

Table S1. General characteristics of the participants by sex

| | Total (n = 42613) | Men (n = 17311) | Women (n = 25302) | p value |
|--|-------------------|-----------------|-------------------|---------|
| Age, years | 41.87±0.13 | 41.34±0.15 | 42.39±0.15 | <0.001 |
| Coffee intake | | | | <0.001 |
| <1 time/week | 7750 (18.19) | 2575 (14.87) | 5175 (20.45) | |
| 1 time/week ~ <1 time/day | 7605 (17.85) | 2948 (17.03) | 4657 (18.41) | |
| ≥1 time/day | 27258 (63.97) | 11788 (68.10) | 15470 (61.14) | |
| Tea intake | | | | <0.001 |
| <1 time/week | 28952 (67.94) | 11270 (65.10) | 17682 (69.88) | |
| 1 time/week ~ <1 time/day | 9318 (21.87) | 4000 (23.11) | 5318 (21.02) | |
| ≥1 time/day | 4343 (10.19) | 2041 (11.79) | 2302 (9.10) | |
| Carbonated beverage intake | | | | <0.001 |
| <1 time/week | 31995 (75.08) | 11486 (66.35) | 20509 (81.06) | |
| 1 time/week ~ <1 time/day | 9876 (23.18) | 5364 (30.99) | 4512 (17.83) | |
| ≥1 time/day | 742 (1.74) | 461 (2.66) | 281 (1.11) | |
| Nutritional intake | | | | |
| Total energy intake, kcal/day | 2,043.14±6.02 | 2,371.05±8.89 | 1,717.84±5.57 | <0.001 |
| Carbohydrates, % of energy | 63.46±0.11 | 60.88±0.15 | 66.02±0.12 | <0.001 |
| Protein, % of energy | 14.36±0.03 | 14.48±0.04 | 14.25±0.04 | <0.001 |
| Fat, % of energy | 19.12±0.07 | 19.27±0.09 | 18.98±0.09 | 0.007 |
| Average monthly household income, 10,000 KRW | 381.10±3.28 | 385.12±3.81 | 377.09±3.42 | 0.009 |
| Education | | | | <0.001 |
| ≤Elementary school | 7896 (20.24) | 2271 (14.70) | 5625 (23.88) | |
| Middle school | 3942 (10.11) | 1666 (10.78) | 2276 (9.66) | |
| High school | 14184 (36.36) | 5834 (37.75) | 8350 (35.45) | |
| ≥College | 12985 (33.29) | 5683 (36.77) | 7302 (31.00) | |
| Smoking | | | | <0.001 |
| None | 25581 (64.94) | 3959 (25.33) | 21622 (91.00) | |
| Past | 6301 (16.00) | 5353 (34.25) | 948 (3.99) | |
| Current | 7508 (19.06) | 6318 (40.42) | 1190 (5.01) | |
| Alcohol drinking | | | | <0.001 |
| <1 time/month | 17950 (45.63) | 4096 (26.24) | 13854 (58.39) | |
| ≥1 time/month | 21386 (54.37) | 11512 (73.76) | 9874 (41.61) | |
| Walking | | | | <0.001 |
| <30 minute * 5 days/week | 22786 (58.51) | 8636 (55.93) | 14150 (60.19) | |
| ≥30 minute * 5 days/week | 16161 (41.49) | 6804 (44.07) | 9357 (39.81) | |
| Body mass index | | | | <0.001 |
| <25 kg/m ² | 27414 (68.51) | 10012 (62.83) | 17402 (72.27) | |

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|-----------------------|---------------|--------------|--------------|--------|
| ≥25 kg/m ² | 12599 (31.49) | 5923 (37.17) | 6676 (27.73) | |
| Hypertension | 6773 (37.25) | 2934 (39.73) | 3839 (35.56) | <0.001 |
| Diabetes | 2494 (16.93) | 1213 (20.19) | 1281 (14.69) | <0.001 |
| Dyslipidemia | 3570 (23.57) | 1361 (22.79) | 2209 (24.08) | 0.067 |
| Metabolic syndrome | 8706 (21.70) | 4123 (25.79) | 4583 (18.99) | <0.001 |

KRW: Korea republic won.

Data are presented as mean ± standard error for continuous variables (linear regression) and as numbers (%) for categorical variables (χ^2 test).

Tables S2. General characteristics of men by the frequency of intake of coffee

| | <1 time/week (n = 2575) | 1 time/week ~ <1 time/day (n = 2948) | ≥1 time/day (n = 11788) | p value |
|--|-------------------------|--------------------------------------|-------------------------|---------|
| Age, years | 38.18±0.39 | 35.59±0.30 | 43.74±0.17 | <0.001 |
| Tea intake | | | | <0.001 |
| <1 time/week | 1894 (73.55) | 1561 (52.95) | 7815 (66.30) | |
| 1 time/week ~ <1 time/day | 471 (18.29) | 1207 (40.94) | 2322 (19.70) | |
| ≥1 time/day | 210 (8.16) | 180 (6.11) | 1651 (14.01) | |
| Carbonated beverage intake | | | | <0.001 |
| <1 time/week | 1876 (72.85) | 1649 (55.94) | 7961 (67.53) | |
| 1 time/week ~ <1 time/day | 638 (24.78) | 1222 (41.45) | 3504 (29.73) | |
| ≥1 time/day | 61 (2.37) | 77 (2.61) | 323 (2.74) | |
| Nutritional intake | | | | |
| Total energy intake, kcal/day | 2,270.07±21.94 | 2,343.02±19.32 | 2,403.05±10.31 | <0.001 |
| Carbohydrates, % of energy | 61.13±0.39 | 59.15±0.33 | 61.32±0.17 | 0.024 |
| Protein, % of energy | 14.58±0.11 | 15.03±0.11 | 14.30±0.05 | <0.001 |
| Fat, % of energy | 19.20±0.25 | 20.75±0.22 | 18.85±0.10 | <0.001 |
| Average monthly household income, 10,000 KRW | 346.35±7.46 | 404.09±7.90 | 388.75±4.06 | <0.001 |
| Education | | | | <0.001 |
| ≤Elementary school | 426 (18.30) | 353 (13.28) | 1492 (14.25) | |
| Middle school | 223 (9.58) | 212 (7.97) | 1231 (11.76) | |
| High school | 940 (40.38) | 1185 (44.57) | 3709 (35.44) | |
| ≥College | 739 (31.74) | 909 (34.19) | 4035 (38.55) | |
| Smoking | | | | <0.001 |
| None | 968 (41.31) | 998 (37.20) | 1993 (18.79) | |
| Past | 788 (33.63) | 853 (31.79) | 3712 (35.01) | |
| Current | 587 (25.05) | 832 (31.01) | 4899 (46.20) | |
| Alcohol drinking | | | | <0.001 |
| <1 time/month | 757 (32.31) | 648 (24.17) | 2691 (25.43) | |
| ≥1 time/month | 1586 (67.69) | 2033 (75.83) | 7893 (74.57) | |
| Walking | | | | <0.001 |
| <30 minute * 5 days/week | 1263 (54.28) | 1374 (51.69) | 5999 (57.38) | |
| ≥30 minute * 5 days/week | 1064 (45.72) | 1284 (48.31) | 4456 (42.62) | |
| Body mass index | | | | <0.001 |
| <25 kg/m ² | 1633 (68.50) | 1736 (63.59) | 6643 (61.39) | |
| ≥25 kg/m ² | 751 (31.50) | 994 (36.41) | 4178 (38.61) | |
| Hypertension | 454 (43.53) | 433 (29.76) | 2047 (41.89) | <0.001 |
| Diabetes | 197 (23.68) | 186 (14.86) | 830 (21.15) | <0.001 |
| Dyslipidemia | 193 (24.16) | 185 (15.02) | 983 (24.94) | <0.001 |

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|--------------------|-------------|-------------|--------------|--------|
| Metabolic syndrome | 534 (22.34) | 587 (21.41) | 3002 (27.66) | <0.001 |
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KRW: Korea republic won.

Data are presented as mean \pm standard error for continuous variables (linear regression) and as numbers (%) for categorical variables (χ^2 test).

