.001** |
| **Body Fat-1, %** |  |  |  |  |  |  |  |
| **High** | 1031 (13.3) | 166 (4.8) | 865 (36.2) | <0.001 | 381(7.2) | 650(51.6) | <0.001 |
| **Low** | 211 (7.7) | 56 (3.5) | 155 (43.9) | <0.001 | 96(4.7) | 115(55.1) | <0.001 |
| **p-value** | <0.001 | 0.07 | 0.0499 |  | 0.0009 | 0.49 |  |
| **Body Fat-2, %** |  |  |  |  |  |  |  |
| **High** | 858 (14.6) | 144 (5.6) | 714 (35.8) | <0.001 | 381 (8.1) | 650 (50.8) | <0.001 |
| **Low** | 384 (8.2) | 78 (3.0) | 306 (41.2) | <0.001 | 96 (4.5) | 115 (55.5) | <0.001 |
| **p-value** |  | 0.0006 | 0.02 |  | <0.001 | 0.12 |  |
| **Body Mass Index, kg/m2** |  |  |  |  |  |  |  |
| **Underweight** | 25 (13.2) | 3 (3.6) | 22 (52.5) | <0.001 | 10 (5.1) | 15 (56.2) | <0.001 |
| **Normal** | 379 (10.6) | 62 (3.4) | 317 (41.9) | <0.001 | 125 (7.6) | 254 (44.7) | <0.001 |
| **Overweight** | 440 (11.0) | 67 (3.4) | 373 (35.0) | <0.001 | 159 (3.4) | 281 (35.0) | <0.001 |
| **Obese** | 342 (12.2) | 92 (6.2) | 250 (32.2) | <0.001 | 181 (6.2) | 161 (32.2) | <0.001 |
| **p-value** | 0.34 | 0.02 | 0.004 |  | 0.002 | 0.20 |  |
| **Waist Circumference, cm** |  |  |  |  |  |  |  |
| **High** | 685 (14.1) | 129 (5.7) | 556 (34.9) | <0.001 | 281 (8.2) | 404 (49.9) | <0.001 |
| **Low** | 518 (8.9) | 92 (3.0) | 426 (39.8) | <0.001 | 193 (4.6) | 325 (53.9) | <0.001 |
|  | <0.001 | 0.0012 | 0.02 |  | <0.001 | 0.05 |  |

All values represented are β coefficient ± standard error

Model adjusts for age, sex race, education, smoking, diabetes mellitus, congestive heart failure, non-skin cancer, coronary artery disease, arthritis, physical activity.

High body fat is categorized in males as ≥25% and in females as ≥35%

High waist circumference is categorized in males as ≥102cm in males, and ≥88cm in females

BMI categories: underweight (<18.5kg/m2), normal (18.5-24.9kg/m2), overweight (25.0-29.9kg/m2), obese (≥30kg/m2)