**Supplemental materials**

**Figure S1** Association between iron intake as percentage of RNI and serum ferritin in men and women



Lines represent fitted values and shaded areas are 95% CI of the fitted values. Fractional polynomial method was used to general the predicted values using fpfitci syntax in Stata.

**Table S1** Interaction between serum ferritin and anaemia in relation to all-cause mortality by genders

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | Quartiles of serum ferritin |  |  |  |
|  | Q1(median, men: 45 µg/L; women:13 ) | Q2(89; 33) | Q3(138; 66) | Q4(228; 147) | P for interaction\* |
|  |  |  |  |  |  |
| Men |  |  |  |  |  |
| Without anaemia  | 1.00 | 1.08 (0.57-2.03) | 0.83 (0.42-1.64) | 0.88 (0.45-1.73) | 0.995 |
| With anaemia  | 1.00 | 2.48 (0.98-6.25) | 1.17 (0.40-3.43) | 0.74 (0.26-2.11) |  |
|  |  |  |  |  |  |
| Women |  |  |  |  |  |
| Without anaemia  | 1.00 | 2.48 (0.27-22.82) | 3.87 (0.49-30.45) | 5.28 (0.67-41.74) | 0.001 |
| With anaemia  | 1.00 | 0.93 (0.21-4.13) | 0.55 (0.13-2.26) | 0.46 (0.11-1.89) |  |

Model adjusted for age, smoking (0, 1-19, ≥20 cigarettes/day), alcohol drinking (no, 1-2 times/wk, 3-4 times/wk, daily), leisure time physical activity (no, 1-29 minutes/day, >30 minutes/day), income (low, medium, high), and BMI (liner and square terms).

Anaemia was defined as Hb<13 g/dl for men and Hb<12 g/dl for women.

\*ordinal number (1,2,3,4) representing four levels of serum ferritin was used to test p for interaction. Interaction was tested by putting the product term of serum ferritin and anaemia in the model.