Tables S3. General characteristics of women by the frequency of intake of coffee

| | <1 time/week (n = 5175) | 1 time/week ~ <1 time/day (n = 4657) | ≥1 time/day (n = 15470) | p value |
|--|-------------------------|--------------------------------------|-------------------------|---------|
| Age, years | 42.48±0.32 | 37.59±0.28 | 43.95±0.16 | <0.001 |
| Tea intake | | | | <0.001 |
| <1 time/week | 4193 (81.02) | 2791 (59.93) | 10698 (69.15) | |
| 1 time/week ~ <1 time/day | 735 (14.20) | 1642 (35.26) | 2941 (19.01) | |
| ≥1 time/day | 247 (4.77) | 224 (4.81) | 1831 (11.84) | |
| Carbonated beverage intake | | | | <0.001 |
| <1 time/week | 4434 (85.68) | 3416 (73.35) | 12659 (81.83) | |
| 1 time/week ~ <1 time/day | 690 (13.33) | 1189 (25.53) | 2633 (17.02) | |
| ≥1 time/day | 51 (0.99) | 52 (1.12) | 178 (1.15) | |
| Nutritional intake | | | | |
| Total energy intake, kcal/day | 1,707.91±12.63 | 1,703.48±12.05 | 1,725.88±6.64 | 0.113 |
| Carbohydrates, % of energy | 67.58±0.24 | 64.21±0.25 | 66.11±0.14 | 0.002 |
| Protein, % of energy | 14.14±0.07 | 14.47±0.08 | 14.21±0.05 | 0.974 |
| Fat, % of energy | 17.88±0.18 | 20.34±0.19 | 18.89±0.10 | 0.007 |
| Average monthly household income, 10,000 KRW | 326.74±5.06 | 399.68±5.82 | 386.12±3.91 | <0.001 |
| Education | | | | <0.001 |
| ≤Elementary school | 1567 (32.52) | 969 (22.30) | 3089 (21.47) | |
| Middle school | 426 (8.84) | 343 (7.89) | 1507 (10.47) | |
| High school | 1524 (31.63) | 1649 (37.94) | 5177 (35.98) | |
| ≥College | 1301 (27.00) | 1385 (31.87) | 4616 (32.08) | |
| Smoking | | | | <0.001 |
| None | 4501 (92.69) | 4024 (91.77) | 13097 (90.21) | |
| Past | 194 (4.00) | 171 (3.90) | 583 (4.02) | |
| Current | 161 (3.32) | 190 (4.33) | 839 (5.78) | |
| Alcohol drinking | | | | <0.001 |
| <1 time/month | 3510 (72.45) | 2524 (57.61) | 7820 (53.92) | |
| ≥1 time/month | 1335 (27.55) | 1857 (42.39) | 6682 (46.08) | |
| Walking | | | | 0.026 |
| <30 minute * 5 days/week | 2857 (59.38) | 2554 (58.86) | 8739 (60.87) | |
| ≥30 minute * 5 days/week | 1954 (40.62) | 1785 (41.14) | 5618 (39.13) | |
| Body mass index | | | | <0.001 |
| <25 kg/m ² | 3644 (74.02) | 3274 (73.96) | 10484 (71.18) | |
| ≥25 kg/m ² | 1279 (25.98) | 1153 (26.04) | 4244 (28.82) | |
| Hypertension | 995 (44.80) | 650 (29.78) | 2194 (34.32) | <0.001 |
| Diabetes | 417 (24.46) | 229 (12.41) | 635 (12.28) | <0.001 |
| Dyslipidemia | 502 (29.24) | 358 (18.70) | 1349 (24.34) | <0.001 |

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|--------------------|--------------|--------------|--------------|--------|
| Metabolic syndrome | 1082 (21.92) | 795 (17.91) | 2706 (18.34) | <0.001 |
| Menopause | 2501 (50.79) | 1674 (37.93) | 5765 (39.44) | <0.001 |

KRW: Korea republic won.

Data are presented as mean \pm standard error for continuous variables (linear regression) and as numbers (%) for categorical variables (χ^2 test).

Tables S4. General characteristics of men by the frequency of intake of tea

| | <1 time/week (n = 11270) | 1 time/week ~ <1 time/day (n = 4000) | ≥1 time/day (n = 2041) | p value |
|--|--------------------------|--------------------------------------|------------------------|---------|
| Age, years | 42.49±0.19 | 38.10±0.25 | 41.94±0.32 | <0.001 |
| Coffee intake | | | | <0.001 |
| <1 time/week | 1894 (16.81) | 471 (11.77) | 210 (10.29) | |
| 1 time/week ~ <1 time/day | 1561 (13.85) | 1207 (30.18) | 180 (8.82) | |
| ≥1 time/day | 7815 (69.34) | 2322 (58.05) | 1651 (80.89) | |
| Carbonated beverage intake | | | | <0.001 |
| <1 time/week | 7902 (70.12) | 2258 (56.45) | 1326 (64.97) | |
| 1 time/week ~ <1 time/day | 3064 (27.19) | 1640 (41.00) | 660 (32.34) | |
| ≥1 time/day | 304 (2.70) | 102 (2.55) | 55 (2.69) | |
| Nutritional intake | | | | |
| Total energy intake, kcal/day | 2,374.48±10.59 | 2,374.13±16.82 | 2,346.37±24.97 | 0.381 |
| Carbohydrates, % of energy | 61.53±0.18 | 59.33±0.28 | 60.66±0.42 | <0.001 |
| Protein, % of energy | 14.16±0.05 | 15.07±0.09 | 14.96±0.13 | <0.001 |
| Fat, % of energy | 18.83±0.11 | 20.50±0.18 | 19.02±0.24 | <0.001 |
| Average monthly household income, 10,000 KRW | 365.77±4.33 | 423.55±6.78 | 408.14±7.71 | <0.001 |
| Education | | | | <0.001 |
| ≤Elementary school | 1887 (18.76) | 275 (7.66) | 109 (6.04) | |
| Middle school | 1260 (12.53) | 275 (7.66) | 131 (7.26) | |
| High school | 3781 (37.59) | 1445 (40.24) | 608 (33.68) | |
| ≥College | 3130 (31.12) | 1596 (44.44) | 957 (53.02) | |
| Smoking | | | | <0.001 |
| None | 2363 (23.24) | 1163 (32.01) | 433 (23.65) | |
| Past | 3519 (34.62) | 1141 (31.41) | 693 (37.85) | |
| Current | 4284 (42.14) | 1329 (36.58) | 705 (38.50) | |
| Alcohol drinking | | | | <0.001 |
| <1 time/month | 2859 (28.16) | 844 (23.25) | 393 (21.51) | |
| ≥1 time/month | 7292 (71.84) | 2786 (76.75) | 1434 (78.49) | |
| Walking | | | | 0.007 |
| <30 minute * 5 days/week | 5714 (56.85) | 1936 (54.05) | 986 (54.57) | |
| ≥30 minute * 5 days/week | 4337 (43.15) | 1646 (45.95) | 821 (45.43) | |
| Body mass index | | | | <0.001 |
| <25 kg/m ² | 6779 (65.17) | 2186 (59.29) | 1047 (56.72) | |
| ≥25 kg/m ² | 3623 (34.83) | 1501 (40.71) | 799 (43.28) | |
| Hypertension | 2035 (40.15) | 558 (33.14) | 341 (53.96) | <0.001 |
| Diabetes | 807 (19.63) | 242 (17.10) | 164 (34.10) | <0.001 |
| Dyslipidemia | 886 (21.95) | 284 (19.80) | 191 (38.05) | <0.001 |

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|--------------------|--------------|-------------|-------------|-------|
| Metabolic syndrome | 2680 (25.69) | 906 (24.49) | 537 (28.96) | 0.001 |
|--------------------|--------------|-------------|-------------|-------|

KRW: Korea republic won.

Data are presented as mean \pm standard error for continuous variables (linear regression) and as numbers (%) for categorical variables (χ^2 test).

