

**Table S1. Development of composite chronic disease risk score and hypothetical examples.**

|                                   | Cancer incidence risk score   |  |  |   |                     | Cancer mortality risk score                              |  |   |                     |  |
|-----------------------------------|-------------------------------|--|--|---|---------------------|--|--|---|---------------------|--|
|                                   | Chronic disease marker status | Beta coefficient in Cox model <sup>a</sup> ( $\beta_i$ ) | Constant beta coefficient for one-year increase in age ( $\beta_0$ ) | Risk points before rounding ( $\beta_i/\beta_0$ ) | Integer risk points | Beta coefficient in Cox model <sup>a</sup> ( $\beta_i$ ) | Constant beta coefficient for one-year increase in age ( $\beta_0$ ) | Risk points before rounding ( $\beta_i/\beta_0$ ) | Integer risk points |  |
| <b>Hypothetical individual 1</b>  |                               |  |  |   |                     |  |  |   |                     |  |
| Blood pressure                    | Normal                        | 0  | 0.063  | 0   | 0                   | 0  | 0.081  | 0   | 0                   |  |
| Total cholesterol (mmol/L)        | 5.70                          | 0.119  | 0.063  | 1.895   | 2                   | 0.165  | 0.081  | 2.043   | 2                   |  |
| Heart rate (beats/min)            | 65                            | 0  | 0.063  | 0   | 0                   | 0  | 0.081  | 0   | 0                   |  |
| Diabetes                          | Normal                        | 0  | 0.063  | 0   | 0                   | 0  | 0.081  | 0   | 0                   |  |
| Proteinuria                       | Trace proteinuria             | 0.107  | 0.063  | 1.714   | 2                   | 0.254  | 0.081  | 3.159   | 3                   |  |
| GFR (mL/min/1.73 m <sup>2</sup> ) | 85                            | 0  | 0.063  | 0   | 0                   | 0  | 0.081  | 0   | 0                   |  |
| Pulmonary disease                 | Normal                        | 0  | 0.063  | 0   | 0                   | 0  | 0.081  | 0   | 0                   |  |
| Uric acid ( $\mu$ mol/L)          | 387                           | -0.001   | 0.063  | -0.020  | 0                   | -0.022   | 0.081  | -0.271  | 0                   |  |
| Total chronic disease risk score  |                               |  |  |   | 4                   |  |  |   | 5                   |  |
| <b>Hypothetical individual 2</b>  |                               |  |  |   |                     |  |  |   |                     |  |
| Blood pressure                    | Prehypertension               | 0.048  | 0.063  | 0.763   | 1                   | 0.140  | 0.081  | 1.740   | 2                   |  |
| Total cholesterol (mmol/L)        | 4.01                          | 0.435  | 0.063  | 6.939   | 7                   | 0.617  | 0.081  | 7.660   | 8                   |  |
| Heart rate (beats/min)            | 95                            | 0.070  | 0.063  | 1.118   | 1                   | 0.164  | 0.081  | 2.035   | 2                   |  |
| Diabetes                          | Diabetes                      | 0.074  | 0.063  | 1.187   | 1                   | 0.279  | 0.081  | 3.468   | 3                   |  |
| Proteinuria                       | Normal                        | 0  | 0.063  | 0   | 0                   | 0  | 0.081  | 0   | 0                   |  |
| GFR (mL/min/1.73 m <sup>2</sup> ) | 55                            | 0.116  | 0.063  | 1.849   | 2                   | 0.180  | 0.081  | 2.229   | 2                   |  |
| Pulmonary disease                 | Normal                        | 0  | 0.063  | 0   | 0                   | 0  | 0.081  | 0   | 0                   |  |
| Uric acid ( $\mu$ mol/L)          | 268                           | 0.100  | 0.063  | 1.601   | 2                   | 0.157  | 0.081  | 1.943   | 2                   |  |
| Total chronic disease risk score  |                               |  |  |   | 14                  |  |  |   | 19                  |  |

<sup>a</sup>Model including age (continuous), age squared, sex (male or female), education (middle school or lower, high school, junior college, or college or higher), occupation (white collar, blue collar, self-employed, house wife/husband, or other), smoking status (never, former, or current), pack-years of smoking (continuous), drinking status (never, ever), grams of alcohol/day (continuous), BMI (continuous), BMI squared, physical activity (inactive, low active, medium active, high active, and very high active), fruit/vegetable intake (continuous), and all chronic diseases/markers.

Abbreviations: GFR, glomerular filtration rate

**Table S2. Chronic diseases/markers and risk of cancer incidence and cancer mortality after further adjustment of annual income**

| Chronic disease/marker                            | Cancer incidence                  |         | Cancer mortality                  |         |
|---|-----------------------------------|---------|-----------------------------------|---------|
|   | Adjusted <sup>a</sup> HR (95% CI) | P value | Adjusted <sup>a</sup> HR (95% CI) | P value |
| <b>Cardiovascular disease markers</b>             |                                   |         |                                   |         |
| <b>Blood pressure</b>                             |                                   |         |                                   |         |
| Normal  | Reference                         |         | Reference                         |         |
| Prehypertension                                   | 1.00 (0.94 to 1.05)               | 0.92    | 1.07 (0.98 to 1.18)               | 0.13    |
| Hypertension                                      | 1.03 (0.97 to 1.09)               | 0.28    | 1.20 (1.10 to 1.32)               | <0.001  |
| <b>Total cholesterol (mmol/L)</b>                 |                                   |         |                                   |         |
| ≥6.22   | Reference                         |         | Reference                         |         |
| 5.19 to 6.21                                      | 1.06 (1.00 to 1.14)               | 0.06    | 1.05 (0.94 to 1.16)               | 0.40    |
| 4.67 to 5.18                                      | 1.15 (1.07 to 1.24)               | <0.001  | 1.15 (1.03 to 1.29)               | 0.01    |
| 4.15 to 4.66                                      | 1.27 (1.18 to 1.37)               | <0.001  | 1.37 (1.23 to 1.54)               | <0.001  |
| <4.15   | 1.44 (1.33 to 1.55)               | <0.001  | 1.63 (1.45 to 1.84)               | <0.001  |
| <b>Heart rate (beats/min)</b>                     |                                   |         |                                   |         |
| <70   | Reference                         |         | Reference                         |         |
| 70 to 79  | 1.00 (0.95 to 1.05)               | 0.98    | 1.03 (0.95 to 1.11)               | 0.48    |
| 80 to 89  | 1.05 (0.99 to 1.11)               | 0.08    | 1.12 (1.03 to 1.23)               | 0.01    |
| ≥90   | 1.09 (1.01 to 1.18)               | 0.03    | 1.35 (1.20 to 1.51)               | <0.001  |
| <b>Diabetes</b>                                   |                                   |         |                                   |         |
| Normal  | Reference                         |         | Reference                         |         |
| Prediabetes                                       | 1.06 (0.98 to 1.14)               | 0.13    | 1.07 (0.96 to 1.20)               | 0.23    |
| Diabetes  | 1.10 (1.03 to 1.18)               | 0.004   | 1.41 (1.29 to 1.55)               | <0.001  |
| <b>Chronic kidney disease markers</b>             |                                   |         |                                   |         |
| <b>Proteinuria</b>                                |                                   |         |                                   |         |
| Normal  | Reference                         |         | Reference                         |         |
| Trace proteinuria                                 | 1.11 (1.03 to 1.20)               | 0.01    | 1.35 (1.21 to 1.50)               | <0.001  |
| Proteinuria                                       | 1.21 (1.09 to 1.34)               | <0.001  | 1.70 (1.48 to 1.95)               | <0.001  |
| <b>GFR (mL/min/1.73 m<sup>2</sup>)</b>            |                                   |         |                                   |         |
| <60   | 1.11 (1.04 to 1.18)               | 0.001   | 1.21 (1.11 to 1.32)               | <0.001  |
| 60 to 89  | Reference                         |         | Reference                         |         |
| ≥90   | 1.10 (1.04 to 1.16)               | <0.001  | 1.08 (0.98 to 1.19)               | 0.12    |
| <b>Pulmonary disease</b>                          |                                   |         |                                   |         |
| Normal  | Reference                         |         | Reference                         |         |
| Restrictive                                       | 1.02 (0.97 to 1.08)               | 0.35    | 1.14 (1.06 to 1.23)               | <0.001  |
| COPD  | 0.99 (0.92 to 1.06)               | 0.79    | 1.09 (0.99 to 1.20)               | 0.09    |
| <b>Gouty arthritis marker: uric acid (μmol/L)</b> |                                   |         |                                   |         |
| ≥476  | 1.01 (0.93 to 1.09)               | 0.88    | 1.08 (0.97 to 1.21)               | 0.18    |
| 416 to 475  | Reference                         |         | Reference                         |         |
| 357 to 415  | 1.04 (0.97 to 1.12)               | 0.26    | 0.99 (0.90 to 1.10)               | 0.92    |
| 297 to 356  | 1.07 (1.00 to 1.15)               | 0.04    | 1.06 (0.95 to 1.17)               | 0.32    |
| <297  | 1.15 (1.07 to 1.24)               | <0.001  | 1.22 (1.09 to 1.36)               | <0.001  |

<sup>a</sup>Adjusted for age (continuous), age squared, sex (male or female), education (middle school or lower, high school, junior college, or college or higher), occupation (white collar, blue collar, self to employed, house wife/husband, or other), annual income (none, <400k New Taiwan dollar, 400k to 799k, 800k to 119k, 120k to 159k, 160k to 199k, ≥200k), smoking status (never, former, or current), pack to years of smoking (continuous), drinking status (never, ever), grams of alcohol/day (continuous), BMI (continuous), BMI squared, physical activity (inactive, low active, medium active, high active, and very high active), and fruit/vegetable intake (continuous).

