Supplementary Table 1. Logic of health risk appraisal for cardiovascular disease

| Risk Factors                      | Criteria                      | Risk (Male) | Risk (Female) | Remark                                      |
|-----------------------------------|-------------------------------|-------------|---------------|---------------------------------------------|
| **BMI (kg/m²)**                   |                               |             |               | Select the higher risk between BMI and WC  |
| < 25.0                            | 1                             | 1           |               |                                             |
| 25.0 – 26.4                       | 1.04                          | 1.02        |               |                                             |
| 26.5 – 27.9                       | 1.15                          | 1.03        |               |                                             |
| 28.0 – 29.9                       | 1.36                          | 1.15        |               |                                             |
| ≥30.0                             | 1.58                          | 1.33        |               |                                             |
| **Waist circumference (cm)**      |                               |             |               |                                             |
| < 90 (Male)/85 (Female)           | 1                             | 1           |               |                                             |
| ≥90 (Male)/85 (Female)            | 1.44                          | 1.52        |               |                                             |
| **Blood pressure (mmHg)**         |                               |             |               |                                             |
| <120 and <80                      | 1                             | 1           |               |                                             |
| 120-139 or 80-89                  | 1.25                          | 1.43        |               |                                             |
| 140-159 or 90-99                  | 1.78                          | 2.06        |               |                                             |
| ≥160 or ≥100                      | 2.71                          | 3.2         |               |                                             |
| **Treatment of hypertension**     |                               |             |               |                                             |
| No                                | 1                             | 1           |               |                                             |
| Yes                               | 1.22                          | 1.22        |               |                                             |
| **Fasting blood sugar (mg/dL)**   |                               |             |               |                                             |
| <100                              | 1                             | 1           |               |                                             |
| 100-109                           | 1.04                          | 1.03        |               |                                             |
| 110-125                           | 1.12                          | 1.14        |               |                                             |
| 126-139                           | 1.27                          | 1.31        |               |                                             |
| ≥140                              | 1.75                          | 1.8         |               |                                             |
| **Treatment of diabetes**         |                               |             |               |                                             |
| No                                | 1                             | 1           |               |                                             |
| Yes                               | 1.42                          | 1.42        |               |                                             |
| **Total cholesterol (mg/dL)**     |                               |             |               |                                             |
| <200                              | 1                             | 1           |               |                                             |
| 200-239                           | 1.15                          | 1.07        |               |                                             |
| ≥240                              | 1.37                          | 1.2         |               |                                             |
| **GFR (MDRD) (ml/min/1.73m²)**    |                               |             |               |                                             |
| ≥60                               | 1                             | 1           |               |                                             |
| ≥45 & <60                         | 1.34                          | 1.34        |               |                                             |
| <45                               | 2.09                          | 2.09        |               |                                             |
| Select the higher risk between GFR and Dipstick proteinuria |
| **Proteinuria by dipstick**       | None/trace/1+                 | 1           | 1             |                                             |
|                                   | 2+                            | 1.69        | 1.69          |                                             |
| **Smoking status**                |                               |             |               |                                             |
| 3+ or above                       | 2.43                          | 2.43        |               |                                             |
| None smoking                      | 1                             | 1           |               |                                             |
| Past smoking                      | 1.3                           | 1.2         |               |                                             |
| Current smoking                   | 1.6                           | 1.6         |               |                                             |
| **Exercise**                      |                               |             |               |                                             |
| ≥3 days per week                  | 1                             | 1           |               |                                             |
| ≤2 days per week                  | 1.2                           | 1.2         |               |                                             |
Supplementary Table 2. Average absolute risk (10 years) of individual subjects according to the type of health examination (including and excluding total cholesterol measurement)