Tables S5. General characteristics of women by the frequency of intake of tea

| | <1 time/week (n = 17682) | 1 time/week ~ <1 time/day (n = 5318) | ≥1 time/day (n = 2302) | p value |
|--|--------------------------|--------------------------------------|------------------------|---------|
| Age, years | 43.84±0.18 | 38.42±0.23 | 41.30±0.35 | <0.001 |
| Coffee intake | | | | <0.001 |
| <1 time/week | 4193 (23.71) | 735 (13.82) | 247 (10.73) | |
| 1 time/week ~ <1 time/day | 2791 (15.78) | 1642 (30.88) | 224 (9.73) | |
| ≥1 time/day | 10698 (60.50) | 2941 (55.30) | 1831 (79.54) | |
| Carbonated beverage intake | | | | <0.001 |
| <1 time/week | 14755 (83.45) | 3941 (74.11) | 1813 (78.76) | |
| 1 time/week ~ <1 time/day | 2750 (15.55) | 1310 (24.63) | 452 (19.64) | |
| ≥1 time/day | 177 (1.00) | 67 (1.26) | 37 (1.61) | |
| Nutritional intake | | | | |
| Total energy intake, kcal/day | 1,716.56±6.45 | 1,718.55±11.70 | 1,725.50±18.85 | 0.656 |
| Carbohydrates, % of energy | 66.73±0.14 | 64.27±0.23 | 65.11±0.33 | <0.001 |
| Protein, % of energy | 14.02±0.04 | 14.65±0.07 | 14.96±0.12 | <0.001 |
| Fat, % of energy | 18.44±0.10 | 20.39±0.17 | 19.53±0.24 | <0.001 |
| Average monthly household income, 10,000 KRW | 360.49±3.69 | 423.96±6.16 | 385.86±7.70 | <0.001 |
| Education | | | | <0.001 |
| ≤Elementary school | 4658 (28.23) | 676 (13.63) | 291 (13.91) | |
| Middle school | 1603 (9.72) | 450 (9.07) | 223 (10.66) | |
| High school | 5445 (33.00) | 2027 (40.86) | 878 (41.97) | |
| ≥College | 4794 (29.05) | 1808 (36.44) | 700 (33.46) | |
| Smoking | | | | 0.029 |
| None | 15109 (90.76) | 4590 (91.71) | 1923 (91.27) | |
| Past | 706 (4.24) | 174 (3.48) | 68 (3.23) | |
| Current | 833 (5.00) | 241 (4.82) | 116 (5.51) | |
| Alcohol drinking | | | | <0.001 |
| <1 time/month | 10168 (61.14) | 2654 (53.13) | 1032 (49.10) | |
| ≥1 time/month | 6463 (38.86) | 2341 (46.87) | 1070 (50.90) | |
| Walking | | | | <0.001 |
| <30 minute * 5 days/week | 10151 (61.62) | 2852 (57.58) | 1147 (55.14) | |
| ≥30 minute * 5 days/week | 6323 (38.38) | 2101 (42.42) | 933 (44.86) | |
| Body mass index | | | | <0.001 |
| <25 kg/m ² | 12094 (71.58) | 3780 (74.94) | 1528 (71.44) | |
| ≥25 kg/m ² | 4801 (28.42) | 1264 (25.06) | 611 (28.56) | |
| Hypertension | 2982 (36.08) | 602 (30.73) | 255 (44.58) | <0.001 |
| Diabetes | 988 (14.77) | 205 (12.67) | 88 (21.26) | <0.001 |
| Dyslipidemia | 1672 (23.99) | 380 (21.99) | 157 (32.98) | <0.001 |

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|--------------------|--------------|--------------|-------------|--------|
| Metabolic syndrome | 3442 (20.32) | 774 (15.31) | 367 (17.13) | <0.001 |
| Menopause | 7618 (45.52) | 1620 (32.05) | 702 (32.41) | <0.001 |

KRW: Korea republic won.

Data are presented as mean \pm standard error for continuous variables (linear regression) and as numbers (%) for categorical variables (χ^2 test).

Tables S6. General characteristics of men by the frequency of intake of carbonated beverages

| | <1 time/week (n = 11486) | 1 time/week ~ <1 time/day (n = 5364) | ≥1 time/day (n = 461) | p value |
|--|--------------------------|--------------------------------------|-----------------------|---------|
| Age, years | 46.20±0.17 | 34.38±0.20 | 30.64±0.48 | <0.001 |
| Coffee intake | | | | <0.001 |
| <1 time/week | 1876 (16.33) | 638 (11.89) | 61 (13.23) | |
| 1 time/week ~ <1 time/day | 1649 (14.36) | 1222 (22.78) | 77 (16.70) | |
| ≥1 time/day | 7961 (69.31) | 3504 (65.32) | 323 (70.07) | |
| Tea intake | | | | <0.001 |
| <1 time/week | 7902 (68.80) | 3064 (57.12) | 304 (65.94) | |
| 1 time/week ~ <1 time/day | 2258 (19.66) | 1640 (30.57) | 102 (22.13) | |
| ≥1 time/day | 1326 (11.54) | 660 (12.30) | 55 (11.93) | |
| Nutritional intake | | | | |
| Total energy intake, kcal/day | 2,317.01±10.43 | 2,443.38±14.77 | 2,544.90±56.14 | <0.001 |
| Carbohydrates, % of energy | 62.20±0.19 | 58.86±0.22 | 59.52±0.73 | <0.001 |
| Protein, % of energy | 14.31±0.05 | 14.77±0.07 | 14.42±0.27 | <0.001 |
| Fat, % of energy | 17.75±0.10 | 21.44±0.15 | 22.53±0.52 | <0.001 |
| Average monthly household income, 10,000 KRW | 375.90±4.18 | 397.93±5.77 | 408.68±18.39 | <0.001 |
| Education | | | | <0.001 |
| ≤Elementary school | 1943 (18.74) | 310 (6.60) | 18 (4.59) | |
| Middle school | 1332 (12.85) | 315 (6.71) | 19 (4.85) | |
| High school | 3521 (33.96) | 2101 (44.76) | 212 (54.08) | |
| ≥College | 3572 (34.45) | 1968 (41.93) | 143 (36.48) | |
| Smoking | | | | <0.001 |
| None | 2389 (22.80) | 1458 (30.69) | 112 (27.86) | |
| Past | 4167 (39.77) | 1137 (23.94) | 49 (12.19) | |
| Current | 3922 (37.43) | 2155 (45.37) | 241 (59.95) | |
| Alcohol drinking | | | | <0.001 |
| <1 time/month | 2861 (27.34) | 1141 (24.06) | 94 (23.38) | |
| ≥1 time/month | 7603 (72.66) | 3601 (75.94) | 308 (76.62) | |
| Walking | | | | 0.303 |
| <30 minute * 5 days/week | 5838 (56.32) | 2590 (55.28) | 208 (53.47) | |
| ≥30 minute * 5 days/week | 4528 (43.68) | 2095 (44.72) | 181 (46.53) | |
| Body mass index | | | | 0.051 |
| <25 kg/m ² | 6776 (63.48) | 2985 (61.56) | 251 (60.92) | |
| ≥25 kg/m ² | 3898 (36.52) | 1864 (38.44) | 161 (39.08) | |
| Hypertension | 2443 (48.78) | 471 (21.51) | 20 (10.70) | <0.001 |
| Diabetes | 1057 (26.95) | 146 (7.67) | 10 (5.49) | <0.001 |
| Dyslipidemia | 1097 (28.70) | 247 (12.54) | 17 (9.34) | <0.001 |

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|--------------------|--------------|--------------|------------|--------|
| Metabolic syndrome | 3008 (28.09) | 1034 (21.25) | 81 (19.66) | <0.001 |
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KRW: Korea republic won.

Data are presented as mean \pm standard error for continuous variables (linear regression) and as numbers (%) for categorical variables (χ^2 test).

Tables S7. General characteristics of women by the frequency of intake of carbonated beverages

| | <1 time/week (n = 20509) | 1 time/week ~ <1 time/day (n = 4512) | ≥1 time/day (n = 281) | p value |
|--|--------------------------|--------------------------------------|-----------------------|---------|
| Age, years | 45.32±0.16 | 32.65±0.21 | 30.56±0.78 | <0.001 |
| Coffee intake | | | | <0.001 |
| <1 time/week | 4434 (21.62) | 690 (15.29) | 51 (18.15) | |
| 1 time/week ~ <1 time/day | 3416 (16.66) | 1189 (26.35) | 52 (18.51) | |
| ≥1 time/day | 12659 (61.72) | 2633 (58.36) | 178 (63.35) | |
| Tea intake | | | | <0.001 |
| <1 time/week | 14755 (71.94) | 2750 (60.95) | 177 (62.99) | |
| 1 time/week ~ <1 time/day | 3941 (19.22) | 1310 (29.03) | 67 (23.84) | |
| ≥1 time/day | 1813 (8.84) | 452 (10.02) | 37 (13.17) | |
| Nutritional intake | | | | |
| Total energy intake, kcal/day | 1,694.68±6.10 | 1,791.10±12.73 | 1,863.23±50.61 | <0.001 |
| Carbohydrates, % of energy | 67.26±0.13 | 61.93±0.23 | 61.12±0.96 | <0.001 |
| Protein, % of energy | 14.21±0.04 | 14.43±0.08 | 13.72±0.34 | 0.182 |
| Fat, % of energy | 18.01±0.10 | 22.28±0.18 | 21.84±0.68 | <0.001 |
| Average monthly household income, 10,000 KRW | 370.45±3.62 | 399.79±5.79 | 394.37±23.39 | <0.001 |
| Education | | | | <0.001 |
| ≤Elementary school | 5179 (27.03) | 427 (10.29) | 19 (7.72) | |
| Middle school | 2007 (10.48) | 257 (6.19) | 12 (4.88) | |
| High school | 6433 (33.58) | 1809 (43.60) | 108 (43.90) | |
| ≥College | 5539 (28.91) | 1656 (39.91) | 107 (43.50) | |
| Smoking | | | | <0.001 |
| None | 17789 (92.01) | 3640 (87.10) | 193 (77.82) | |
| Past | 714 (3.69) | 215 (5.14) | 19 (7.66) | |
| Current | 830 (4.29) | 324 (7.75) | 36 (14.52) | |
| Alcohol drinking | | | | <0.001 |
| <1 time/month | 11819 (61.21) | 1930 (46.25) | 105 (42.51) | |
| ≥1 time/month | 7489 (38.79) | 2243 (53.75) | 142 (57.49) | |
| Walking | | | | 0.081 |
| <30 minute * 5 days/week | 11556 (60.41) | 2463 (59.58) | 131 (53.91) | |
| ≥30 minute * 5 days/week | 7574 (39.59) | 1671 (40.42) | 112 (46.09) | |
| Body mass index | | | | 0.001 |
| <25 kg/m ² | 14064 (71.76) | 3147 (74.50) | 191 (75.20) | |
| ≥25 kg/m ² | 5536 (28.24) | 1077 (25.50) | 63 (24.80) | |
| Hypertension | 3529 (39.89) | 291 (15.86) | 19 (16.67) | <0.001 |
| Diabetes | 1183 (17.01) | 89 (5.36) | 9 (8.65) | <0.001 |
| Dyslipidemia | 2039 (27.67) | 156 (9.19) | 14 (13.08) | <0.001 |

| | | | | |
|--------------------|--------------|-------------|------------|--------|
| Metabolic syndrome | 4001 (20.37) | 546 (12.90) | 36 (14.12) | <0.001 |
| Menopause | 9137 (46.94) | 768 (18.13) | 35 (13.89) | <0.001 |

KRW: Korea republic won.