Abbreviations: HR, hazard ratio; 95% CI, 95% confidence interval; COPD, chronic obstructive pulmonary disease; GFR, glomerular filtration rate

**Table S3. Chronic diseases/markers and risk of cancer incidence and cancer mortality stratified on years of follow to up.**

| Chronic disease/marker                            | Cancer incidence                               |  | Cancer mortality                               |  |
|---|--|--|--|--|
|   | < 5 years<br>Adjusted <sup>a</sup> HR (95% CI) | ≥ 5 years<br>Adjusted <sup>a</sup> HR (95% CI) | < 5 years<br>Adjusted <sup>a</sup> HR (95% CI) | ≥ 5 years<br>Adjusted <sup>a</sup> HR (95% CI) |
| <b>Cardiovascular disease markers</b>             |  |  |  |  |
| <b>Blood pressure</b>                             |  |  |  |  |
| Normal  | Reference                                      | Reference                                      | Reference                                      | Reference                                      |
| Prehypertension                                   | 0.96 (0.89 to 1.05)                            | 1.03 (0.95 to 1.10)                            | 1.08 (0.98 to 1.18)                            | 1.13 (1.00 to 1.29)                            |
| Hypertension                                      | 0.99 (0.91 to 1.07)                            | 1.08 (1.00 to 1.16)                            | 1.21 (1.10 to 1.32)                            | 1.29 (1.13 to 1.46)                            |
| <b>Total cholesterol (mmol/L)</b>                 |  |  |  |  |
| ≥6.22   | Reference                                      | Reference                                      | Reference                                      | Reference                                      |
| 5.19 to 6.21                                      | 1.07 (0.97 to 1.18)                            | 1.06 (0.97 to 1.16)                            | 1.04 (0.94 to 1.16)                            | 1.03 (0.90 to 1.19)                            |
| 4.67 to 5.18                                      | 1.12 (1.00 to 1.24)                            | 1.19 (1.08 to 1.30)                            | 1.15 (1.03 to 1.28)                            | 1.14 (0.98 to 1.33)                            |
| 4.15 to 4.66                                      | 1.34 (1.20 to 1.50)                            | 1.21 (1.09 to 1.34)                            | 1.37 (1.22 to 1.54)                            | 1.23 (1.05 to 1.45)                            |
| <4.15   | 1.38 (1.22 to 1.55)                            | 1.48 (1.34 to 1.65)                            | 1.63 (1.45 to 1.84)                            | 1.59 (1.34 to 1.88)                            |
| <b>Heart rate (beats/min)</b>                     |  |  |  |  |
| <70   | Reference                                      | Reference                                      | Reference                                      | Reference                                      |
| 70 to 79  | 0.98 (0.91 to 1.06)                            | 1.01 (0.95 to 1.08)                            | 1.04 (0.96 to 1.12)                            | 1.13 (1.01 to 1.26)                            |
| 80 to 89  | 1.02 (0.93 to 1.11)                            | 1.08 (1.00 to 1.17)                            | 1.14 (1.04 to 1.24)                            | 1.24 (1.09 to 1.41)                            |
| ≥90   | 1.09 (0.97 to 1.23)                            | 1.09 (0.98 to 1.21)                            | 1.36 (1.22 to 1.53)                            | 1.41 (1.20 to 1.66)                            |
| <b>Diabetes</b>                                   |  |  |  |  |
| Normal  | Reference                                      | Reference                                      | Reference                                      | Reference                                      |
| Prediabetes                                       | 0.97 (0.87 to 1.09)                            | 1.13 (1.03 to 1.25)                            | 1.06 (0.95 to 1.18)                            | 1.21 (1.04 to 1.41)                            |
| Diabetes  | 1.16 (1.05 to 1.27)                            | 1.06 (0.96 to 1.16)                            | 1.40 (1.28 to 1.53)                            | 1.46 (1.28 to 1.66)                            |
| <b>Chronic kidney disease markers</b>             |  |  |  |  |
| <b>Proteinuria</b>                                |  |  |  |  |
| Normal  | Reference                                      | Reference                                      | Reference                                      | Reference                                      |
| Trace proteinuria                                 | 1.24 (1.11 to 1.39)                            | 1.03 (0.92 to 1.14)                            | 1.36 (1.22 to 1.51)                            | 1.27 (1.09 to 1.48)                            |
| Proteinuria                                       | 1.31 (1.12 to 1.53)                            | 1.14 (0.99 to 1.32)                            | 1.69 (1.47 to 1.94)                            | 1.77 (1.46 to 2.15)                            |
| <b>GFR (mL/min/1.73 m<sup>2</sup>)</b>            |  |  |  |  |
| <60   | 1.10 (1.00 to 1.20)                            | 1.12 (1.03 to 1.22)                            | 1.22 (1.12 to 1.33)                            | 1.24 (1.10 to 1.39)                            |
| 60 to 89  | Reference                                      | Reference                                      | Reference                                      | Reference                                      |
| ≥90   | 1.14 (1.05 to 1.24)                            | 1.07 (0.99 to 1.16)                            | 1.07 (0.98 to 1.18)                            | 1.14 (0.99 to 1.30)                            |
| <b>Pulmonary disease</b>                          |  |  |  |  |
| Normal  | Reference                                      | Reference                                      | Reference                                      | Reference                                      |
| Restrictive                                       | 1.00 (0.93 to 1.08)                            | 1.04 (0.98 to 1.12)                            | 1.14 (1.06 to 1.23)                            | 1.14 (1.03 to 1.27)                            |
| COPD  | 1.05 (0.95 to 1.16)                            | 0.95 (0.87 to 1.04)                            | 1.10 (1.00 to 1.22)                            | 1.04 (0.91 to 1.19)                            |
| <b>Gouty arthritis marker: uric acid (μmol/L)</b> |  |  |  |  |
| ≥476  | 1.01 (0.90 to 1.13)                            | 1.00 (0.91 to 1.11)                            | 1.08 (0.96 to 1.20)                            | 1.06 (0.91 to 1.23)                            |
| 416 to 475  | Reference                                      | Reference                                      | Reference                                      | Reference                                      |
| 357 to 415  | 1.14 (1.03 to 1.27)                            | 0.96 (0.88 to 1.06)                            | 1.00 (0.90 to 1.11)                            | 0.88 (0.76 to 1.02)                            |
| 297 to 356  | 1.13 (1.02 to 1.26)                            | 1.03 (0.94 to 1.13)                            | 1.06 (0.95 to 1.18)                            | 0.96 (0.83 to 1.11)                            |
| <297  | 1.21 (1.08 to 1.35)                            | 1.11 (1.00 to 1.22)                            | 1.22 (1.09 to 1.37)                            | 1.15 (0.99 to 1.23)                            |

<sup>a</sup>Adjusted for age (continuous), age squared, sex (male or female), education (middle school or lower, high school, junior college, or college or higher), occupation (white collar, blue collar, self to employed, house wife/husband, or other), smoking status (never, former, or current), pack to years of smoking (continuous), drinking status (never, ever), grams of alcohol/day (continuous), BMI (continuous), BMI squared, physical activity (inactive, low active, medium active, high active, and very high active), and fruit/vegetable intake (continuous).

Abbreviations: HR, hazard ratio; 95% CI, 95% confidence interval; COPD, chronic obstructive pulmonary disease; GFR, glomerular filtration rate

**Table S4. Risk of cancer incidence and cancer mortality by total cholesterol level after deleting cases developed within 1 to 10 years of follow-up.**

