

SUPPLEMENTARY TABLES

Supplementary Table 1. Distributions of variables of included participants compared to results from datasets excluding participants due to lack of follow-up.

| Characteristics | Participants included (n =12,331) | Participants excluded due to lack of follow-up (n =11,048) |
|--------------------------------------|--|---|
| Age, mean (SD), years | 89.52 (7.0) | 92.93 (7.2) |
| Women | 6946 (56.3) | 6332 (57.3) |
| Residence | | |
| Urban | 4923 (39.9) | 4298 (38.9) |
| Rural | 7408 (60.1) | 6750 (61.1) |
| Co-residence status | | |
| Living alone | 2039 (16.5) | 1863 (16.9) |
| Living with others | 10,292 (83.5) | 9185 (83.1) |
| Marital status | | |
| Married | 2858 (23.2) | 1690 (15.3) |
| Not married | 9473 (76.8) | 9358 (84.7) |
| Educational level, years | | |
| 0 | 8102 (65.7) | 7676 (69.9) |
| ≥ 1 | 4229 (34.3) | 3313 (30.1) |
| BMI, kg/m ² | | |
| < 18.5 | 5491 (44.5) | 4699 (51.1) |
| 18.5-23.9 | 5292 (42.9) | 3659 (39.8) |
| ≥ 24.0 | 1548 (12.6) | 840 (9.1) |
| Smoking status | | |
| Current smoker | 2293 (18.6) | 1912 (17.3) |
| Former smoker | 1685 (13.7) | 1534 (13.9) |
| Nonsmoker | 8353 (67.7) | 7595 (68.8) |
| Alcohol status | | |
| Current drinker | 2775 (22.5) | 2265 (20.5) |
| Former drinker | 1166 (9.5) | 1163 (10.5) |
| Nondrinker | 8390 (68.0) | 7610 (68.9) |
| Frequent fresh vegetable consumption | 4140 (33.6) | 4352 (39.4) |
| Frequent fresh fruit consumption | 10,893 (88.3) | 9831 (89.0) |
| Physical exercise | 6613 (53.7) | 6888 (62.4) |
| Depression symptoms | 510 (4.5) | 795 (7.2) |
| Cognitive impairment | 1677 (13.7) | 2191 (22.5) |
| Hypertension | 5087 (41.2) | 4832 (45.8) |
| Diabetes mellitus | 119 (1.0) | 130 (1.2) |
| Respiratory disease | 1252 (10.1) | 1225 (11.1) |
| Stroke | 294 (2.4) | 264 (2.4) |
| Heart disease | 759 (6.2) | 666 (6.1) |

ADL: activities of daily living; SD: standard deviation; BMI: body mass index. Data are presented as n (percent) unless otherwise indicated.

Supplementary Table 2. Association between leisure activities and disability in activities of daily living additionally adjusted for time of recruitment.

| Leisure activity | Disability in activities of daily living | |
|---------------------------------------|--|---------|
| | HR (95% CI) ^a | P |
| Watching TV or listening to the radio | | |
| Never | 1.00 (reference) | - |
| Sometimes | 0.82 (0.75-0.89) | < 0.001 |
| Almost every day | 0.82 (0.75-0.90) | < 0.001 |
| Reading books or newspapers | | |
| Never | 1.00 (reference) | - |
| Sometimes | 0.88 (0.76-1.01) | 0.072 |
| Almost every day | 0.83 (0.72-0.96) | 0.014 |
| Gardening | | |
| Never | 1.00 (reference) | - |
| Sometimes | 0.71 (0.64-0.80) | < 0.001 |
| Almost every day | 0.66 (0.60-0.74) | < 0.001 |
| Playing cards or mah-jong | | |
| Never | 1.00 (reference) | - |
| Sometimes | 0.89 (0.79-1.01) | 0.672 |
| Almost every day | 0.91 (0.77-1.07) | 0.236 |
| Keeping domestic animals or pets | | |
| Never | 1.00 (reference) | - |
| Sometimes | 1.00 (0.87-1.16) | 0.972 |
| Almost every day | 0.86 (0.75-0.98) | 0.293 |
| Attending religious activities | | |
| Never | 1.00 (reference) | - |
| Sometimes | 0.90 (0.80-1.00) | 0.051 |
| Almost every day | 0.90 (0.77-1.07) | 0.236 |
| Number of leisure activities | | |
| 0 | 1.00 (reference) | - |
| 1 | 0.72 (0.66-0.79) | < 0.001 |
| 2 | 0.63 (0.57-0.69) | < 0.001 |
| 3 | 0.50 (0.44-0.57) | < 0.001 |
| 4+ | 0.46 (0.39-0.54) | < 0.001 |
| <i>P</i> for trend | | < 0.001 |

HR: hazard ratio; CI: confidence interval

^a Adjusted for age and sex, residence, co-residence status, marital status, educational level, body mass index, smoking status, alcohol status, frequent fresh vegetable consumption, frequent fresh fruit consumption, physical exercise, hypertension, diabetes mellitus, respiratory disease, stroke, heart disease, depression symptoms, cognitive impairment, and participation in other leisure activities.

