**Table S1: Calcium supplementation, other nutrient supplementation or no supplementation and mortality risk**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | **Total sample** | | | | | **Participants <65 years** | | | | | **Participants ≥65 years** | | | | |
|  | **Case/non-case** | **ORcrude(95%CI)†** | **P** | **ORadj(95%CI)‡** | **P** | **Case/non-case** | **ORcrude(95%CI)†** | **P** | **ORadj(95%CI)‡** | **P** | **Case/non-case** | **ORcrude(95%CI)†** | **P** | **ORadj(95%CI)‡** | **P** |
| All-cause mortality | N | 477,099 |  |  |  |  | 386,987 |  |  |  |  | 90,112 |  |  |  |  |
|  | None | 6,424/234,584 | Ref |  | Ref |  | 4,130/198,330 | Ref |  | Ref |  | 36,254 | Ref |  | Ref |  |
|  | Other supplements | 5,705/209,166 | 0.87 (0.84-0.91) | 9.2E-13 | 0.90 (0.86-0.93) | 2.3E-08 | 3,328/163,402 | 0.89 (0.85-0.94) | 2.4E-06 | 0.87 (0.83-0.92) | 3.0E-08 | 2,377/45,764 | 0.84 (0.79-0.90) | 2.2E-08 | 0.88 (0.83-0.94) | 8.0E-05 |
|  | Calcium supplement | 953/33,346 | 1.04 (0.97-1.12) | 0.24 | 0.96 (0.89-1.03) | 0.3 | 579/25,255 | 1.12 (1.02-1.23) | 0.01 | 0.85 (0.78-0.93) | 4.0E-04 | 374/8,094 | 0.94 (0.84-1.06) | 0.3 | 0.89 (0.79-1.00) | 0.049 |
| Cancer mortality | N | 471,799 |  |  |  |  | 383,755 |  |  |  |  | 80,044 |  |  |  |  |
|  | None | 3,813/231,973 | Ref |  | Ref |  | 2,484/196,684 | Ref |  | Ref |  | 1,329/35,289 | Ref |  | Ref |  |
|  | Other supplements | 3,408/206,869 | 0.86 (0.82-0.90) | 3.3E-10 | 0.88 (0.84-0.93) | 6.1E-07 | 1,977/162,051 | 0.85 (0.80-0.91) | 2.2E-07 | 0.87 (0.82-0.93) | 1.0E-5 | 1,431/44,818 | 0.87 (0.80-0.94) | 3.0E-04 | 0.91 (0.84-0.98) | 0.01 |
|  | Calcium supplement | 561/32,957 | 0.93 (0.85-1.02) | 0.1 | 0.90 (0.82-0.99) | 0.04 | 344/25,020 | 0.97 (0.86-1.09) | 0.6 | 0.93 (0.83-1.05) | 0.3 | 217/7,937 | 0.89 (0.76-1.03) | 0.1 | 0.88 (0.84-0.98) | 0.1 |
| Cardiovascular mortality | N | 466,584 |  |  |  |  | 380,455 |  |  |  |  | 86,129 |  |  |  |  |
| None | 1,332/229,492 | Ref |  | Ref |  | 822/195,022 | Ref |  | Ref |  | 510/34,470 | Ref |  | Ref |  |
| Other supplements | 1,093/204,554 | 0.83 (0.76-0.90) | 3.8E-06 | 0.84 (0.78-0.92) | 6.0E-05 | 599/160,673 | 0.84 (0.75-0.93) | 1.0E-03 | 0.84 (0.76-0.94) | 2.0E-03 | 494/43,881 | 0.81 (0.71-0.92) | 1.0E-03 | 0.84 (0.74-0.96) | 0.01 |
|  | Calcium supplement | 142/32,538 | 0.95 (0.80-1.14) | 0.6 | 0.84 (0.70-1.00) | 0.05 | 84/24,760 | 1.10 (0.87-1.39) | 0.4 | 0.94 (0.75-1.19) | 0.6 | 58/7,778 | 0.79 (0.60-1.04) | 0.1 | 0.71 (0.53-0.94) | 0.02 |
| Respiratory mortality | N | 453,685 |  |  |  |  | 369,763 |  |  |  |  | 83,922 |  |  |  |  |
|  | None | 238/223,536 | Ref |  | Ref |  | 121/189,956 | Ref |  | Ref |  | 117/33,580 | Ref |  | Ref |  |
|  | Other supplements | 192/198,656 | 0.77 (0.64-0.93) | 8.0E-3 | 0.80 (0.66-0.98) | 0.03 | 105/155,908 | 0.96 (0.74-1.25) | 0.8 | 0.97 (0.74-1.27) | 0.8 | 87/42,748 | 0.61 (0.46-0.80) | 5.0E-04 | 0.66 (0.49-0.88) | 4.0E-03 |
|  | Calcium supplement | 58/31,493 | 1.75 (1.30-2.37) | 2.0E-4 | 1.21 (0.89-1.64) | 0.2 | 35/23,899 | 2.57 (1.73-3.82) | 2.7E-06 | 1.71 (1.14-2.56) | 0.01 | 23/7,594 | 1.12 (0.71-1.79) | 0.6 | 0.78 (0.48-1.27) | 0.3 |

OR, odds ratio. 95% CI, 95% confidence interval;

†Crude odds ratio with the adjustment of age, sex, ethnicity, and assessment centre.

‡Adjusted odds ratio with the adjustment of age, sex, ethnicity, assessment centre, education level, deprivation index quintile, smoking, alcohol use, physical activity intensity, body mass index, number of treatments or medications taken and self-reported health