| Total cholesterol (mmol/L) | Cancer incidence                  |         | Cancer mortality                  |         |
|----------------------------|-----------------------------------|---------|-----------------------------------|---------|
|                            | Adjusted <sup>a</sup> HR (95% CI) | P value | Adjusted <sup>a</sup> HR (95% CI) | P value |
| <b>Delete one year</b>     |                                   |         |                                   |         |
| ≥6.22                      | Reference                         |         | Reference                         |         |
| 5.19 to 6.21               | 1.07 (1.00 to 1.14)               | 0.06    | 1.05 (0.94 to 1.16)               | 0.39    |
| 4.67 to 5.18               | 1.16 (1.08 to 1.24)               | <0.001  | 1.15 (1.03 to 1.29)               | 0.01    |
| 4.15 to 4.66               | 1.27 (1.18 to 1.37)               | <0.001  | 1.38 (1.23 to 1.54)               | <0.001  |
| <4.15                      | 1.44 (1.33 to 1.56)               | <0.001  | 1.64 (1.45 to 1.85)               | <0.001  |
| <b>Delete two years</b>    |                                   |         |                                   |         |
| ≥6.22                      | Reference                         |         | Reference                         |         |
| 5.19 to 6.21               | 1.07 (1.00 to 1.15)               | 0.05    | 1.06 (0.95 to 1.18)               | 0.30    |
| 4.67 to 5.18               | 1.16 (1.07 to 1.25)               | <0.001  | 1.15 (1.02 to 1.29)               | 0.02    |
| 4.15 to 4.66               | 1.24 (1.15 to 1.34)               | <0.001  | 1.31 (1.16 to 1.48)               | <0.001  |
| <4.15                      | 1.45 (1.34 to 1.58)               | <0.001  | 1.61 (1.41 to 1.82)               | <0.001  |
| <b>Delete three years</b>  |                                   |         |                                   |         |
| ≥6.22                      | Reference                         |         | Reference                         |         |
| 5.19 to 6.21               | 1.06 (0.99 to 1.14)               | 0.11    | 1.04 (0.93 to 1.17)               | 0.48    |
| 4.67 to 5.18               | 1.18 (1.09 to 1.28)               | <0.001  | 1.18 (1.04 to 1.34)               | 0.01    |
| 4.15 to 4.66               | 1.24 (1.14 to 1.35)               | <0.001  | 1.31 (1.15 to 1.49)               | <0.001  |
| <4.15                      | 1.45 (1.33 to 1.58)               | <0.001  | 1.58 (1.38 to 1.82)               | <0.001  |
| <b>Delete four years</b>   |                                   |         |                                   |         |
| ≥6.22                      | Reference                         |         | Reference                         |         |
| 5.19 to 6.21               | 1.05 (0.97 to 1.14)               | 0.21    | 1.05 (0.92 to 1.19)               | 0.45    |
| 4.67 to 5.18               | 1.18 (1.09 to 1.29)               | <0.001  | 1.19 (1.04 to 1.37)               | 0.01    |
| 4.15 to 4.66               | 1.21 (1.11 to 1.33)               | <0.001  | 1.27 (1.09 to 1.47)               | 0.002   |
| <4.15                      | 1.46 (1.32 to 1.60)               | <0.001  | 1.61 (1.38 to 1.87)               | <0.001  |
| <b>Delete five years</b>   |                                   |         |                                   |         |
| ≥6.22                      | Reference                         |         | Reference                         |         |
| 5.19 to 6.21               | 1.06 (0.97 to 1.16)               | 0.17    | 1.03 (0.90 to 1.19)               | 0.65    |
| 4.67 to 5.18               | 1.19 (1.08 to 1.30)               | <0.001  | 1.14 (0.98 to 1.33)               | 0.09    |
| 4.15 to 4.66               | 1.21 (1.09 to 1.34)               | <0.001  | 1.23 (1.05 to 1.45)               | 0.01    |
| <4.15                      | 1.48 (1.34 to 1.65)               | <0.001  | 1.59 (1.34 to 1.88)               | <0.001  |
| <b>Delete six years</b>    |                                   |         |                                   |         |
| ≥6.22                      | Reference                         |         | Reference                         |         |
| 5.19 to 6.21               | 1.08 (0.98 to 1.20)               | 0.11    | 0.99 (0.85 to 1.17)               | 0.95    |
| 4.67 to 5.18               | 1.18 (1.06 to 1.31)               | 0.002   | 1.09 (0.92 to 1.30)               | 0.33    |
| 4.15 to 4.66               | 1.23 (1.10 to 1.38)               | <0.001  | 1.24 (1.04 to 1.49)               | 0.02    |
| <4.15                      | 1.52 (1.35 to 1.71)               | <0.001  | 1.62 (1.34 to 1.95)               | <0.001  |
| <b>Delete seven years</b>  |                                   |         |                                   |         |
| ≥6.22                      | Reference                         |         | Reference                         |         |
| 5.19 to 6.21               | 1.13 (1.01 to 1.27)               | 0.03    | 1.01 (0.83 to 1.22)               | 0.95    |
| 4.67 to 5.18               | 1.21 (1.07 to 1.37)               | 0.002   | 1.14 (0.93 to 1.40)               | 0.22    |
| 4.15 to 4.66               | 1.26 (1.10 to 1.43)               | <0.001  | 1.24 (1.00 to 1.54)               | 0.05    |
| <4.15                      | 1.53 (1.34 to 1.75)               | <0.001  | 1.61 (1.29 to 2.01)               | <0.001  |
| <b>Delete eight years</b>  |                                   |         |                                   |         |
| ≥6.22                      | Reference                         |         | Reference                         |         |
| 5.19 to 6.21               | 1.14 (1.00 to 1.31)               | 0.06    | 0.97 (0.77 to 1.23)               | 0.82    |
| 4.67 to 5.18               | 1.20 (1.03 to 1.39)               | 0.02    | 1.14 (0.89 to 1.48)               | 0.30    |
| 4.15 to 4.66               | 1.27 (1.08 to 1.48)               | 0.003   | 1.26 (0.97 to 1.64)               | 0.09    |
| <4.15                      | 1.56 (1.33 to 1.84)               | <0.001  | 1.44 (1.09 to 1.90)               | 0.01    |
| <b>Delete nine years</b>   |                                   |         |                                   |         |
| ≥6.22                      | Reference                         |         | Reference                         |         |
| 5.19 to 6.21               | 1.12 (0.94 to 1.34)               | 0.19    | 1.08 (0.79 to 1.47)               | 0.62    |
| 4.67 to 5.18               | 1.15 (0.95 to 1.38)               | 0.16    | 1.12 (0.80 to 1.57)               | 0.52    |
| 4.15 to 4.66               | 1.15 (0.94 to 1.40)               | 0.17    | 1.16 (0.81 to 1.65)               | 0.43    |
| <4.15                      | 1.55 (1.27 to 1.89)               | <0.001  | 1.56 (1.08 to 2.24)               | 0.02    |
| <b>Delete ten years</b>    |                                   |         |                                   |         |
| ≥6.22                      | Reference                         |         | Reference                         |         |
| 5.19 to 6.21               | 1.07 (0.83 to 1.37)               | 0.61    | 1.23 (0.77 to 1.96)               | 0.38    |
| 4.67 to 5.18               | 1.19 (0.92 to 1.55)               | 0.19    | 1.40 (0.85 to 2.29)               | 0.18    |
| 4.15 to 4.66               | 1.09 (0.82 to 1.45)               | 0.54    | 1.39 (0.82 to 2.34)               | 0.22    |
| <4.15                      | 1.52 (1.15 to 2.02)               | 0.003   | 1.73 (1.01 to 2.97)               | 0.047   |

<sup>a</sup>Adjusted for age (continuous), age squared, sex (male or female), education (middle school or lower, high school, junior college, or college or higher), occupation (white collar, blue collar, self to employed, house wife/husband, or other), smoking status (never, former, or current), pack to years of smoking (continuous), drinking status (never, ever), grams of alcohol/day (continuous), BMI (continuous), BMI squared, physical activity (inactive, low active, medium active, high active, and very high active), and fruit/vegetable intake (continuous).

Abbreviations: HR, hazard ratio; 95% CI, 95% confidence interval

**Table S5. Risk of cancer incidence and cancer mortality by total cholesterol level after further adjustment of aspartate transaminase, alanine transaminase, alpha to fetoprotein, and hepatitis B virus infection status.**

| Total cholesterol (mmol/L) | Cancer incidence     |         | Cancer mortality     |         |
|----------------------------|----------------------|---------|----------------------|---------|
|                            | Adjusted HR (95% CI) | P value | Adjusted HR (95% CI) | P value |
| ≥6.22                      | Reference            |         | Reference            |         |
| 5.19 to 6.21               | 1.06 (0.99 to 1.13)  | 0.10    | 1.03 (0.93 to 1.14)  | 0.54    |
| 4.67 to 5.18               | 1.14 (1.06 to 1.23)  | <0.001  | 1.13 (1.01 to 1.26)  | 0.04    |
| 4.15 to 4.66               | 1.24 (1.15 to 1.33)  | <0.001  | 1.31 (1.17 to 1.48)  | <0.001  |
| <4.15                      | 1.38 (1.28 to 1.49)  | <0.001  | 1.52 (1.35 to 1.72)  | <0.001  |

<sup>a</sup>Adjusted for age (continuous), age squared, sex (male or female), education (middle school or lower, high school, junior college, or college or higher), occupation (white collar, blue collar, self to employed, house wife/husband, or other), smoking status (never, former, or current), pack to years of smoking (continuous), drinking status (never, ever), grams of alcohol/day (continuous), BMI (continuous), BMI squared, physical activity (inactive, low active, medium active, high active, and very high active), fruit/vegetable intake (continuous), aspartate transaminase, alanine transaminase, alpha to fetoprotein, and hepatitis B virus infection status.