Data are presented as mean \pm standard error for continuous variables (linear regression) and as numbers (%) for categorical variables (χ^2 test).

Tables S8. Proportion of age groups by the frequency of intake of coffee, tea, and carbonated beverages

| Coffee intake | Tea intake | Carbonated beverage intake | 10s | 20s | 30s | 40s | 50s | 60s | 70s | ≥80s | Total |
|---------------------------|---------------------------|----------------------------|----------------|----------------|-----------------|-----------------|-----------------|-----------------|----------------|---------------|-------------------|
| <1 time/week | <1 time/week | <1 time/week | 105 (2.10) | 670 (13.40) | 827 (16.54) | 583 (11.66) | 991 (19.82) | 958 (19.16) | 689 (13.78) | 177 (3.54) | 5000 (100.00) |
| 1 time/week ~ <1 time/day | <1 time/week | <1 time/week | 37 (1.18) | 357 (11.37) | 541 (17.22) | 466 (14.84) | 685 (21.81) | 622 (19.80) | 360 (11.46) | 73 (2.32) | 3141 (100.00) |
| <1 time/week | 1 time/week ~ <1 time/day | <1 time/week | 7 (0.74) | 133 (14.07) | 160 (16.93) | 170 (17.99) | 201 (21.27) | 177 (18.73) | 87 (9.21) | 10 (1.06) | 945 (100.00) |
| <1 time/week | <1 time/week | 1 time/week ~ <1 time/day | 106 (10.59) | 457 (45.65) | 220 (21.98) | 75 (7.49) | 53 (5.29) | 45 (4.50) | 33 (3.30) | 12 (1.20) | 1001 (100.00) |
| 1 time/week ~ <1 time/day | 1 time/week ~ <1 time/day | <1 time/week | 26 (1.55) | 401 (23.93) | 282 (16.83) | 299 (17.84) | 308 (18.38) | 251 (14.98) | 98 (5.85) | 11 (0.66) | 1676 (100.00) |
| 1 time/week ~ <1 time/day | <1 time/week | 1 time/week ~ <1 time/day | 99 (8.66) | 519 (45.41) | 256 (22.40) | 117 (10.24) | 79 (6.91) | 41 (3.59) | 27 (2.36) | 5 (0.44) | 1143 (100.00) |
| <1 time/week | 1 time/week ~ <1 time/day | 1 time/week ~ <1 time/day | 17 (6.94) | 101 (41.22) | 62 (25.31) | 25 (10.20) | 22 (8.98) | 10 (4.08) | 8 (3.27) | 0 (0.00) | 245 (100.00) |
| 1 time/week ~ <1 time/day | 1 time/week ~ <1 time/day | 1 time/week ~ <1 time/day | 82 (7.31) | 753 (67.17) | 134 (11.95) | 69 (6.16) | 44 (3.93) | 28 (2.50) | 9 (0.80) | 2 (0.18) | 1121 (100.00) |
| ≥1 time/day | <1 time/week | <1 time/week | 14 (0.10) | 668 (4.60) | 2783 (19.17) | 3463 (23.86) | 3668 (25.27) | 2564 (17.66) | 1159 (7.98) | 197 (1.36) | 14516 (100.00) |
| <1 time/week | ≥1 time/day | <1 time/week | 2 (0.55) | 52 (14.25) | 52 (14.25) | 100 (27.40) | 86 (23.56) | 59 (16.16) | 14 (3.84) | 0 (0.00) | 365 (100.00) |
| <1 time/week | <1 time/week | ≥1 time/day | 14 (16.28) | 48 (55.81) | 13 (15.12) | 4 (4.65) | 4 (4.65) | 3 (3.49) | 0 (0.00) | 0 (0.00) | 86 (100.00) |
| ≥1 time/day | 1 time/week ~ <1 time/day | <1 time/week | 3 (0.08) | 266 (7.43) | 740 (20.68) | 1096 (30.63) | 866 (24.20) | 463 (12.94) | 123 (3.44) | 21 (0.59) | 3578 (100.00) |
| ≥1 time/day | <1 time/week | 1 time/week ~ <1 time/day | 30 (0.82) | 690 (18.80) | 1264 (34.44) | 817 (22.26) | 487 (13.27) | 254 (6.92) | 108 (2.94) | 20 (0.54) | 3670 (100.00) |
| 1 time/week ~ <1 time/day | ≥1 time/day | <1 time/week | 2 (0.81) | 60 (24.19) | 34 (13.71) | 51 (20.56) | 56 (22.58) | 33 (13.31) | 12 (4.84) | 0 (0.00) | 248 (100.00) |
| <1 time/week | ≥1 time/day | 1 time/week ~ <1 time/day | 1 (1.22) | 35 (42.68) | 17 (20.73) | 14 (17.07) | 7 (8.54) | 7 (8.54) | 0 (0.00) | 1 (1.22) | 82 (100.00) |
| 1 time/week ~ <1 time/day | <1 time/week | ≥1 time/day | 3 (4.41) | 43 (63.24) | 16 (23.53) | 4 (5.88) | 1 (1.47) | 1 (1.47) | 0 (0.00) | 0 (0.00) | 68 (100.00) |
| <1 time/week | 1 time/week ~ <1 time/day | ≥1 time/day | 1 (6.25) | 5 (31.25) | 7 (43.75) | 1 (6.25) | 1 (6.25) | 0 (0.00) | 1 (6.25) | 0 (0.00) | 16 (100.00) |

| | | | | | | | | | | | |
|---------------------------|---------------------------|---------------------------|--------------|----------------|----------------|----------------|----------------|----------------|---------------|--------------|------------------|
| ≥1 time/day | 1 time/week ~ <1 time/day | 1 time/week ~ <1 time/day | 13 (0.82) | 472 (29.80) | 496 (31.31) | 346 (21.84) | 170 (10.73) | 63 (3.98) | 21 (1.33) | 3 (0.19) | 1584 (100.00) |
| 1 time/week ~ <1 time/day | ≥1 time/day | 1 time/week ~ <1 time/day | 13 (8.84) | 84 (57.14) | 28 (19.05) | 13 (8.84) | 5 (3.40) | 2 (1.36) | 2 (1.36) | 0 (0.00) | 147 (100.00) |
| 1 time/week ~ <1 time/day | 1 time/week ~ <1 time/day | ≥1 time/day | 7 (13.46) | 37 (71.15) | 7 (13.46) | 0 (0.00) | 1 (1.92) | 0 (0.00) | 0 (0.00) | 0 (0.00) | 52 (100.00) |
| ≥1 time/day | ≥1 time/day | <1 time/week | 3 (0.12) | 154 (6.10) | 517 (20.47) | 785 (31.08) | 640 (25.34) | 302 (11.96) | 105 (4.16) | 20 (0.79) | 2526 (100.00) |
| ≥1 time/day | <1 time/week | ≥1 time/day | 8 (2.45) | 102 (31.19) | 108 (33.03) | 57 (17.43) | 33 (10.09) | 13 (3.98) | 4 (1.22) | 2 (0.61) | 327 (100.00) |
| <1 time/week | ≥1 time/day | ≥1 time/day | 0 (0.00) | 7 (70.00) | 2 (20.00) | 1 (10.00) | 0 (0.00) | 0 (0.00) | 0 (0.00) | 0 (0.00) | 10 (100.00) |
| ≥1 time/day | ≥1 time/day | 1 time/week ~ <1 time/day | 6 (0.68) | 188 (21.29) | 324 (36.69) | 221 (25.03) | 101 (11.44) | 30 (3.40) | 11 (1.25) | 2 (0.23) | 883 (100.00) |
| ≥1 time/day | 1 time/week ~ <1 time/day | ≥1 time/day | 6 (5.94) | 47 (46.53) | 28 (27.72) | 15 (14.85) | 3 (2.97) | 2 (1.98) | 0 (0.00) | 0 (0.00) | 101 (100.00) |
| 1 time/week ~ <1 time/day | ≥1 time/day | ≥1 time/day | 1 (11.11) | 7 (77.78) | 1 (11.11) | 0 (0.00) | 0 (0.00) | 0 (0.00) | 0 (0.00) | 0 (0.00) | 9 (100.00) |
| ≥1 time/day | ≥1 time/day | ≥1 time/day | 1 (1.37) | 31 (42.47) | 21 (28.77) | 13 (17.81) | 5 (6.85) | 1 (1.37) | 1 (1.37) | 0 (0.00) | 73 (100.00) |

