



Supplementary Table S1. Sex-specific changes in systolic and diastolic blood pressures with time by changes in living environment in everyday life according to drinking status.

| | Men | | | | Women | | | |
|--|--|---------------------------------|-----------|--|---------------------------------|-----------|--|--|
| | Without living environment changes (reference) | With living environment changes | | Without living environment changes (reference) | With living environment changes | | | |
| Non-current drinkers | | | | | | | | |
| Number | 1,711 | 3,925 | | 4,058 | 10,072 | | | |
| | | β (95% CI) | p value | | β (95% CI) | p value | | |
| Systolic blood pressure | | | | | | | | |
| Baseline difference | 0 | 0.14 (-0.54, 0.81) | 0.69 | 0 | -0.29 (-0.74, 0.16) | 0.20 | | |
| Time-dependent difference** | 0 | -0.19 (-0.47, 0.10) | 0.20 | 0 | -0.22 (-0.40, -0.04) | 0.02* | | |
| Diastolic blood pressure | | | | | | | | |
| Baseline difference | 0 | 0.49 (0.01, 0.97) | 0.045 | 0 | 0.23 (-0.08, 0.54) | 0.15 | | |
| Time-dependent difference** | 0 | 0.04 (-0.16, 0.24) | 0.70 | 0 | 0.02 (-0.11, 0.14) | 0.78 | | |
| Current drinkers of ethanol at 1–22 g/day or ≥ 23 g/day | | | | | | | | |
| Number | 1,303 | 3,087 | | 207 | 965 | | | |
| | | β (95% CI) | p value | | β (95% CI) | p value | | |
| Systolic blood pressure | | | | | | | | |
| Baseline difference | 0 | -0.03 (-0.80, 0.75) | 0.95 | 0 | 0.43 (-1.30, 2.15) | 0.63 | | |
| Time-dependent difference** | 0 | 0.13 (-0.20, 0.47) | 0.43 | 0 | -0.66 (-1.46, 0.14) | 0.10 | | |
| Diastolic blood pressure | | | | | | | | |
| Baseline difference | 0 | 0.72 (0.17, 1.27) | 0.01* | 0 | 0.74 (-0.53, 2.01) | 0.25 | | |
| Time-dependent difference** | 0 | 0.005 (-0.23, 0.24) | 0.97 | 0 | -0.38 (-0.96, 0.21) | 0.21 | | |

* *p* value of interaction with time

** Time \times changes in living environment

Adjusted for age, antihypertensive medication use from 2012 to 2015, current smoking, drinking status, regular physical exercise, subjective sufficient sleep, K6 score, and BMI from 2012 to 2015.

The *p*-value of interaction with time is based on the assessment comparing between reference category ("without living-environment changes") and other categories by using the linear mixed-effect models.

Supplemental Table S2. Sex-specific baseline characteristics of participants with only one baseline measurement by changes in living environment (n=9,040).

| | Men | | | Women | | |
|---|---|--------------------------------------|---------------------------------|---|--------------------------------------|------------------------------|
| | Without living en- vironment changes | With living envi- ronment changes | <i>p</i> for differ- ence | Without living en- vironment changes | With living envi- ronment changes | <i>p</i> for dif- ference |
| Number | 1,157 | 2,741 | | 1,384 | 3,758 | |
| Age, mean (SD) | 59.5 (17.4) | 53.6 (18.5) | <0.001 | 58.1 (18.4) | 50.9 (19.4) | <0.001 |
| BMI (kg/m²), mean (SD) | 24.1 (3.7) | 24.3 (3.8) | 0.08 | 23.3 (3.8) | 23.2 (4.2) | 0.39 |
| Systolic blood pressure, mean (SD) | 129.8 (16.7) | 127.4 (15.7) | <0.001 | 126.4 (17.8) | 121.7 (17.8) | <0.001 |
| Diastolic blood pressure, mean (SD) | 76.5 (10.9) | 76.6 (10.9) | 0.67 | 73.4 (11.1) | 72.3 (11.3) | 0.01 |
| Antihypertensive medication use, % | 15.9 | 13.3 | 0.031 | 15.6 | 10.4 | <0.001 |
| Hypertension, % | 38.1 | 33.2 | 0.003 | 33.2 | 24.3 | <0.001 |
| High triglycerides, % | 24.0 | 26.7 | 0.09 | 15.2 | 14.8 | 0.75 |
| High LDL cholesterol, % | 33.8 | 35.2 | 0.41 | 42.4 | 38.9 | 0.02 |
| Low HDL cholesterol, % | 23.0 | 22.2 | 0.60 | 22.9 | 18.5 | <0.001 |
| Diabetes, % | 17.9 | 15.8 | 0.10 | 11.5 | 8.3 | <0.001 |
| Smoking Status: | | | | | | |
| never, % | 28.1 | 25.5 | 0.09 | 81.1 | 72.9 | <0.001 |
| ex-smokers, % | 39.1 | 34.5 | 0.006 | 6.4 | 8.7 | 0.008 |
| current smokers, % | 28.3 | 34.1 | <0.001 | 5.3 | 11.5 | <0.001 |
| Drinking Status: | | | | | | |
| never, % | 36.4 | 36.7 | 0.85 | 76.0 | 70.9 | <0.001 |
| Occasional drinkers, % | 22.9 | 22.8 | 0.94 | 16.7 | 18.3 | 0.18 |
| current drinkers, % | 38.6 | 37.8 | 0.64 | 5.3 | 8.2 | <0.001 |
| K6≥13, % | 6.7 | 13.8 | <0.001 | 10.7 | 16.9 | <0.001 |
| Regular physical exercise (yes), % | 56.4 | 48.6 | <0.001 | 47.1 | 42.0 | 0.001 |
| Subjective sufficient sleep (yes), % | 91.2 | 83.6 | <0.001 | 89.9 | 79.2 | <0.001 |

Hypertension: systolic pressure ≥ 140mmHg or diastolic pressure ≥ 90mmHg, and/or antihypertensive medication use

High triglycerides: triglycerides ≥ 150 mg/dl (1.69mmol/l)

High LDL cholesterol: LDL cholesterol ≥ 140mg/dl (3.62mmol/l) or medication use

Low HDL cholesterol: HDL cholesterol < 40mg/dl (1.03mmol/l) or medication use

Diabetes: fasting glucose ≥ 126mg/dl (7.0mmol/l), or casual blood glucose ≥ 200mg/dl (11.1mmol) and/or on treatment or HbA1c ≥ 6.5%

Drinking Status: never drinkers: never or rarely, occasional drinkers: sometimes, current drinkers : everyday