| Age  | Including Total Cholesterol | Excluding Total Cholesterol |
|------|-----------------------------|----------------------------|
|      | Male | Female | Male | Female |
| 20-24| 1.83 | 1.43   | 1.8  | 1.42   |
| 25-29| 1.91 | 1.4    | 1.86 | 1.38   |
| 30-34| 2.02 | 1.44   | 1.94 | 1.41   |
| 35-39| 2.08 | 1.47   | 1.98 | 1.45   |
| 40-44| 2.11 | 1.54   | 2.01 | 1.51   |
| 45-49| 2.14 | 1.64   | 2.04 | 1.6    |
| 50-54| 2.19 | 1.78   | 2.09 | 1.72   |
| 55-59| 2.23 | 1.92   | 2.14 | 1.85   |
| 60-64| 2.25 | 2.08   | 2.17 | 2.02   |
| 65-69| 2.28 | 2.22   | 2.2  | 2.16   |
| 70-74| 2.25 | 2.32   | 2.18 | 2.26   |
| 75-  | 2.24 | 2.4    | 2.18 | 2.35   |
| Age | Absolute Risk Male | Female | Age | Absolute Risk Male | Female |
|-----|--------------------|--------|-----|--------------------|--------|
| 20  | 99                 | 92     | 53  | 5,573              | 2,905  |
| 21  | 138                | 103    | 54  | 5,988              | 3,201  |
| 22  | 178                | 115    | 55  | 6,403              | 3,496  |
| 23  | 217                | 126    | 56  | 6,818              | 3,792  |
| 24  | 256                | 137    | 57  | 7,234              | 4,088  |
| 25  | 295                | 149    | 58  | 7,928              | 4,720  |
| 26  | 334                | 160    | 59  | 8,622              | 5,353  |
| 27  | 374                | 172    | 60  | 9,316              | 5,986  |
| 28  | 449                | 211    | 61  | 10,010             | 6,619  |
| 29  | 524                | 250    | 62  | 10,705             | 7,252  |
| 30  | 600                | 289    | 63  | 11,462             | 8,001  |
| 31  | 675                | 328    | 64  | 12,219             | 8,750  |
| 32  | 751                | 368    | 65  | 12,976             | 9,499  |
| 33  | 873                | 402    | 66  | 13,733             | 10,248 |
| 34  | 995                | 437    | 67  | 14,491             | 10,997 |
| 35  | 1,117              | 472    | 68  | 15,205             | 11,975 |
| 36  | 1,239              | 507    | 69  | 15,919             | 12,953 |
| 37  | 1,362              | 542    | 70  | 16,633             | 13,931 |
| 38  | 1,557              | 646    | 71  | 17,347             | 14,909 |
| 39  | 1,752              | 750    | 72  | 18,062             | 15,887 |
| 40  | 1,947              | 854    | 73  | 18,380             | 16,307 |
| 41  | 2,142              | 958    | 74  | 18,698             | 16,728 |
| 42  | 2,337              | 1,062  | 75  | 19,017             | 17,148 |
| 43  | 2,591              | 1,143  | 76  | 19,335             | 17,569 |
| 44  | 2,846              | 1,225  | 77  | 19,654             | 17,990 |
| 45  | 3,101              | 1,307  | 78  | 19,972             | 18,410 |
| 46  | 3,356              | 1,389  | 79  | 20,290             | 18,831 |
| 47  | 3,611              | 1,471  | 80  | 20,609             | 19,251 |
| 48  | 3,920              | 1,698  | 81  | 20,927             | 19,672 |
| 49  | 4,229              | 1,926  | 82  | 21,246             | 20,093 |
| 50  | 4,539              | 2,154  | 83  | 21,564             | 20,513 |
| 51  | 4,848              | 2,382  | 84  | 21,882             | 20,934 |
| 52  | 5,158              | 2,610  | 85  | 22,201             | 21,354 |
Supplementary Table 4. Components of and scoring standards for Korean Healthy Eating Index

| Components (score range)                      | Reference for score of each component |
|-----------------------------------------------|---------------------------------------|
|                                               | Maximum score | Minimum score |
| Having breakfast (0–10)                       | 5–7 day/week  | 0 day/week    |
| Whole grain (0–5)                             | ≥0.3 serving/day | 0 serving/day |
| Total fruit, including juice (0–5)            | Men: (aged 19–64) ≥3 serving/day, (aged≥65) ≥2 serving/day | 0 serving/day |
|                                               | Women: (aged 19–64) ≥2 serving/day, (aged≥65) ≥1 serving/day | 0 serving/day |
|                                               | Men: (aged 19–64) ≥1.5 serving/day, (aged≥65) ≥1 serving/day | 0 serving/day |
|                                               | Women: (aged 19–64) ≥1 serving/day, (aged≥65) ≥0.5 serving/day | 0 serving/day |
| Total vegetable, including Kimchi and pickles (0–5) | Men: ≥8 serving/day | 0 serving/day |
| Vegetable, excluding Kimchi and pickles (0–5) | Men: ≥5 serving/day | 0 serving/day |
|                                               | Women: (aged 19–64) ≥5 serving/day, (aged≥65) ≥3 serving/day | 0 serving/day |
|                                               | Men: (aged 19–64) ≥5 serving/day, (aged≥65) ≥4 serving/day | 0 serving/day |
|                                               | Women: (aged 19–64) ≥4 serving/day, (aged≥65) ≥2.5 serving/day | 0 serving/day |
| Milk and dairy (0–10)                         | ≥1 serving/day | 0 serving/day |
| Sodium (0–10)                                 | ≤2,000 mg/day | >6,500 mg/day |
| Saturated fatty acid (0–10)                   | ≤7% of energy | >10 % of energy |
| Empty calorie foods (0–10)                    | ≤10% of energy | >20 % of energy |
| Carbohydrate (0–5)                            | 55–65% of energy | <50%, >75% of energy |
| Fat (0–5)                                     | 15–30% of energy | <10%, >35% of energy |
| Total energy (0–5)                            | 75–125% of EER by sex and age group <60%, >140% of EAR |

EER = estimated energy requirement.