Table S9. Multivariable logistic regression for hypertension according to the frequency of intake of coffee, tea, and carbonated beverages (age ≥ 20 and < 60 years)

| | Crude | Model 1 | Model 2 | Model 3 |
|-----------------------------------|---------------------|---------------------|---------------------|---------------------|
| Men | | | | |
| Coffee intake | | | | |
| <1 time/week | reference | reference | reference | reference |
| 1 time/week ~ <1 time/day | 0.58 (0.46 to 0.74) | 0.85 (0.65 to 1.12) | 0.83 (0.63 to 1.09) | 0.73 (0.55 to 0.98) |
| ≥ 1 time/day | 1.13 (0.93 to 1.36) | 0.78 (0.63 to 0.97) | 0.75 (0.61 to 0.94) | 0.70 (0.56 to 0.89) |
| Tea intake | | | | |
| <1 time/week | reference | reference | reference | reference |
| 1 time/week ~ <1 time/day | 0.86 (0.74 to 1.01) | 1.35 (1.14 to 1.61) | 1.35 (1.13 to 1.61) | 1.38 (1.14 to 1.66) |
| ≥ 1 time/day | 2.48 (2.04 to 3.02) | 2.72 (2.18 to 3.39) | 2.74 (2.19 to 3.42) | 2.85 (2.25 to 3.60) |
| Carbonated beverage intake | | | | |
| <1 time/week | reference | reference | reference | reference |
| 1 time/week ~ <1 time/day | 0.41 (0.36 to 0.48) | 1.09 (0.92 to 1.29) | 1.07 (0.90 to 1.28) | 1.05 (0.88 to 1.27) |
| ≥ 1 time/day | 0.23 (0.14 to 0.38) | 0.81 (0.46 to 1.42) | 0.84 (0.47 to 1.47) | 0.85 (0.48 to 1.51) |
| Women | | | | |
| Coffee intake | | | | |
| <1 time/week | reference | reference | reference | reference |
| 1 time/week ~ <1 time/day | 0.65 (0.53 to 0.79) | 1.04 (0.83 to 1.31) | 0.98 (0.78 to 1.24) | 0.95 (0.74 to 1.22) |
| ≥ 1 time/day | 1.00 (0.86 to 1.17) | 0.96 (0.80 to 1.14) | 0.91 (0.76 to 1.08) | 0.95 (0.79 to 1.16) |
| Tea intake | | | | |
| <1 time/week | reference | reference | reference | reference |
| 1 time/week ~ <1 time/day | 0.99 (0.85 to 1.14) | 1.52 (1.28 to 1.80) | 1.51 (1.27 to 1.79) | 1.69 (1.41 to 2.03) |
| ≥ 1 time/day | 2.03 (1.64 to 2.51) | 2.43 (1.88 to 3.15) | 2.44 (1.88 to 3.16) | 2.64 (2.00 to 3.48) |
| Carbonated beverage intake | | | | |
| <1 time/week | reference | reference | reference | reference |
| 1 time/week ~ <1 time/day | 0.40 (0.33 to 0.47) | 1.27 (1.03 to 1.57) | 1.23 (1.00 to 1.52) | 1.09 (0.87 to 1.36) |
| ≥ 1 time/day | 0.40 (0.21 to 0.78) | 1.37 (0.62 to 3.02) | 1.34 (0.61 to 2.94) | 1.18 (0.51 to 2.73) |

Data are presented as odds ratio (95% confidence interval).

Model 1: Adjusted for age.

Model 2: Adjusted for age, the frequency of intake of coffee, tea, and carbonated beverages.

Model 3: Adjusted for age, the frequency of intake of coffee, tea, and carbonated beverages, daily nutritional intake (total and fat), average monthly household income, education level, smoking, alcohol drinking, walking, body mass index status, and menopause status (only in women).

Table S10. Multivariable logistic regression for diabetes according to the frequency of intake of coffee, tea, and carbonated beverages (age ≥ 20 and < 60 years)

| | Crude | Model 1 | Model 2 | Model 3 |
|-----------------------------------|---------------------|---------------------|---------------------|---------------------|
| Men | | | | |
| Coffee intake | | | | |
| <1 time/week | reference | reference | reference | reference |
| 1 time/week ~ <1 time/day | 0.63 (0.45 to 0.87) | 0.99 (0.69 to 1.43) | 1.02 (0.71 to 1.48) | 1.00 (0.67 to 1.47) |
| ≥ 1 time/day | 1.00 (0.77 to 1.31) | 0.72 (0.54 to 0.96) | 0.72 (0.54 to 0.96) | 0.69 (0.50 to 0.95) |
| Tea intake | | | | |
| <1 time/week | reference | reference | reference | reference |
| 1 time/week ~ <1 time/day | 0.99 (0.80 to 1.24) | 1.62 (1.28 to 2.06) | 1.62 (1.28 to 2.07) | 1.90 (1.46 to 2.46) |
| ≥ 1 time/day | 2.68 (2.06 to 3.48) | 2.97 (2.23 to 3.96) | 3.04 (2.28 to 4.06) | 4.21 (3.09 to 5.72) |
| Carbonated beverage intake | | | | |
| <1 time/week | reference | reference | reference | reference |
| 1 time/week ~ <1 time/day | 0.29 (0.23 to 0.37) | 0.85 (0.66 to 1.11) | 0.84 (0.65 to 1.10) | 0.83 (0.63 to 1.10) |
| ≥ 1 time/day | 0.23 (0.11 to 0.49) | 0.91 (0.41 to 2.04) | 0.98 (0.44 to 2.20) | 0.79 (0.34 to 1.83) |
| Women | | | | |
| Coffee intake | | | | |
| <1 time/week | reference | reference | reference | reference |
| 1 time/week ~ <1 time/day | 0.46 (0.35 to 0.62) | 0.66 (0.48 to 0.89) | 0.62 (0.46 to 0.85) | 0.62 (0.45 to 0.87) |
| ≥ 1 time/day | 0.58 (0.47 to 0.72) | 0.52 (0.41 to 0.65) | 0.49 (0.39 to 0.62) | 0.58 (0.46 to 0.75) |
| Tea intake | | | | |
| <1 time/week | reference | reference | reference | reference |
| 1 time/week ~ <1 time/day | 0.96 (0.76 to 1.23) | 1.40 (1.08 to 1.80) | 1.42 (1.10 to 1.83) | 1.62 (1.24 to 2.12) |
| ≥ 1 time/day | 2.18 (1.57 to 3.02) | 2.59 (1.83 to 3.66) | 2.77 (1.95 to 3.93) | 2.90 (2.00 to 4.20) |
| Carbonated beverage intake | | | | |
| <1 time/week | reference | reference | reference | reference |
| 1 time/week ~ <1 time/day | 0.46 (0.35 to 0.61) | 1.17 (0.86 to 1.58) | 1.19 (0.88 to 1.62) | 1.00 (0.72 to 1.38) |
| ≥ 1 time/day | 0.92 (0.42 to 1.99) | 2.61 (1.12 to 6.07) | 2.68 (1.16 to 6.21) | 1.97 (0.82 to 4.75) |

Data are presented as odds ratio (95% confidence interval).

Model 1: Adjusted for age.

Model 2: Adjusted for age, the frequency of intake of coffee, tea, and carbonated beverages.

Model 3: Adjusted for age, the frequency of intake of coffee, tea, and carbonated beverages, daily nutritional intake (total and fat), average monthly household income, education level, smoking, alcohol drinking, walking, body mass index status, and menopause status (only in women).