Abbreviations: HR, hazard ratio; 95% CI, 95% confidence interval

**Table S6. Chronic diseases/markers and risk of cancer incidence and cancer mortality by smoking status.**

| Chronic disease/marker                            | Cancer incidence                  |                                   | Cancer mortality                  |                                   |
|---|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
|   | Never smokers                     | Ever smokers                      | Never smokers                     | Ever smokers                      |
|   | Adjusted <sup>a</sup> HR (95% CI) | Adjusted <sup>a</sup> HR (95% CI) | Adjusted <sup>a</sup> HR (95% CI) | Adjusted <sup>a</sup> HR (95% CI) |
| <b>Cardiovascular disease markers</b>             |                                   |                                   |                                   |                                   |
| <b>Blood pressure</b>                             |                                   |                                   |                                   |                                   |
| Normal  | Reference                         | Reference                         | Reference                         | Reference                         |
| Prehypertension                                   | 0.96 (0.90 to 1.04)               | 1.09 (1.00 to 1.20)               | 1.00 (0.87 to 1.15)               | 1.17 (1.02 to 1.33)               |
| Hypertension                                      | 0.99 (0.91 to 1.07)               | 1.15 (1.05 to 1.27)               | 1.10 (0.96 to 1.26)               | 1.30 (1.14 to 1.48)               |
| <b>Total cholesterol (mmol/L)</b>                 |                                   |                                   |                                   |                                   |
| ≥6.22   | Reference                         | Reference                         | Reference                         | Reference                         |
| 5.19 to 6.21                                      | 1.05 (0.96 to 1.15)               | 1.09 (0.97 to 1.22)               | 1.04 (0.90 to 1.21)               | 1.07 (0.91 to 1.25)               |
| 4.67 to 5.18                                      | 1.11 (1.01 to 1.22)               | 1.20 (1.06 to 1.36)               | 1.05 (0.89 to 1.24)               | 1.26 (1.06 to 1.49)               |
| 4.15 to 4.66                                      | 1.23 (1.12 to 1.36)               | 1.36 (1.20 to 1.55)               | 1.35 (1.14 to 1.59)               | 1.50 (1.26 to 1.79)               |
| <4.15   | 1.37 (1.23 to 1.53)               | 1.49 (1.31 to 1.70)               | 1.61 (1.35 to 1.93)               | 1.71 (1.42 to 2.05)               |
| <b>Heart rate (beats/min)</b>                     |                                   |                                   |                                   |                                   |
| <70   | Reference                         | Reference                         | Reference                         | Reference                         |
| 70 to 79  | 1.03 (0.96 to 1.10)               | 0.96 (0.88 to 1.04)               | 1.04 (0.93 to 1.17)               | 1.00 (0.89 to 1.12)               |
| 80 to 89  | 1.04 (0.96 to 1.13)               | 1.08 (0.98 to 1.18)               | 1.07 (0.94 to 1.23)               | 1.18 (1.03 to 1.35)               |
| ≥90   | 1.05 (0.95 to 1.17)               | 1.14 (0.99 to 1.30)               | 1.19 (1.00 to 1.41)               | 1.55 (1.31 to 1.84)               |
| <b>Diabetes</b>                                   |                                   |                                   |                                   |                                   |
| Normal  | Reference                         | Reference                         | Reference                         | Reference                         |
| Prediabetes                                       | 1.06 (0.96 to 1.17)               | 1.08 (0.96 to 1.22)               | 1.07 (0.90 to 1.26)               | 1.11 (0.94 to 1.31)               |
| Diabetes  | 1.12 (1.02 to 1.23)               | 1.05 (0.94 to 1.17)               | 1.50 (1.31 to 1.71)               | 1.30 (1.13 to 1.49)               |
| <b>Chronic kidney disease markers</b>             |                                   |                                   |                                   |                                   |
| <b>Proteinuria</b>                                |                                   |                                   |                                   |                                   |
| Normal  | Reference                         | Reference                         | Reference                         | Reference                         |
| Trace proteinuria                                 | 1.10 (0.98 to 1.24)               | 1.10 (0.98 to 1.24)               | 1.36 (1.15 to 1.62)               | 1.29 (1.11 to 1.50)               |
| Proteinuria                                       | 1.19 (1.02 to 1.39)               | 1.19 (1.01 to 1.40)               | 1.79 (1.45 to 2.20)               | 1.50 (1.22 to 1.86)               |
| <b>GFR (mL/min/1.73 m<sup>2</sup>)</b>            |                                   |                                   |                                   |                                   |
| <60   | 1.13 (1.03 to 1.23)               | 1.10 (1.00 to 1.21)               | 1.28 (1.13 to 1.46)               | 1.16 (1.03 to 1.32)               |
| 60 to 89  | Reference                         | Reference                         | Reference                         | Reference                         |
| ≥90   | 1.09 (1.01 to 1.17)               | 1.11 (1.00 to 1.23)               | 1.07 (0.93 to 1.22)               | 1.09 (0.94 to 1.27)               |
| <b>Pulmonary disease</b>                          |                                   |                                   |                                   |                                   |
| Normal  | Reference                         | Reference                         | Reference                         | Reference                         |
| Restrictive                                       | 0.96 (0.90 to 1.03)               | 1.10 (1.01 to 1.20)               | 1.05 (0.94 to 1.17)               | 1.24 (1.10 to 1.38)               |
| COPD  | 0.95 (0.86 to 1.05)               | 1.02 (0.92 to 1.13)               | 1.07 (0.92 to 1.25)               | 1.14 (1.00 to 1.31)               |
| <b>Gouty arthritis marker: uric acid (μmol/L)</b> |                                   |                                   |                                   |                                   |
| ≥476  | 0.97 (0.86 to 1.10)               | 0.99 (0.89 to 1.11)               | 0.98 (0.81 to 1.19)               | 1.09 (0.94 to 1.27)               |
| 416 to 475  | Reference                         | Reference                         | Reference                         | Reference                         |
| 357 to 415  | 1.01 (0.91 to 1.12)               | 1.06 (0.96 to 1.17)               | 0.93 (0.78 to 1.10)               | 1.05 (0.91 to 1.21)               |
| 297 to 356  | 1.07 (0.97 to 1.18)               | 1.04 (0.93 to 1.16)               | 1.04 (0.89 to 1.23)               | 1.05 (0.90 to 1.23)               |
| <297  | 1.10 (0.99 to 1.21)               | 1.23 (1.09 to 1.39)               | 1.14 (0.96 to 1.35)               | 1.35 (1.14 to 1.60)               |

<sup>a</sup>Adjusted for age (continuous), age squared, sex (male or female), education (middle school or lower, high school, junior college, or college or higher), occupation (white collar, blue collar, self to employed, house wife/husband, or other), pack to years of smoking (continuous) among ever smokers, drinking status (never, ever), grams of alcohol/day (continuous), BMI (continuous), BMI squared, physical activity (inactive, low active, medium active, high active, and very high active), and fruit/vegetable intake (continuous).

Abbreviations: HR, hazard ratio; 95% CI, 95% confidence interval; COPD, chronic obstructive pulmonary disease; GFR, glomerular filtration rate

**Table S7. Chronic diseases/markers and risk of cancer incidence and cancer mortality by drinking status.**

| Chronic disease/marker                            | Cancer incidence                  |                                   | Cancer mortality                  |                                   |
|---|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
|   | Never drinkers                    | Ever drinkers                     | Never drinkers                    | Ever drinkers                     |
|   | Adjusted <sup>a</sup> HR (95% CI) | Adjusted <sup>a</sup> HR (95% CI) | Adjusted <sup>a</sup> HR (95% CI) | Adjusted <sup>a</sup> HR (95% CI) |
| <b>Cardiovascular disease markers</b>             |                                   |                                   |                                   |                                   |
| <b>Blood pressure</b>                             |                                   |                                   |                                   |                                   |
| Normal  | Reference                         | Reference                         | Reference                         | Reference                         |
| Prehypertension                                   | 0.95 (0.89 to 1.02)               | 1.14 (1.03 to 1.27)               | 1.02 (0.90 to 1.15)               | 1.19 (1.01 to 1.40)               |
| Hypertension                                      | 0.97 (0.90 to 1.04)               | 1.21 (1.08 to 1.34)               | 1.07 (0.94 to 1.20)               | 1.46 (1.24 to 1.71)               |
| <b>Total cholesterol (mmol/L)</b>                 |                                   |                                   |                                   |                                   |
| ≥6.22   | Reference                         | Reference                         | Reference                         | Reference                         |
| 5.19 to 6.21                                      | 1.07 (0.98 to 1.16)               | 1.09 (0.96 to 1.23)               | 1.11 (0.97 to 1.27)               | 1.02 (0.85 to 1.23)               |
| 4.67 to 5.18                                      | 1.14 (1.04 to 1.25)               | 1.15 (1.01 to 1.32)               | 1.12 (0.97 to 1.30)               | 1.25 (1.02 to 1.51)               |
| 4.15 to 4.66                                      | 1.24 (1.13 to 1.37)               | 1.40 (1.22 to 1.61)               | 1.35 (1.16 to 1.57)               | 1.59 (1.31 to 1.94)               |
| <4.15   | 1.42 (1.29 to 1.57)               | 1.50 (1.29 to 1.74)               | 1.74 (1.48 to 2.05)               | 1.66 (1.35 to 2.05)               |
| <b>Heart rate (beats/min)</b>                     |                                   |                                   |                                   |                                   |
| <70   | Reference                         | Reference                         | Reference                         | Reference                         |
| 70 to 79  | 1.01 (0.94 to 1.07)               | 0.97 (0.89 to 1.06)               | 1.07 (0.96 to 1.19)               | 0.95 (0.83 to 1.08)               |
| 80 to 89  | 1.05 (0.97 to 1.13)               | 1.05 (0.94 to 1.17)               | 1.13 (1.00 to 1.27)               | 1.15 (0.98 to 1.34)               |
| ≥90   | 1.04 (0.94 to 1.15)               | 1.19 (1.03 to 1.38)               | 1.22 (1.05 to 1.43)               | 1.56 (1.29 to 1.89)               |
| <b>Diabetes</b>                                   |                                   |                                   |                                   |                                   |
| Normal  | Reference                         | Reference                         | Reference                         | Reference                         |
| Prediabetes                                       | 1.03 (0.93 to 1.13)               | 1.14 (1.01 to 1.30)               | 1.01 (0.87 to 1.18)               | 1.17 (0.97 to 1.40)               |
| Diabetes  | 1.09 (1.00 to 1.19)               | 1.08 (0.95 to 1.22)               | 1.42 (1.25 to 1.60)               | 1.37 (1.16 to 1.60)               |
| <b>Chronic kidney disease markers</b>             |                                   |                                   |                                   |                                   |
| <b>Proteinuria</b>                                |                                   |                                   |                                   |                                   |
| Normal  | Reference                         | Reference                         | Reference                         | Reference                         |
| Trace proteinuria                                 | 1.16 (1.05 to 1.29)               | 1.02 (0.89 to 1.17)               | 1.43 (1.23 to 1.66)               | 1.16 (0.97 to 1.40)               |
| Proteinuria                                       | 1.23 (1.07 to 1.41)               | 1.20 (1.00 to 1.45)               | 1.75 (1.45 to 2.12)               | 1.55 (1.22 to 1.96)               |
| <b>GFR (mL/min/1.73 m<sup>2</sup>)</b>            |                                   |                                   |                                   |                                   |
| <60   | 1.10 (1.03 to 1.18)               | 1.14 (1.02 to 1.28)               | 1.20 (1.07 to 1.34)               | 1.22 (1.05 to 1.42)               |
| 60 to 89  | Reference                         | Reference                         | Reference                         | Reference                         |
| ≥90   | 1.10 (1.02 to 1.20)               | 1.05 (0.94 to 1.18)               | 1.05 (0.92 to 1.20)               | 1.05 (0.88 to 1.23)               |
| <b>Pulmonary disease</b>                          |                                   |                                   |                                   |                                   |
| Normal  | Reference                         | Reference                         | Reference                         | Reference                         |
| Restrictive                                       | 0.98 (0.92 to 1.05)               | 1.16 (1.06 to 1.27)               | 1.10 (1.00 to 1.22)               | 1.30 (1.14 to 1.48)               |
| COPD  | 0.96 (0.88 to 1.06)               | 0.97 (0.86 to 1.10)               | 1.05 (0.91 to 1.20)               | 1.11 (0.94 to 1.31)               |
| <b>Gouty arthritis marker: uric acid (μmol/L)</b> |                                   |                                   |                                   |                                   |
| ≥476  | 1.01 (0.90 to 1.12)               | 0.97 (0.86 to 1.10)               | 0.96 (0.81 to 1.13)               | 1.17 (0.98 to 1.39)               |
| 416 to 475  | Reference                         | Reference                         | Reference                         | Reference                         |
| 357 to 415  | 1.03 (0.94 to 1.13)               | 1.03 (0.92 to 1.16)               | 0.94 (0.82 to 1.09)               | 1.05 (0.89 to 1.25)               |
| 297 to 356  | 1.05 (0.96 to 1.15)               | 1.09 (0.97 to 1.23)               | 1.01 (0.87 to 1.16)               | 1.14 (0.95 to 1.36)               |
| <297  | 1.10 (1.00 to 1.21)               | 1.17 (1.02 to 1.35)               | 1.12 (0.97 to 1.30)               | 1.42 (1.16 to 1.73)               |