Supplementary Table 3. Association between leisure activities and disability in activities of daily living excluding participants with missing data for the covariates.

| Leisure activity | Disability in activities of daily living | |
|---------------------------------------|--|----------|
| | HR (95% CI) ^a | <i>P</i> |
| Watching TV or listening to the radio | | |
| Never | 1.00 (reference) | - |
| Sometimes | 0.80 (0.73-0.87) | < 0.001 |
| Almost every day | 0.74 (0.68-0.81) | < 0.001 |
| Reading books or newspapers | | |
| Never | 1.00 (reference) | - |
| Sometimes | 0.89 (0.77-1.04) | 0.141 |
| Almost every day | 0.86 (0.75-1.00) | 0.049 |
| Gardening | | |
| Never | 1.00 (reference) | - |
| Sometimes | 0.75 (0.67-0.84) | < 0.001 |
| Almost every day | 0.64 (0.58-0.72) | < 0.001 |
| Playing cards or mah-jong | | |
| Never | 1.00 (reference) | - |
| Sometimes | 0.85 (0.75-0.96) | 0.010 |
| Almost every day | 0.85 (0.72-1.00) | 0.046 |
| Keeping domestic animals or pets | | |
| Never | 1.00 (reference) | - |
| Sometimes | 1.05 (0.90-1.21) | 0.538 |
| Almost every day | 0.85 (0.73-0.98) | 0.141 |
| Attending religious activities | | |
| Never | 1.00 (reference) | - |
| Sometimes | 0.94 (0.84-1.05) | 0.293 |
| Almost every day | 0.89 (0.74-1.08) | 0.235 |
| Number of leisure activities | | |
| 0 | 1.00 (reference) | - |
| 1 | 0.72 (0.66-0.79) | < 0.001 |
| 2 | 0.63 (0.57-0.69) | < 0.001 |
| 3 | 0.50 (0.44-0.57) | < 0.001 |
| 4+ | 0.46 (0.39-0.54) | < 0.001 |
| <i>P</i> for trend | | < 0.001 |

HR: hazard ratio; CI: confidence interval

^a Adjusted for age and sex, residence, co-residence status, marital status, educational level, body mass index, smoking status, alcohol status, frequent fresh vegetables consumption, frequent fresh fruit consumption, physical exercise, hypertension, diabetes mellitus, respiratory disease, stroke, heart disease, depression symptoms, cognitive impairment, and participation in other leisure activities.

Supplementary Table 4. Association between leisure activities and disability in activities of daily living excluding participants who lost to follow-up at least two years.

| Leisure activity | Disability in activities of daily living | |
|---------------------------------------|--|----------|
| | HR (95% CI) ^a | <i>P</i> |
| Watching TV or listening to the radio | | |
| Never | 1.00 (reference) | - |
| Sometimes | 0.74 (0.68-0.82) | < 0.001 |
| Almost every day | 0.72 (0.65-0.79) | < 0.001 |
| Reading books or newspapers | | |
| Never | 1.00 (reference) | - |
| Sometimes | 0.94 (0.80-1.11) | 0.444 |
| Almost every day | 0.90 (0.77-1.06) | 0.211 |
| Gardening | | |
| Never | 1.00 (reference) | - |
| Sometimes | 0.67 (0.59-0.76) | < 0.001 |
| Almost every day | 0.59 (0.53-0.67) | < 0.001 |
| Playing cards or mah-jong | | |
| Never | 1.00 (reference) | - |
| Sometimes | 0.85 (0.74-0.97) | 0.016 |
| Almost every day | 0.82 (0.68-0.98) | 0.033 |
| Keeping domestic animals or pets | | |
| Never | 1.00 (reference) | - |
| Sometimes | 0.98 (0.83-1.16) | 0.820 |
| Almost every day | 0.86 (0.73-1.00) | 0.051 |
| Attending religious activities | | |
| Never | 1.00 (reference) | - |
| Sometimes | 0.89 (0.78-1.01) | 0.076 |
| Almost every day | 0.90 (0.73-1.10) | 0.311 |
| Number of leisure activities | | |
| 0 | 1.00 (reference) | - |
| 1 | 0.66 (0.60-0.73) | < 0.001 |
| 2 | 0.54 (0.49-0.61) | < 0.001 |
| 3 | 0.43 (0.37-0.49) | < 0.001 |
| 4+ | 0.42 (0.35-0.50) | < 0.001 |
| <i>P</i> for trend | | < 0.001 |

HR: hazard ratio; CI: confidence interval

^a Adjusted for age and sex, residence, co-residence status, marital status, educational level, body mass index, smoking status, alcohol status, frequent fresh vegetable consumption, frequent fresh fruit consumption, physical exercise, hypertension, diabetes mellitus, respiratory disease, stroke, heart disease, depression symptoms, cognitive impairment, and participation in other leisure activities.