Table S11. Multivariable logistic regression for dyslipidemia according to the frequency of intake of coffee, tea, and carbonated beverages (age ≥ 20 and < 60 years)

| | Crude | Model 1 | Model 2 | Model 3 |
|-----------------------------------|---------------------|---------------------|---------------------|----------------------|
| Men | | | | |
| Coffee intake | | | | |
| <1 time/week | reference | reference | reference | reference |
| 1 time/week ~ <1 time/day | 0.59 (0.44 to 0.78) | 0.81 (0.60 to 1.10) | 0.78 (0.57 to 1.06) | 0.73 (0.53 to 1.001) |
| ≥ 1 time/day | 1.12 (0.89 to 1.40) | 0.82 (0.65 to 1.04) | 0.80 (0.62 to 1.02) | 0.73 (0.57 to 0.95) |
| Tea intake | | | | |
| <1 time/week | reference | reference | reference | reference |
| 1 time/week ~ <1 time/day | 0.94 (0.78 to 1.12) | 1.39 (1.14 to 1.68) | 1.40 (1.15 to 1.71) | 1.49 (1.22 to 1.83) |
| ≥ 1 time/day | 2.37 (1.89 to 2.97) | 2.51 (1.98 to 3.20) | 2.52 (1.98 to 3.21) | 2.61 (2.03 to 3.36) |
| Carbonated beverage intake | | | | |
| <1 time/week | reference | reference | reference | reference |
| 1 time/week ~ <1 time/day | 0.46 (0.39 to 0.54) | 1.04 (0.86 to 1.26) | 1.03 (0.84 to 1.25) | 1.02 (0.83 to 1.25) |
| ≥ 1 time/day | 0.32 (0.19 to 0.56) | 0.96 (0.54 to 1.71) | 1.01 (0.56 to 1.81) | 1.03 (0.57 to 1.86) |
| Women | | | | |
| Coffee intake | | | | |
| <1 time/week | reference | reference | reference | reference |
| 1 time/week ~ <1 time/day | 0.55 (0.44 to 0.69) | 0.82 (0.64 to 1.05) | 0.79 (0.61 to 1.01) | 0.78 (0.60 to 1.01) |
| ≥ 1 time/day | 0.98 (0.83 to 1.16) | 0.90 (0.75 to 1.09) | 0.87 (0.72 to 1.05) | 0.95 (0.78 to 1.16) |
| Tea intake | | | | |
| <1 time/week | reference | reference | reference | reference |
| 1 time/week ~ <1 time/day | 0.98 (0.84 to 1.16) | 1.52 (1.26 to 1.82) | 1.53 (1.27 to 1.84) | 1.61 (1.33 to 1.95) |
| ≥ 1 time/day | 1.88 (1.49 to 2.39) | 2.36 (1.79 to 3.11) | 2.37 (1.80 to 3.13) | 2.35 (1.76 to 3.14) |
| Carbonated beverage intake | | | | |
| <1 time/week | reference | reference | reference | reference |
| 1 time/week ~ <1 time/day | 0.36 (0.29 to 0.44) | 1.09 (0.87 to 1.38) | 1.07 (0.85 to 1.35) | 0.95 (0.75 to 1.21) |
| ≥ 1 time/day | 0.61 (0.33 to 1.12) | 2.28 (1.09 to 4.77) | 2.31 (1.11 to 4.80) | 1.81 (0.85 to 3.85) |

Data are presented as odds ratio (95% confidence interval).

Model 1: Adjusted for age.

Model 2: Adjusted for age, the frequency of intake of coffee, tea, and carbonated beverages.

Model 3: Adjusted for age, the frequency of intake of coffee, tea, and carbonated beverages, daily nutritional intake (total and fat), average monthly household income, education level, smoking, alcohol drinking, walking, body mass index status, and menopause status (only in women).

Table S12. Multivariable logistic regression for metabolic syndrome according to the frequency of intake of coffee, tea, and carbonated beverages (age ≥ 20 and < 60 years)

| | Crude | Model 1 | Model 2 | Model 3 |
|-----------------------------------|---------------------|---------------------|----------------------|---------------------|
| Men | | | | |
| Coffee intake | | | | |
| <1 time/week | reference | reference | reference | reference |
| 1 time/week ~ <1 time/day | 0.87 (0.74 to 1.02) | 0.96 (0.82 to 1.14) | 0.94 (0.80 to 1.12) | 0.88 (0.72 to 1.06) |
| ≥ 1 time/day | 1.28 (1.13 to 1.46) | 1.09 (0.96 to 1.25) | 1.08 (0.94 to 1.23) | 0.92 (0.79 to 1.08) |
| Tea intake | | | | |
| <1 time/week | reference | reference | reference | reference |
| 1 time/week ~ <1 time/day | 0.96 (0.87 to 1.06) | 1.10 (0.99 to 1.21) | 1.11 (1.001 to 1.23) | 1.02 (0.90 to 1.15) |
| ≥ 1 time/day | 1.20 (1.06 to 1.36) | 1.19 (1.05 to 1.35) | 1.18 (1.04 to 1.34) | 1.04 (0.90 to 1.20) |
| Carbonated beverage intake | | | | |
| <1 time/week | reference | reference | reference | reference |
| 1 time/week ~ <1 time/day | 0.70 (0.64 to 0.77) | 1.04 (0.94 to 1.15) | 1.03 (0.93 to 1.14) | 1.03 (0.92 to 1.16) |
| ≥ 1 time/day | 0.70 (0.54 to 0.90) | 1.22 (0.94 to 1.59) | 1.21 (0.93 to 1.58) | 1.10 (0.81 to 1.49) |
| Women | | | | |
| Coffee intake | | | | |
| <1 time/week | reference | reference | reference | reference |
| 1 time/week ~ <1 time/day | 0.93 (0.80 to 1.07) | 1.09 (0.93 to 1.27) | 1.08 (0.93 to 1.26) | 1.02 (0.85 to 1.21) |
| ≥ 1 time/day | 1.05 (0.93 to 1.17) | 0.94 (0.83 to 1.06) | 0.92 (0.82 to 1.04) | 0.82 (0.72 to 0.95) |
| Tea intake | | | | |
| <1 time/week | reference | reference | reference | reference |
| 1 time/week ~ <1 time/day | 0.80 (0.72 to 0.89) | 0.93 (0.83 to 1.04) | 0.91 (0.81 to 1.01) | 0.97 (0.85 to 1.10) |
| ≥ 1 time/day | 0.97 (0.84 to 1.12) | 1.03 (0.89 to 1.20) | 1.04 (0.90 to 1.21) | 1.06 (0.90 to 1.26) |
| Carbonated beverage intake | | | | |
| <1 time/week | reference | reference | reference | reference |
| 1 time/week ~ <1 time/day | 0.74 (0.66 to 0.83) | 1.42 (1.25 to 1.61) | 1.43 (1.26 to 1.62) | 1.20 (1.04 to 1.38) |
| ≥ 1 time/day | 0.88 (0.59 to 1.31) | 2.06 (1.35 to 3.16) | 2.08 (1.36 to 3.18) | 2.05 (1.28 to 3.29) |

Data are presented as odds ratio (95% confidence interval).

Model 1: Adjusted for age.

Model 2: Adjusted for age, the frequency of intake of coffee, tea, and carbonated beverages.

Model 3: Adjusted for age, the frequency of intake of coffee, tea, and carbonated beverages, daily nutritional intake (total and fat), average monthly household income, education level, smoking, alcohol drinking, walking, body mass index status, and menopause status (only in women).

Table S13. Multivariable logistic regression for hypertension when the frequency of intake is categorized into four groups