<sup>a</sup>Adjusted for age (continuous), age squared, sex (male or female), education (middle school or lower, high school, junior college, or college or higher), occupation (white collar, blue collar, self to employed, house wife/husband, or other), smoking status (never, former, or current), pack to years of smoking (continuous), grams of alcohol/day (continuous) among ever drinkers, BMI (continuous), BMI squared, physical activity (inactive, low active, medium active, high active, and very high active), and fruit/vegetable intake (continuous).

Abbreviations: HR, hazard ratio; 95% CI, 95% confidence interval; COPD, chronic obstructive pulmonary disease; GFR, glomerular filtration rate

**Table S8. Chronic diseases/markers and risk of cancer incidence and cancer mortality by body mass index (BMI).**

| Chronic disease/marker                            | Cancer incidence                  |                                   | Cancer mortality                  |                                   |
|---|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
|   | BMI<25                            | BMI≥25                            | BMI<25                            | BMI≥25                            |
|   | Adjusted <sup>a</sup> HR (95% CI) | Adjusted <sup>a</sup> HR (95% CI) | Adjusted <sup>a</sup> HR (95% CI) | Adjusted <sup>a</sup> HR (95% CI) |
| <b>Cardiovascular disease markers</b>             |                                   |                                   |                                   |                                   |
| <b>Blood pressure</b>                             |                                   |                                   |                                   |                                   |
| Normal  | Reference                         | Reference                         | Reference                         | Reference                         |
| Prehypertension                                   | 0.98 (0.92 to 1.05)               | 1.05 (0.94 to 1.16)               | 1.09 (0.98 to 1.21)               | 1.03 (0.87 to 1.23)               |
| Hypertension                                      | 1.00 (0.94 to 1.08)               | 1.10 (0.99 to 1.21)               | 1.18 (1.06 to 1.32)               | 1.22 (1.04 to 1.43)               |
| <b>Total cholesterol (mmol/L)</b>                 |                                   |                                   |                                   |                                   |
| ≥6.22   | Reference                         | Reference                         | Reference                         | Reference                         |
| 5.19 to 6.21                                      | 1.04 (0.96 to 1.13)               | 1.09 (0.99 to 1.21)               | 1.04 (0.91 to 1.19)               | 1.04 (0.89 to 1.23)               |
| 4.67 to 5.18                                      | 1.11 (1.01 to 1.21)               | 1.22 (1.09 to 1.36)               | 1.09 (0.95 to 1.26)               | 1.26 (1.05 to 1.50)               |
| 4.15 to 4.66                                      | 1.24 (1.13 to 1.36)               | 1.28 (1.13 to 1.45)               | 1.35 (1.17 to 1.56)               | 1.41 (1.17 to 1.70)               |
| <4.15   | 1.33 (1.21 to 1.47)               | 1.67 (1.47 to 1.91)               | 1.56 (1.35 to 1.82)               | 1.81 (1.49 to 2.21)               |
| <b>Heart rate (beats/min)</b>                     |                                   |                                   |                                   |                                   |
| <70   | Reference                         | Reference                         | Reference                         | Reference                         |
| 70 to 79  | 0.96 (0.90 to 1.02)               | 1.08 (0.99 to 1.17)               | 1.01 (0.92 to 1.11)               | 1.06 (0.93 to 1.20)               |
| 80 to 89  | 1.00 (0.93 to 1.07)               | 1.16 (1.05 to 1.27)               | 1.12 (1.00 to 1.26)               | 1.12 (0.97 to 1.30)               |
| ≥90   | 1.10 (1.00 to 1.22)               | 1.08 (0.95 to 1.23)               | 1.44 (1.25 to 1.66)               | 1.24 (1.03 to 1.49)               |
| <b>Diabetes</b>                                   |                                   |                                   |                                   |                                   |
| Normal  | Reference                         | Reference                         | Reference                         | Reference                         |
| Prediabetes                                       | 1.05 (0.95 to 1.16)               | 1.05 (0.95 to 1.17)               | 1.16 (1.00 to 1.35)               | 0.96 (0.81 to 1.13)               |
| Diabetes  | 1.18 (1.08 to 1.29)               | 1.03 (0.93 to 1.13)               | 1.57 (1.40 to 1.77)               | 1.24 (1.08 to 1.42)               |
| <b>Chronic kidney disease markers</b>             |                                   |                                   |                                   |                                   |
| <b>Proteinuria</b>                                |                                   |                                   |                                   |                                   |
| Normal  | Reference                         | Reference                         | Reference                         | Reference                         |
| Trace proteinuria                                 | 1.16 (1.05 to 1.28)               | 1.06 (0.94 to 1.20)               | 1.44 (1.25 to 1.65)               | 1.24 (1.04 to 1.47)               |
| Proteinuria                                       | 1.27 (1.10 to 1.47)               | 1.15 (0.99 to 1.34)               | 1.90 (1.58 to 2.28)               | 1.50 (1.22 to 1.84)               |
| <b>GFR (mL/min/1.73 m<sup>2</sup>)</b>            |                                   |                                   |                                   |                                   |
| <60   | 1.08 (1.00 to 1.17)               | 1.15 (1.04 to 1.26)               | 1.20 (1.08 to 1.34)               | 1.24 (1.09 to 1.42)               |
| 60 to 89  | Reference                         | Reference                         | Reference                         | Reference                         |
| ≥90   | 1.12 (1.04 to 1.19)               | 1.07 (0.97 to 1.18)               | 1.17 (1.04 to 1.31)               | 0.93 (0.78 to 1.11)               |
| <b>Pulmonary disease</b>                          |                                   |                                   |                                   |                                   |
| Normal  | Reference                         | Reference                         | Reference                         | Reference                         |
| Restrictive                                       | 1.01 (0.94 to 1.07)               | 1.05 (0.97 to 1.13)               | 1.16 (1.05 to 1.28)               | 1.12 (1.00 to 1.26)               |
| COPD  | 0.97 (0.89 to 1.06)               | 1.02 (0.91 to 1.15)               | 1.11 (0.99 to 1.26)               | 1.05 (0.88 to 1.24)               |
| <b>Gouty arthritis marker: uric acid (μmol/L)</b> |                                   |                                   |                                   |                                   |
| ≥476  | 1.04 (0.94 to 1.16)               | 0.96 (0.86 to 1.07)               | 1.16 (0.99 to 1.36)               | 0.99 (0.84 to 1.16)               |
| 416 to 475  | Reference                         | Reference                         | Reference                         | Reference                         |
| 357 to 415  | 1.06 (0.97 to 1.16)               | 1.02 (0.92 to 1.13)               | 1.05 (0.91 to 1.20)               | 0.94 (0.80 to 1.10)               |
| 297 to 356  | 1.11 (1.02 to 1.22)               | 1.01 (0.91 to 1.13)               | 1.15 (1.00 to 1.32)               | 0.93 (0.78 to 1.10)               |
| <297  | 1.16 (1.06 to 1.28)               | 1.14 (1.01 to 1.29)               | 1.26 (1.09 to 1.45)               | 1.22 (1.01 to 1.46)               |

<sup>a</sup>Adjusted for age (continuous), age squared, sex (male or female), education (middle school or lower, high school, junior college, or college or higher), occupation (white collar, blue collar, self to employed, house wife/husband, or other), smoking status (never, former, or current), pack to years of smoking (continuous), drinking status (never, ever), grams of alcohol/day (continuous), physical activity (inactive, low active, medium active, high active, and very high active), and fruit/vegetable intake (continuous).

