**Supplemental Figure I.** Participants’ flow chart

Participants eligible for the analysis

 (n= 19,168)

Apparently healthy participants

(n= 52,658)

Excluded (n=33,490)

Participants who had not provided data on history of diabetes at the 5 year survey.

Excluded (n=9,439)

▪Medical history of diabetes, cancer or cardiovascular diseases at baseline.

Participants with dietary data

(n= 62,097)

**Supplemental Table I. Associations between combinations of dietary intakes of vitamin K and E with risk of 5-year incidence of type 2 diabetes**

|  |  |
| --- | --- |
|  | **Combination of vitamins K and E intakes** a |
|  | **Low vitamin K Low vitamin E** | **Low vitamin K** **High vitamin E** | **High Vitamin K****Low vitamin E** | **High Vitamin K****High Vitamin E** |
| **Subjects,** n | 7699 | 1885 | 1885 | 7699 |
| Cases, n (%) | 230 (3.0) | 50 (2.7) | 45 (2.4) | 169 (2.2) |
| Model 1 b | 1.00 | 0.86 (0.63-1.17) | 0.90 (0.65-1.25) | 0.79 (0.65-0.97) |
| Model 2 c | 1.00 | 0.87 (0.67-1.19) | 0.93 (0.67-1.29) | 0.80 (0.65-0.99) |
| Model 3 d | 1.00 | 0.86 (0.63-1.18) | 0.92 (0.65-1.30) | 0.78 (0.62-0.98) |
| Model 4 e | 1.00 | 0.83 (0.60-1.15) | 0.92 (0.64-1.31) | 0.76 (0.58-0.98) |

a Median values of dietary intakes of vitamins K (183.3µg) and vitamin E (5.2mg) defined low and high vitamins intakes.

b Model 1 Odds ratio (95% confidence intervals) estimated by using logistic regression model adjusted for age and sex.

c Model 2 Adjusted further for non-dietary factors including: past history of hypertension, family history of diabetes, body mass index, smoking status, hours of exercise, hours of walking, and supplement use of vitamin E, C and multivitamins.

d Model 3 Adjusted further for dietary factors including: coffee, green tea and alcohol intakes and total energy, carbohydrate and magnesium intakes (quartiles).

e Model 4 Adjusted further for dietary intakes of vitamin A and D (quartiles).

**Supplemental Table II. Associations between combinations of dietary intakes of fat-soluble vitamins and risk of 5-year incidence of type 2 diabetes**

|  |  |
| --- | --- |
|  | **Combination of fat-soluble vitamin intakes** a |
|  | **Low all vitamins** | **Low and high combinations** | **High all vitamins** |
| **Subjects,** n | 4302 | 10,470 | 4396 |
| Cases, n (%) | 132 (3.1) | 263 (2.5) | 99 (2.3) |
| Model 1 b | 1.00 | 0.88 (0.71-1.09) | 0.82 (0.63-1.07) |
| Model 2 c | 1.00 | 0.89 (0.72-1.11) | 0.83 (0.63-1.09) |
| Model 3 d | 1.00 | 0.86 (0.69-1.09) | 0.79 (0.58-1.09) |

a Median values of dietary intakes of vitamins A (944.2µg), K (183.3µg), E (5.2mg) and D (7.6µg) defined low and high vitamins intakes.

b Model 1 Odds ratio (95% confidence intervals) estimated by using logistic regression model adjusted for age and sex.

c Model 2 Adjusted further for non-dietary factors including: past history of hypertension, family history of diabetes, body mass index, smoking status, hours of exercise, hours of walking, and supplement use of vitamin E, C and multivitamins.

d Model 3 Adjusted further for dietary factors including: coffee, green tea and alcohol intakes and total energy, carbohydrate and magnesium intakes (quartiles).