| | Crude | Model 1 | Model 2 | Model 3 |
|-----------------------------------|----------------------|---------------------|---------------------|---------------------|
| Men | | | | |
| Coffee intake | | | | |
| <1 time/week | reference | reference | reference | reference |
| 1 time/week ~ <1 time/day | 0.53 (0.43 to 0.64) | 0.77 (0.58 to 1.01) | 0.74 (0.56 to 0.98) | 0.66 (0.49 to 0.90) |
| 1 time/day ~ <2 times/day | 1.42 (1.16 to 1.75) | 1.04 (0.80 to 1.35) | 0.99 (0.75 to 1.30) | 0.99 (0.74 to 1.32) |
| ≥2 times/day | 1.02 (0.86 to 1.21) | 0.62 (0.49 to 0.77) | 0.60 (0.48 to 0.76) | 0.57 (0.44 to 0.73) |
| Green tea intake | | | | |
| <6–11 times/year | reference | reference | reference | reference |
| 6–11 times/year ~ <1 time/week | 1.01 (0.85 to 1.19) | 1.15 (0.94 to 1.41) | 1.11 (0.90 to 1.36) | 1.14 (0.92 to 1.42) |
| 1 time/week ~ <1 time/day | 0.75 (0.65 to 0.87) | 1.42 (1.16 to 1.72) | 1.37 (1.12 to 1.67) | 1.47 (1.20 to 1.80) |
| ≥1 time/day | 1.93 (1.58 to 2.36) | 2.49 (1.94 to 3.19) | 2.48 (1.93 to 3.20) | 2.66 (2.05 to 3.45) |
| Carbonated beverage intake | | | | |
| <1 time/month | reference | reference | reference | reference |
| 1 time/month ~ <1 time/week | 0.45 (0.39 to 0.52) | 1.02 (0.85 to 1.22) | 1.04 (0.86 to 1.25) | 1.07 (0.88 to 1.30) |
| 1 time/week ~ <1 time/day | 0.23 (0.20 to 0.27) | 1.13 (0.91 to 1.40) | 1.12 (0.91 to 1.39) | 1.11 (0.89 to 1.39) |
| ≥1 time/day | 0.13 (0.078 to 0.23) | 1.02 (0.53 to 1.99) | 1.02 (0.51 to 2.03) | 1.08 (0.55 to 2.12) |
| Women | | | | |
| Coffee intake | | | | |
| <1 time/week | reference | reference | reference | reference |
| 1 time/week ~ <1 time/day | 0.49 (0.42 to 0.57) | 1.10 (0.87 to 1.37) | 1.02 (0.82 to 1.27) | 0.98 (0.77 to 1.24) |
| 1 time/day ~ <2 times/day | 1.01 (0.87 to 1.16) | 1.24 (1.02 to 1.51) | 1.15 (0.94 to 1.40) | 1.18 (0.95 to 1.46) |
| ≥2 times/day | 0.59 (0.52 to 0.68) | 0.79 (0.66 to 0.95) | 0.74 (0.61 to 0.89) | 0.77 (0.63 to 0.94) |
| Green tea intake | | | | |
| <6–11 times/year | reference | reference | reference | reference |
| 6–11 times/year ~ <1 time/week | 1.01 (0.88 to 1.16) | 1.20 (0.99 to 1.45) | 1.18 (0.98 to 1.42) | 1.27 (1.04 to 1.57) |
| 1 time/week ~ <1 time/day | 0.68 (0.59 to 0.77) | 1.46 (1.20 to 1.77) | 1.44 (1.18 to 1.75) | 1.65 (1.35 to 2.01) |
| ≥1 time/day | 1.47 (1.18 to 1.83) | 2.88 (2.12 to 3.92) | 2.83 (2.08 to 3.85) | 3.20 (2.28 to 4.49) |
| Carbonated beverage intake | | | | |
| <1 time/month | reference | reference | reference | reference |
| 1 time/month ~ <1 time/week | 0.41 (0.36 to 0.46) | 1.16 (0.97 to 1.40) | 1.19 (0.99 to 1.43) | 1.14 (0.94 to 1.38) |
| 1 time/week ~ <1 time/day | 0.19 (0.16 to 0.22) | 1.35 (1.06 to 1.72) | 1.32 (1.03 to 1.69) | 1.16 (0.89 to 1.50) |
| ≥1 time/day | 0.28 (0.15 to 0.53) | 2.77 (1.20 to 6.41) | 2.53 (1.13 to 1.18) | 2.36 (0.87 to 6.38) |

Data are presented as odds ratio (95% confidence interval).

Model 1: Adjusted for age.

Model 2: Adjusted for age, the frequency of intake of coffee, tea, and carbonated beverages.

Model 3: Adjusted for age, the frequency of intake of coffee, tea, and carbonated beverages, daily nutritional intake (total and fat), average monthly household income, education level, smoking, alcohol drinking, walking, body mass index status, and menopause status (only in women).

Table S14. Multivariable logistic regression for diabetes when the frequency of intake is categorized into four groups

| | Crude | Model 1 | Model 2 | Model 3 |
|-----------------------------------|----------------------|----------------------|----------------------|----------------------|
| Men | | | | |
| Coffee intake | | | | |
| <1 time/week | reference | reference | reference | reference |
| 1 time/week ~ <1 time/day | 0.54 (0.40 to 0.72) | 0.82 (0.56 to 1.21) | 0.84 (0.57 to 1.24) | 0.89 (0.60 to 1.31) |
| 1 time/day ~ <2 times/day | 1.24 (0.94 to 1.62) | 0.94 (0.66 to 1.34) | 0.92 (0.65 to 1.31) | 1.01 (0.71 to 1.45) |
| ≥2 times/day | 0.82 (0.63 to 1.05) | 0.50 (0.36 to 0.68) | 0.51 (0.37 to 0.70) | 0.54 (0.39 to 0.74) |
| Green tea intake | | | | |
| <6–11 times/year | reference | reference | reference | reference |
| 6–11 times/year ~ <1 time/week | 0.97 (0.77 to 1.23) | 1.09 (0.84 to 1.42) | 1.04 (0.79 to 1.36) | 1.22 (0.91 to 1.63) |
| 1 time/week ~ <1 time/day | 0.82 (0.66 to 1.002) | 1.59 (1.23 to 2.06) | 1.52 (1.17 to 1.97) | 1.88 (1.40 to 2.52) |
| ≥1 time/day | 2.21 (1.71 to 2.84) | 2.71 (2.00 to 3.66) | 2.65 (1.96 to 3.60) | 3.72 (2.68 to 5.16) |
| Carbonated beverage intake | | | | |
| <1 time/month | reference | reference | reference | reference |
| 1 time/month ~ <1 time/week | 0.42 (0.35 to 0.52) | 1.07 (0.85 to 1.36) | 1.11 (0.87 to 1.41) | 1.12 (0.87 to 1.45) |
| 1 time/week ~ <1 time/day | 0.17 (0.13 to 0.21) | 0.91 (0.69 to 1.20) | 0.93 (0.71 to 1.23) | 0.93 (0.69 to 1.25) |
| ≥1 time/day | 0.15 (0.073 to 0.32) | 1.25 (0.54 to 2.91) | 1.23 (0.53 to 2.88) | 1.19 (0.49 to 2.86) |
| Women | | | | |
| Coffee intake | | | | |
| <1 time/week | reference | reference | reference | reference |
| 1 time/week ~ <1 time/day | 0.43 (0.35 to 0.53) | 0.72 (0.56 to 0.94) | 0.68 (0.52 to 0.89) | 0.65 (0.49 to 0.87) |
| 1 time/day ~ <2 times/day | 0.81 (0.66 to 0.997) | 0.84 (0.66 to 1.07) | 0.79 (0.62 to 1.01) | 0.87 (0.67 to 1.14) |
| ≥2 times/day | 0.34 (0.27 to 0.42) | 0.36 (0.28 to 0.46) | 0.33 (0.25 to 0.42) | 0.37 (0.28 to 0.49) |
| Green tea intake | | | | |
| <6–11 times/year | reference | reference | reference | reference |
| 6–11 times/year ~ <1 time/week | 1.07 (0.87 to 1.33) | 1.22 (0.95 to 1.56) | 1.21 (0.93 to 1.56) | 1.31 (0.99 to 1.72) |
| 1 time/week ~ <1 time/day | 0.69 (0.57 to 0.85) | 1.33 (1.05 to 1.69) | 1.35 (1.06 to 1.73) | 1.63 (1.26 to 2.11) |
| ≥1 time/day | 1.55 (1.14 to 2.11) | 2.82 (1.96 to 4.05) | 3.01 (2.09 to 4.34) | 3.35 (2.29 to 4.89) |
| Carbonated beverage intake | | | | |
| <1 time/month | reference | reference | reference | reference |
| 1 time/month ~ <1 time/week | 0.37 (0.30 to 0.45) | 0.999 (0.78 to 1.28) | 1.10 (0.85 to 1.41) | 1.10 (0.84 to 1.45) |
| 1 time/week ~ <1 time/day | 0.20 (0.15 to 0.26) | 1.31 (0.94 to 1.83) | 1.45 (1.02 to 2.05) | 1.26 (0.88 to 1.80) |
| ≥1 time/day | 0.59 (0.25 to 1.34) | 5.87 (1.74 to 19.78) | 5.82 (1.89 to 17.91) | 4.29 (1.32 to 13.91) |

Data are presented as odds ratio (95% confidence interval).

Model 1: Adjusted for age.

Model 2: Adjusted for age, the frequency of intake of coffee, tea, and carbonated beverages.

Model 3: Adjusted for age, the frequency of intake of coffee, tea, and carbonated beverages, daily nutritional intake (total and fat), average monthly household income, education level, smoking, alcohol drinking, walking, body mass index status, and menopause status (only in women).