Abbreviations: HR, hazard ratio; 95% CI, 95% confidence interval; COPD, chronic obstructive pulmonary disease; GFR, glomerular filtration rate



**Table S9. Chronic diseases/markers and risk of cancer incidence and cancer mortality by physical activity.**

| Chronic disease/marker  | Cancer incidence                  |                                   | Cancer mortality                  |                                   |
|---|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
|   | Inactive<br>( $<3.75$ MET h/wk)   | Active<br>( $\geq 3.75$ MET h/wk) | Inactive<br>( $<3.75$ MET h/wk)   | Active<br>( $\geq 3.75$ MET h/wk) |
|   | Adjusted <sup>a</sup> HR (95% CI) | Adjusted <sup>a</sup> HR (95% CI) | Adjusted <sup>a</sup> HR (95% CI) | Adjusted <sup>a</sup> HR (95% CI) |
| <b>Cardiovascular disease markers</b>                                   |                                   |                                   |                                   |                                   |
| <b>Blood pressure</b>   |                                   |                                   |                                   |                                   |
| Normal  | Reference                         | Reference                         | Reference                         | Reference                         |
| Prehypertension   | 0.97 (0.90 to 1.05)               | 1.02 (0.94 to 1.11)               | 1.10 (0.97 to 1.24)               | 1.05 (0.92 to 1.20)               |
| Hypertension  | 1.03 (0.95 to 1.11)               | 1.04 (0.96 to 1.13)               | 1.24 (1.10 to 1.41)               | 1.17 (1.03 to 1.34)               |
| <b>Total cholesterol (mmol/L)</b>                                       |                                   |                                   |                                   |                                   |
| $\geq 6.22$   | Reference                         | Reference                         | Reference                         | Reference                         |
| 5.19 to 6.21  | 1.09 (0.99 to 1.20)               | 1.04 (0.95 to 1.14)               | 1.01 (0.87 to 1.17)               | 1.08 (0.93 to 1.24)               |
| 4.67 to 5.18  | 1.21 (1.09 to 1.34)               | 1.10 (1.00 to 1.22)               | 1.17 (1.00 to 1.37)               | 1.13 (0.97 to 1.32)               |
| 4.15 to 4.66  | 1.33 (1.20 to 1.48)               | 1.21 (1.09 to 1.34)               | 1.46 (1.25 to 1.72)               | 1.28 (1.08 to 1.51)               |
| $<4.15$   | 1.54 (1.38 to 1.72)               | 1.34 (1.20 to 1.50)               | 1.79 (1.52 to 2.12)               | 1.47 (1.23 to 1.75)               |
| <b>Heart rate (beats/min)</b>   |                                   |                                   |                                   |                                   |
| $<70$   | Reference                         | Reference                         | Reference                         | Reference                         |
| 70 to 79  | 0.99 (0.92 to 1.06)               | 1.01 (0.95 to 1.09)               | 1.05 (0.94 to 1.17)               | 1.02 (0.91 to 1.14)               |
| 80 to 89  | 1.05 (0.96 to 1.14)               | 1.06 (0.97 to 1.15)               | 1.09 (0.96 to 1.24)               | 1.17 (1.03 to 1.33)               |
| $\geq 90$   | 1.15 (1.04 to 1.28)               | 1.02 (0.91 to 1.14)               | 1.43 (1.22 to 1.67)               | 1.29 (1.09 to 1.53)               |
| <b>Diabetes</b>   |                                   |                                   |                                   |                                   |
| Normal  | Reference                         | Reference                         | Reference                         | Reference                         |
| Prediabetes   | 1.15 (1.04 to 1.28)               | 0.98 (0.88 to 1.09)               | 1.13 (0.97 to 1.33)               | 1.01 (0.86 to 1.19)               |
| Diabetes  | 1.18 (1.07 to 1.30)               | 1.04 (0.95 to 1.14)               | 1.50 (1.32 to 1.71)               | 1.35 (1.18 to 1.53)               |
| <b>Chronic kidney disease markers</b>                                   |                                   |                                   |                                   |                                   |
| <b>Proteinuria</b>  |                                   |                                   |                                   |                                   |
| Normal  | Reference                         | Reference                         | Reference                         | Reference                         |
| Trace proteinuria   | 1.22 (1.10 to 1.35)               | 1.02 (0.90 to 1.14)               | 1.46 (1.26 to 1.68)               | 1.26 (1.07 to 1.49)               |
| Proteinuria   | 1.21 (1.04 to 1.40)               | 1.22 (1.05 to 1.42)               | 1.71 (1.41 to 2.08)               | 1.69 (1.38 to 2.06)               |
| <b>GFR (mL/min/1.73 m<sup>2</sup>)</b>                                  |                                   |                                   |                                   |                                   |
| $<60$   | 1.11 (1.01 to 1.22)               | 1.11 (1.02 to 1.20)               | 1.17 (1.03 to 1.32)               | 1.27 (1.13 to 1.43)               |
| 60 to 89  | Reference                         | Reference                         | Reference                         | Reference                         |
| $\geq 90$   | 1.08 (1.00 to 1.16)               | 1.14 (1.04 to 1.23)               | 1.00 (0.88 to 1.14)               | 1.21 (1.05 to 1.40)               |
| <b>Pulmonary disease</b>  |                                   |                                   |                                   |                                   |
| Normal  | Reference                         | Reference                         | Reference                         | Reference                         |
| Restrictive   | 1.06 (0.99 to 1.14)               | 0.98 (0.92 to 1.06)               | 1.12 (1.01 to 1.24)               | 1.18 (1.06 to 1.32)               |
| COPD  | 1.01 (0.92 to 1.12)               | 0.97 (0.88 to 1.07)               | 1.06 (0.92 to 1.22)               | 1.13 (0.98 to 1.29)               |
| <b>Gouty arthritis marker: uric acid (<math>\mu\text{mol/L}</math>)</b> |                                   |                                   |                                   |                                   |
| $\geq 476$  | 1.04 (0.93 to 1.16)               | 0.97 (0.87 to 1.08)               | 1.10 (0.94 to 1.30)               | 1.05 (0.90 to 1.24)               |
| 416 to 475  | Reference                         | Reference                         | Reference                         | Reference                         |
| 357 to 415  | 1.07 (0.97 to 1.18)               | 1.01 (0.92 to 1.11)               | 1.02 (0.88 to 1.19)               | 0.95 (0.82 to 1.10)               |
| 297 to 356  | 1.08 (0.98 to 1.19)               | 1.07 (0.97 to 1.18)               | 1.05 (0.91 to 1.22)               | 1.05 (0.90 to 1.21)               |
| $<297$  | 1.21 (1.09 to 1.35)               | 1.09 (0.98 to 1.21)               | 1.28 (1.09 to 1.50)               | 1.14 (0.97 to 1.34)               |

<sup>a</sup>Adjusted for age (continuous), age squared, sex (male or female), education (middle school or lower, high school, junior college, or college or higher), occupation (white collar, blue collar, self to employed, house wife/husband, or other), smoking status (never, former, or current), pack to years of smoking (continuous), drinking status (never, ever), grams of alcohol/day (continuous), BMI (continuous), BMI squared, and fruit/vegetable intake (continuous).

Abbreviations: HR, hazard ratio; 95% CI, 95% confidence interval; COPD, chronic obstructive pulmonary disease; GFR, glomerular filtration rate

**Table S10. Chronic diseases/markers and risk of cancer incidence and cancer mortality by fruit and vegetable intake.**

| Chronic disease/marker                            | Cancer incidence                           |  | Cancer mortality                           |  |
|---|--|--|--|--|
|   | Fruit and vegetable intake <5 portions/day | Fruit and vegetable intake ≥5 portions/day | Fruit and vegetable intake <5 portions/day | Fruit and vegetable intake ≥5 portions/day |
|   | Adjusted <sup>a</sup> HR (95% CI)          | Adjusted <sup>a</sup> HR (95% CI)          | Adjusted <sup>a</sup> HR (95% CI)          | Adjusted <sup>a</sup> HR (95% CI)          |
| <b>Cardiovascular disease markers</b>             |  |  |  |  |
| <b>Blood pressure</b>                             |  |  |  |  |
| Normal  | Reference                                  | Reference                                  | Reference                                  | Reference                                  |
| Prehypertension                                   | 0.97 (0.89 to 1.06)                        | 0.99 (0.92 to 1.07)                        | 0.98 (0.84 to 1.13)                        | 1.08 (0.96 to 1.22)                        |
| Hypertension                                      | 1.05 (0.96 to 1.15)                        | 1.00 (0.93 to 1.08)                        | 1.26 (1.10 to 1.46)                        | 1.11 (0.99 to 1.25)                        |
| <b>Total cholesterol (mmol/L)</b>                 |  |  |  |  |
| ≥6.22   | Reference                                  | Reference                                  | Reference                                  | Reference                                  |
| 5.19 to 6.21                                      | 1.01 (0.92 to 1.12)                        | 1.11 (1.01 to 1.21)                        | 0.96 (0.83 to 1.13)                        | 1.11 (0.97 to 1.28)                        |
| 4.67 to 5.18                                      | 1.14 (1.03 to 1.27)                        | 1.16 (1.06 to 1.28)                        | 1.08 (0.91 to 1.28)                        | 1.20 (1.03 to 1.40)                        |
| 4.15 to 4.66                                      | 1.26 (1.12 to 1.41)                        | 1.29 (1.17 to 1.43)                        | 1.35 (1.13 to 1.61)                        | 1.43 (1.22 to 1.67)                        |
| <4.15   | 1.35 (1.19 to 1.52)                        | 1.51 (1.36 to 1.68)                        | 1.44 (1.19 to 1.74)                        | 1.78 (1.52 to 2.10)                        |
| <b>Heart rate (beats/min)</b>                     |  |  |  |  |
| <70   | Reference                                  | Reference                                  | Reference                                  | Reference                                  |
| 70 to 79  | 0.97 (0.90 to 1.05)                        | 1.01 (0.94 to 1.08)                        | 0.96 (0.85 to 1.08)                        | 1.05 (0.95 to 1.17)                        |
| 80 to 89  | 0.98 (0.90 to 1.08)                        | 1.09 (1.01 to 1.18)                        | 1.05 (0.91 to 1.21)                        | 1.16 (1.03 to 1.31)                        |
| ≥90   | 1.18 (1.05 to 1.32)                        | 1.00 (0.90 to 1.12)                        | 1.41 (1.18 to 1.67)                        | 1.22 (1.04 to 1.43)                        |
| <b>Diabetes</b>                                   |  |  |  |  |
| Normal  | Reference                                  | Reference                                  | Reference                                  | Reference                                  |
| Prediabetes                                       | 1.07 (0.95 to 1.20)                        | 1.05 (0.95 to 1.16)                        | 1.15 (0.97 to 1.37)                        | 1.00 (0.86 to 1.17)                        |
| Diabetes  | 1.15 (1.04 to 1.28)                        | 1.06 (0.97 to 1.16)                        | 1.40 (1.21 to 1.62)                        | 1.41 (1.25 to 1.60)                        |
| <b>Chronic kidney disease markers</b>             |  |  |  |  |
| <b>Proteinuria</b>                                |  |  |  |  |
| Normal  | Reference                                  | Reference                                  | Reference                                  | Reference                                  |
| Trace proteinuria                                 | 1.19 (1.07 to 1.34)                        | 1.05 (0.94 to 1.17)                        | 1.49 (1.26 to 1.75)                        | 1.25 (1.07 to 1.46)                        |
| Proteinuria                                       | 1.21 (1.02 to 1.43)                        | 1.22 (1.06 to 1.41)                        | 1.69 (1.36 to 2.11)                        | 1.73 (1.44 to 2.08)                        |
| <b>GFR (mL/min/1.73 m<sup>2</sup>)</b>            |  |  |  |  |
| <60   | 1.11 (1.00 to 1.22)                        | 1.12 (1.03 to 1.21)                        | 1.18 (1.03 to 1.35)                        | 1.24 (1.11 to 1.39)                        |
| 60 to 89  | Reference                                  | Reference                                  | Reference                                  | Reference                                  |
| ≥90   | 1.04 (0.96 to 1.14)                        | 1.15 (1.06 to 1.23)                        | 1.06 (0.91 to 1.23)                        | 1.08 (0.95 to 1.23)                        |
| <b>Pulmonary disease</b>                          |  |  |  |  |
| Normal  | Reference                                  | Reference                                  | Reference                                  | Reference                                  |
| Restrictive                                       | 1.03 (0.95 to 1.11)                        | 1.02 (0.96 to 1.10)                        | 1.15 (1.02 to 1.29)                        | 1.15 (1.04 to 1.27)                        |
| COPD  | 1.04 (0.93 to 1.16)                        | 0.99 (0.90 to 1.08)                        | 1.18 (1.00 to 1.38)                        | 1.09 (0.96 to 1.24)                        |
| <b>Gouty arthritis marker: uric acid (μmol/L)</b> |  |  |  |  |
| ≥476  | 1.01 (0.90 to 1.14)                        | 1.00 (0.90 to 1.11)                        | 1.12 (0.94 to 1.34)                        | 1.04 (0.89 to 1.21)                        |
| 416 to 475  | Reference                                  | Reference                                  | Reference                                  | Reference                                  |
| 357 to 415  | 1.06 (0.96 to 1.18)                        | 1.03 (0.94 to 1.13)                        | 1.09 (0.93 to 1.29)                        | 0.93 (0.81 to 1.08)                        |
| 297 to 356  | 1.09 (0.98 to 1.22)                        | 1.07 (0.98 to 1.18)                        | 1.09 (0.92 to 1.30)                        | 1.04 (0.90 to 1.20)                        |
| <297  | 1.17 (1.04 to 1.31)                        | 1.14 (1.03 to 1.26)                        | 1.38 (1.15 to 1.65)                        | 1.12 (0.96 to 1.30)                        |

<sup>a</sup>Adjusted for age (continuous), age squared, sex (male or female), education (middle school or lower, high school, junior college, or college or higher), occupation (white collar, blue collar, self to employed, house wife/husband, or other), smoking status (never, former, or current), pack to years of smoking (continuous), drinking status (never, ever), grams of alcohol/day (continuous), BMI (continuous), BMI squared, and physical activity (inactive, low active, medium active, high active, and very high active).

Abbreviations: HR, hazard ratio; 95% CI, 95% confidence interval; COPD, chronic obstructive pulmonary disease; GFR, glomerular filtration rate

**Table S11. Chronic diseases/markers at second visit and risk of cancer incidence and cancer mortality.**

| Chronic disease/marker                            | Population size | Cancer incidence |                                   |         | Cancer mortality |                                   |         |
|---|-----------------|------------------|-----------------------------------|---------|------------------|-----------------------------------|---------|
|   |                 | N                | Adjusted <sup>a</sup> HR (95% CI) | P value | N                | Adjusted <sup>a</sup> HR (95% CI) | P value |
| <b>Cardiovascular disease markers</b>             |                 |                  |                                   |         |                  |                                   |         |
| <b>Blood pressure</b>                             |                 |                  |                                   |         |                  |                                   |         |
| Normal  | 95,031          | 1,324            | Reference                         |         | 342              | Reference                         |         |
| Prehypertension                                   | 49,575          | 1,038            | 1.03 (0.94 to 1.12)               | 0.52    | 353              | 1.17 (1.00 to 1.36)               | 0.04    |
| Hypertension                                      | 32,288          | 1,407            | 1.08 (0.99 to 1.19)               | 0.09    | 569              | 1.26 (1.08 to 1.47)               | 0.004   |
| <b>Total cholesterol (mmol/L)</b>                 |                 |                  |                                   |         |                  |                                   |         |
| ≥6.22   | 19,141          | 529              | Reference                         |         | 192              | Reference                         |         |
| 5.19 to 6.21                                      | 53,489          | 1,231            | 1.09 (0.98 to 1.21)               | 0.11    | 410              | 1.04 (0.88 to 1.23)               | 0.66    |
| 4.67 to 5.18                                      | 40,381          | 785              | 1.15 (1.02 to 1.29)               | 0.02    | 267              | 1.15 (0.95 to 1.38)               | 0.15    |
| 4.15 to 4.66                                      | 36,092          | 688              | 1.31 (1.16 to 1.47)               | <0.001  | 218              | 1.26 (1.03 to 1.53)               | 0.02    |
| <4.15   | 28,312          | 539              | 1.47 (1.30 to 1.67)               | <0.001  | 177              | 1.51 (1.23 to 1.86)               | <0.001  |
| <b>Heart rate (beats/min)</b>                     |                 |                  |                                   |         |                  |                                   |         |
| <70   | 75,731          | 1,457            | Reference                         |         | 510              | Reference                         |         |
| 70 to 79  | 64,245          | 1,396            | 1.08 (1.00 to 1.16)               | 0.05    | 442              | 1.01 (0.89 to 1.15)               | 0.84    |
| 80 to 89  | 28,227          | 659              | 1.03 (0.94 to 1.13)               | 0.55    | 220              | 1.02 (0.87 to 1.20)               | 0.80    |
| ≥90   | 9,020           | 260              | 1.17 (1.02 to 1.34)               | 0.03    | 93               | 1.24 (0.99 to 1.55)               | 0.06    |
| <b>Diabetes</b>                                   |                 |                  |                                   |         |                  |                                   |         |
| Normal  | 157,674         | 3,046            | Reference                         |         | 955              | Reference                         |         |
| Prediabetes                                       | 10,306          | 308              | 0.97 (0.86 to 1.09)               | 0.61    | 126              | 1.11 (0.92 to 1.34)               | 0.28    |
| Diabetes  | 9,382           | 419              | 1.06 (0.95 to 1.19)               | 0.27    | 184              | 1.30 (1.10 to 1.53)               | 0.002   |
| <b>Chronic kidney disease markers</b>             |                 |                  |                                   |         |                  |                                   |         |
| <b>Proteinuria</b>                                |                 |                  |                                   |         |                  |                                   |         |
| Normal  | 164,435         | 3,346            | Reference                         |         | 1,071            | Reference                         |         |
| Trace proteinuria                                 | 9,238           | 309              | 1.23 (1.09 to 1.39)               | 0.001   | 135              | 1.53 (1.28 to 1.83)               | <0.001  |
| Proteinuria                                       | 2,107           | 107              | 1.20 (0.99 to 1.47)               | 0.07    | 56               | 1.72 (1.31 to 2.26)               | <0.001  |
| <b>GFR (mL/min/1.73 m<sup>2</sup>)</b>            |                 |                  |                                   |         |                  |                                   |         |
| <60   | 7,977           | 505              | 0.99 (0.89 to 1.09)               | 0.80    | 239              | 1.10 (0.95 to 1.29)               | 0.20    |
| 60 to 89  | 112,384         | 2,533            | Reference                         |         | 838              | Reference                         |         |
| ≥90   | 57,052          | 735              | 1.00 (0.91 to 1.09)               | 0.94    | 188              | 0.98 (0.83 to 1.16)               | 0.85    |
| <b>Pulmonary disease</b>                          |                 |                  |                                   |         |                  |                                   |         |
| Normal  | 137,018         | 2,570            | Reference                         |         | 767              | Reference                         |         |
| Restrictive                                       | 26,020          | 918              | 1.03 (0.95 to 1.12)               | 0.43    | 373              | 1.19 (1.05 to 1.35)               | 0.01    |
| COPD  | 4,150           | 205              | 1.00 (0.86 to 1.17)               | 0.97    | 111              | 1.38 (1.12 to 1.70)               | 0.002   |
| <b>Gouty arthritis marker: uric acid (μmol/L)</b> |                 |                  |                                   |         |                  |                                   |         |
| ≥476  | 20,749          | 451              | 0.90 (0.79 to 1.02)               | 0.09    | 198              | 1.22 (1.00 to 1.49)               | 0.11    |
| 416 to 475  | 25,184          | 568              | Reference                         |         | 181              | Reference                         |         |
| 357 to 415  | 37,260          | 835              | 1.05 (0.94 to 1.17)               | 0.36    | 320              | 1.30 (1.08 to 1.56)               | 0.005   |
| 297 to 356  | 42,409          | 939              | 1.11 (1.00 to 1.24)               | 0.06    | 303              | 1.24 (1.03 to 1.49)               | 0.03    |
| <297  | 51,825          | 981              | 1.21 (1.08 to 1.35)               | 0.001   | 263              | 1.24 (1.02 to 1.50)               | 0.03    |