Table S15. Multivariable logistic regression for dyslipidemia when the frequency of intake is categorized into four groups

| | Crude | Model 1 | Model 2 | Model 3 |
|-----------------------------------|---------------------|-----------------------|-----------------------|---------------------|
| Men | | | | |
| Coffee intake | | | | |
| <1 time/week | reference | reference | reference | reference |
| 1 time/week ~ <1 time/day | 0.52 (0.39 to 0.68) | 0.71 (0.52 to 0.95) | 0.67 (0.49 to 0.91) | 0.62 (0.46 to 0.85) |
| 1 time/day ~ <2 times/day | 1.15 (0.88 to 1.49) | 0.90 (0.67 to 1.20) | 0.85 (0.64 to 1.14) | 0.82 (0.61 to 1.11) |
| ≥2 times/day | 1.09 (0.88 to 1.35) | 0.68 (0.54 to 0.87) | 0.67 (0.52 to 0.86) | 0.60 (0.46 to 0.78) |
| Green tea intake | | | | |
| <6–11 times/year | reference | reference | reference | reference |
| 6–11 times/year ~ <1 time/week | 1.28 (1.04 to 1.58) | 1.40 (1.11 to 1.77) | 1.36 (1.08 to 1.71) | 1.37 (1.07 to 1.75) |
| 1 time/week ~ <1 time/day | 0.92 (0.77 to 1.11) | 1.50 (1.22 to 1.85) | 1.50 (1.21 to 1.84) | 1.66 (1.34 to 2.07) |
| ≥1 time/day | 2.37 (1.85 to 3.04) | 2.71 (2.03 to 3.62) | 2.69 (2.02 to 3.60) | 2.77 (2.07 to 3.71) |
| Carbonated beverage intake | | | | |
| <1 time/month | reference | reference | reference | reference |
| 1 time/month ~ <1 time/week | 0.57 (0.47 to 0.68) | 1.18 (0.96 to 1.46) | 1.19 (0.97 to 1.46) | 1.23 (0.99 to 1.53) |
| 1 time/week ~ <1 time/day | 0.32 (0.26 to 0.38) | 1.17 (0.92 to 1.48) | 1.15 (0.91 to 1.46) | 1.19 (0.94 to 1.52) |
| ≥1 time/day | 0.19 (0.11 to 0.35) | 0.97 (0.51 to 1.84) | 1.02 (0.52 to 1.99) | 1.10 (0.57 to 2.14) |
| Women | | | | |
| Coffee intake | | | | |
| <1 time/week | reference | reference | reference | reference |
| 1 time/week ~ <1 time/day | 0.55 (0.45 to 0.65) | 0.93 (0.74 to 1.16) | 0.88 (0.70 to 1.11) | 0.87 (0.69 to 1.09) |
| 1 time/day ~ <2 times/day | 1.08 (0.91 to 1.27) | 1.10 (0.89 to 1.37) | 1.05 (0.85 to 1.30) | 1.08 (0.87 to 1.35) |
| ≥2 times/day | 0.80 (0.68 to 0.94) | 0.82 (0.67 to 0.997) | 0.78 (0.64 to 0.96) | 0.83 (0.68 to 1.02) |
| Green tea intake | | | | |
| <6–11 times/year | reference | reference | reference | reference |
| 6–11 times/year ~ <1 time/week | 1.18 (0.99 to 1.39) | 1.22 (0.9997 to 1.48) | 1.21 (0.99 to 1.48) | 1.28 (1.04 to 1.57) |
| 1 time/week ~ <1 time/day | 0.76 (0.65 to 0.89) | 1.39 (1.15 to 1.68) | 1.39 (1.15 to 1.69) | 1.49 (1.23 to 1.81) |
| ≥1 time/day | 1.40 (1.09 to 1.79) | 2.29 (1.67 to 3.13) | 2.30 (1.69 to 3.15) | 2.30 (1.67 to 3.16) |
| Carbonated beverage intake | | | | |
| <1 time/month | reference | reference | reference | reference |
| 1 time/month ~ <1 time/week | 0.41 (0.35 to 0.47) | 1.13 (0.94 to 1.36) | 1.15 (0.95 to 1.38) | 1.15 (0.95 to 1.40) |
| 1 time/week ~ <1 time/day | 0.18 (0.14 to 0.22) | 1.01 (0.78 to 1.29) | 0.9999 (0.77 to 1.29) | 0.93 (0.72 to 1.21) |
| ≥1 time/day | 0.32 (0.16 to 0.63) | 3.28 (1.05 to 10.25) | 3.27 (1.12 to 9.53) | 2.72 (1.01 to 7.35) |

Data are presented as odds ratio (95% confidence interval).

Model 1: Adjusted for age.

Model 2: Adjusted for age, the frequency of intake of coffee, tea, and carbonated beverages.

Model 3: Adjusted for age, the frequency of intake of coffee, tea, and carbonated beverages, daily nutritional intake (total and fat), average monthly household income, education level, smoking, alcohol drinking, walking, body mass index status, and menopause status (only in women).

Table S16. Multivariable logistic regression for metabolic syndrome when the frequency of intake is categorized into four groups

| | Crude | Model 1 | Model 2 | Model 3 |
|-----------------------------------|----------------------|---------------------|-----------------------|----------------------|
| Men | | | | |
| Coffee intake | | | | |
| <1 time/week | reference | reference | reference | reference |
| 1 time/week ~ <1 time/day | 0.96 (0.82 to 1.13) | 1.06 (0.90 to 1.26) | 1.06 (0.89 to 1.25) | 1.00 (0.83 to 1.22) |
| 1 time/day ~ <2 times/day | 1.47 (1.27 to 1.72) | 1.30 (1.12 to 1.52) | 1.28 (1.10 to 1.50) | 1.19 (0.998 to 1.42) |
| ≥2 times/day | 1.58 (1.39 to 1.79) | 1.35 (1.18 to 1.54) | 1.34 (1.18 to 1.53) | 1.07 (0.92 to 1.24) |
| Green tea intake | | | | |
| <6–11 times/year | reference | reference | reference | reference |
| 6–11 times/year ~ <1 time/week | 0.94 (0.84 to 1.06) | 1.04 (0.92 to 1.17) | 1.06 (0.94 to 1.20) | 1.01 (0.88 to 1.17) |
| 1 time/week ~ <1 time/day | 0.90 (0.81 to 1.004) | 1.09 (0.98 to 1.22) | 1.12 (0.9996 to 1.26) | 0.99 (0.86 to 1.14) |
| ≥1 time/day | 1.20 (1.03 to 1.39) | 1.29 (1.11 to 1.50) | 1.26 (1.09 to 1.47) | 1.05 (0.88 to 1.25) |
| Carbonated beverage intake | | | | |
| <1 time/month | reference | reference | reference | reference |
| 1 time/month ~ <1 time/week | 0.73 (0.65 to 0.81) | 0.96 (0.86 to 1.08) | 0.95 (0.85 to 1.07) | 0.96 (0.84 to 1.09) |
| 1 time/week ~ <1 time/day | 0.58 (0.52 to 0.64) | 0.99 (0.88 to 1.11) | 0.97 (0.86 to 1.08) | 1.01 (0.88 to 1.15) |
| ≥1 time/day | 0.49 (0.37 to 0.65) | 0.97 (0.72 to 1.29) | 0.94 (0.70 to 1.26) | 0.93 (0.66 to 1.31) |
| Women | | | | |
| Coffee intake | | | | |
| <1 time/week | reference | reference | reference | reference |
| 1 time/week ~ <1 time/day | 0.74 (0.64 to 0.84) | 1.03 (0.89 to 1.19) | 1.01 (0.87 to 1.17) | 1.00 (0.85 to 1.18) |
| 1 time/day ~ <2 times/day | 1.004 (0.90 to 1.13) | 1.01 (0.89 to 1.14) | 0.98 (0.86 to 1.12) | 0.98 (0.85 to 1.14) |
| ≥2 times/day | 0.83 (0.74 to 0.93) | 0.94 (0.83 to 1.05) | 0.91 (0.81 to 1.03) | 0.85 (0.74 to 0.97) |
| Green tea intake | | | | |
| <6–11 times/year | reference | reference | reference | reference |
| 6–11 times/year ~ <1 time/week | 0.85 (0.76 to 0.96) | 0.99 (0.88 to 1.12) | 0.98 (0.86 to 1.10) | 1.01 (0.88 to 1.16) |
| 1 time/week ~ <1 time/day | 0.64 (0.58 to 0.72) | 0.93 (0.83 to 1.05) | 0.92 (0.82 to 1.03) | 0.98 (0.86 to 1.12) |
| ≥1 time/day | 0.88 (0.75 to 1.03) | 1.15 (0.97 to 1.36) | 1.15 (0.97 to 1.36) | 1.15 (0.95 to 1.39) |
| Carbonated beverage intake | | | | |
| <1 time/month | reference | reference | reference | reference |
| 1 time/month ~ <1 time/week | 0.71 (0.64 to 0.78) | 1.23 (1.11 to 1.37) | 1.24 (1.11 to 1.38) | 1.19 (1.05 to 1.34) |
| 1 time/week ~ <1 time/day | 0.50 (0.44 to 0.56) | 1.42 (1.24 to 1.61) | 1.42 (1.25 to 1.62) | 1.26 (1.09 to 1.46) |
| ≥1 time/day | 0.57 (0.37 to 0.86) | 1.96 (1.22 to 3.15) | 1.94 (1.20 to 3.12) | 2.23 (1.43 to 3.49) |

Data are presented as odds ratio (95% confidence interval).

Model 1: Adjusted for age.

Model 2: Adjusted for age, the frequency of intake of coffee, tea, and carbonated beverages.

Model 3: Adjusted for age, the frequency of intake of coffee, tea, and carbonated beverages, daily nutritional intake (total and fat), average monthly household income, education level, smoking, alcohol drinking, walking, body mass index status, and menopause status (only in women).