<sup>a</sup>Adjusted for covariates information at second visit including age (continuous), age squared, sex (male or female), education (middle school or lower, high school, junior college, or college or higher), occupation (white collar, blue collar, self to employed, house wife/husband, or other), smoking status (never, former, or current), pack to years of smoking (continuous), drinking status (never, ever), grams of alcohol/day (continuous), BMI (continuous), BMI squared, physical activity (inactive, low active, medium active, high active, and very high active), and fruit/vegetable intake (continuous).

Abbreviations: HR, hazard ratio; 95% CI, 95% confidence interval; COPD, chronic obstructive pulmonary disease; GFR, glomerular filtration rate

**Table S12. Comparison of host characteristics across three study cohorts.**

| Characteristics   | Overall cohort | Subcohort with a second visit | Subcohort with complete data on all chronic diseases/markers |
|---|----------------|-------------------------------|--|
|   | (N = 405,878)  | (N = 177,430)                 | (N = 274,818)  |
| <b>Mean age (SD), years</b>                                       | 40.4 (13.8)    | 39.9 (12.9)                   | 42.2 (14.3)  |
| <b>Education (%)</b>  |                |                               |  |
| Middle school or lower  | 102,879 (25.4) | 40,602 (22.9)                 | 83,828 (30.5)  |
| High school   | 96,279 (23.7)  | 42,436 (23.9)                 | 69,120 (25.2)  |
| Junior college  | 84,111 (20.7)  | 40,582 (22.9)                 | 54,910 (20.0)  |
| College or higher   | 105,338 (26.0) | 50,296 (28.4)                 | 59,768 (21.8)  |
| Missing   | 17,271 (4.3)   | 3,514 (2.0)                   | 7,192 (2.6)  |
| <b>Occupation (%)</b>   |                |                               |  |
| White collar  | 174,463 (43.0) | 81,966 (46.2)                 | 107,676 (39.2)   |
| Blue collar   | 65,167 (16.1)  | 29,466 (16.6)                 | 51,842 (18.9)  |
| Self-employed   | 32,719 (8.1)   | 13,726 (7.7)                  | 24,112 (8.8)   |
| House wife/husband  | 66,805 (16.5)  | 27,648 (15.6)                 | 52,805 (19.2)  |
| Other   | 41,379 (10.2)  | 16,906 (9.5)                  | 27,627 (10.1)  |
| Missing   | 25,345 (6.2)   | 7,718 (4.4)                   | 10,756 (3.9)   |
| <b>Smoking Status (%)</b>   |                |                               |  |
| Never   | 264,932 (65.3) | 121,310 (68.4)                | 176,560 (64.3)   |
| Former  | 23,000 (5.7)   | 10,646 (6.0)                  | 17,510 (6.4)   |
| Current   | 88,651 (21.8)  | 37,071 (20.9)                 | 63,685 (23.2)  |
| Missing   | 29,295 (7.2)   | 8,403 (4.7)                   | 17,063 (6.2)   |
| <b>Mean pack-years (SD)<sup>a</sup></b>                           | 15.86 (17.2)   | 14.94 (16.3)                  | 16.86 (17.7)   |
| <b>Drinking Status (%)</b>  |                |                               |  |
| Never   | 290,805 (71.7) | 131,476 (74.1)                | 193,264 (70.3)   |
| Former  | 11,140 (2.7)   | 4,298 (2.4)                   | 8,234 (3.0)  |
| Current   | 70,462 (17.4)  | 32,538 (18.3)                 | 53,847 (19.6)  |
| Missing   | 33,471 (8.3)   | 9,118 (5.1)                   | 19,473 (7.1)   |
| <b>Mean grams of alcohol/day (SD)<sup>b</sup></b>                 | 8.85 (11.4)    | 8.12 (10.6)                   | 8.96 (11.6)  |
| <b>Physical activity (%)</b>                                      |                |                               |  |
| Inactive  | 218,891 (53.9) | 91,528 (51.6)                 | 143,449 (52.2)   |
| Low active  | 87,839 (21.6)  | 40,847 (23.0)                 | 59,567 (21.7)  |
| Medium active   | 55,052 (13.6)  | 24,811 (14.0)                 | 38,439 (14.0)  |
| High active   | 23,633 (5.8)   | 10,905 (6.2)                  | 17,790 (6.5)   |
| Very high active  | 20,412 (5.0)   | 9,325 (5.3)                   | 15,528 (5.7)   |
| Missing   | 51 (0.01)      | 14 (0.01)                     | 45 (0.02)  |
| <b>Mean BMI (SD)<sup>c</sup>, kg/m<sup>2</sup></b>                | 23.0 (3.6)     | 22.9 (3.5)                    | 23.2 (3.5)   |
| <b>Mean fruit/vegetable intake (SD)<sup>d</sup>, portions/day</b> | 5.2 (2.8)      | 5.4 (2.8)                     | 5.4 (2.8)  |

<sup>a</sup>Among ever smokers and missing for 5,640 participants in the overall cohort, 2,022 participants in the subcohort with a second visit, and 3,904 participants in the subcohort with complete data on all chronic diseases/markers.

<sup>b</sup>Among ever drinkers and missing for 14,782 participants in the overall cohort, 5,835 participants in the subcohort with a second visit, and 11,139 participants in the subcohort with complete data on all chronic diseases/markers.

<sup>c</sup>Missing for 952 participants in the overall cohort, 112 participants in the subcohort with a second visit, and 42 participants in the subcohort with complete data on all chronic diseases/markers.

<sup>d</sup>Missing for 14,017 participants in the overall cohort, 2,305 participants in the subcohort with a second visit, and 5,207 participants in the subcohort with complete data on all chronic diseases/markers.

Abbreviation: BMI, body mass index.

**S13. Chronic disease risk score and risk of cancer incidence and cancer mortality using data from the second visit.**

| Chronic disease risk score | Adjusted HR <sup>a</sup> (95% CI) | P value |
|----------------------------|-----------------------------------|---------|
| Cancer incidence           |                                   |         |
| 0~1                        |                                   |         |
| 2~4                        | 0.97 (0.73 to 1.28)               | 0.80    |
| 5~8                        | 1.19 (0.91 to 1.56)               | 0.20    |
| 9~11                       | 1.37 (1.03 to 1.83)               | 0.03    |
| >=12                       | 1.73 (1.19 to 2.51)               | 0.004   |
| Per 5 points               | 1.28 (1.18 to 1.39)               | <0.001  |
| Cancer Mortality           |                                   |         |
| 0~2                        |                                   |         |
| 3~6                        | 1.32 (0.92 to 1.90)               | 0.13    |
| 7~11                       | 1.62 (1.13 to 2.32)               | 0.009   |
| 12~14                      | 2.33 (1.57 to 3.45)               | <0.001  |
| >=15                       | 2.88 (1.85 to 4.48)               | <0.001  |
| Per 5 points               | 1.41 (1.30 to 1.54)               | <0.001  |

<sup>b</sup>Adjusted for age (continuous), age squared, sex (male or female), education (middle school or lower, high school, junior college, or college or higher), occupation (white collar, blue collar, self-employed, house wife/husband, or other), smoking status (never, former, or current), pack-years of smoking (continuous), drinking status (never, ever), grams of alcohol/day (continuous), BMI (continuous), BMI squared, physical activity (inactive, low active, medium active, high active, and very high active), and fruit/vegetable intake (continuous).  
Abbreviations: HR, hazard ratio; 95% CI, 95% confidence interval.