## Supplementary Table S1. Comparison of baseline characteristics between included and

 excluded participants|  | Included | Excluded | $p$ value |
| :---: | :---: | :---: | :---: |
| $n$ | 10450 | 6780 |  |
| Demographic and lifestyle factors |  |  |  |
| Mean age (years) | 59.3 (9.4) | 59.6 (10.5) | 0.061 |
| Gender, n (\%) |  |  |  |
| Male | 4943 (47.3\%) | 3422 (50.5\%) | <0.001* |
| Female | 5507 (52.7\%) | 3356 (49.5\%) |  |
| Missing | 0 | 2 |  |
| Smoking status, n (\%) |  |  |  |
| Never smoker | 6238 (59.7\%) | 3952 (66.0\%) | <0.001* |
| Ex-smoker | 950 (9.1\%) | 479 (8.0\%) |  |
| Current smoker | 3262 (31.2\%) | 1554 (26.0\%) |  |
| Missing | 0 | 795 |  |
| Drinking status, n (\%) |  |  |  |
| Never drinker | 6129 (58.7\%) | 3835 (58.0\%) | 0.526 |
| Ex-drinker | 859 (8.2\%) | 572 (8.6\%) |  |
| Current drinker | 3462 (33.1\%) | 2209 (33.4\%) |  |
| Missing | 0 | 164 |  |
| Area of residence, n (\%) |  |  |  |
| Rural | 6492 (62.1\%) | 3751 (55.4\%) | <0.001* |
| Urban | 3958 (37.9\%) | 3027 (44.6\%) |  |
| Missing | 0 | 2 |  |
| Current marriage status |  |  |  |
| Not married | 1328 (12.7\%) | 920 (13.6\%) | 0.083 |
| Married or cohabitated | 9122 (87.3\%) | 5828 (86.4\%) |  |
| Missing | 0 | 32 |  |
| Clinical / biochemical measures |  |  |  |
| BMI ( $\mathrm{kg} / \mathrm{m}^{2}$ ) | 23.5 (3.9) | 23.1 (3.7) | <0.001* |
| Missing | 0 | 3980 |  |
| Obesity, n (\%) | 1211 (11.6\%) | 273 (9.8\%) | 0.007* |
| Missing | 0 | 3980 |  |
| Waist circumference (cm) |  |  |  |
| Female | 85.8 (10.2) | 85.2 (10.5) | 0.059 |
| Male | 85.2 (10.1) | 84.0 (9.6) | <0.001* |
| Missing | 227 | 3817 |  |


| Central obesity, n (\%) | 4371 (42.8\%) | 1163 (39.3\%) | <0.001* |
| :---: | :---: | :---: | :---: |
| Missing | 227 | 3817 |  |
| Systolic BP (mmHg) | 130.7 (21.5) | 132.0 (22.4) | 0.004* |
| Missing | 0 | 3805 |  |
| Diastolic BP (mmHg) | 76.1 (12.2) | 75.8 (12.3) | 0.242 |
| Missing | 0 | 3803 |  |
| History of chronic diseases |  |  |  |
| Hypertension | 4285 (41.0\%) | 2224 (33.3\%) | <0.001* |
| Missing | 0 | 102 |  |
| Diabetes mellitus | 1338 (12.8\%) | 751 (11.2\%) | 0.002* |
| Missing | 0 | 74 |  |
| Dyslipidemia | 1002 (9.6\%) | 569 (9.0\%) | 0.241 |
| Missing | 0 | 479 |  |
| CVD | 1467 (14.0\%) | 904 (13.7\%) | 0.498 |
| Missing | 0 | 161 |  |
| Indoor fuel use |  |  |  |
| Solid fuel use for heating | 7122 (68.2\%) | 2075 (56.8\%) | <0.001* |
| Missing/reported "others" | 0 | 3129 |  |
| Solid fuel use for cooking | 5973 (57.2\%) | 3168 (49.2\%) | <0.001* |
| Missing/reported "others" | 0 | 348 |  |

Abbreviation: BP: Blood Pressure; BMI: Body Mass Index; CVD: Cardiovascular Disease.

Continuous data were reported as mean (SD) and categorical data were reported as number (percentage).

Supplementary Table S2. Associations between indoor solid fuel use for heating and cooking with blood pressure and hypertension based on imputed data

|  | $\begin{aligned} & \hline \text { SBP } \\ & \beta(95 \% \mathrm{CI}) \end{aligned}$ | $\begin{aligned} & \hline \text { DBP } \\ & \beta(95 \% \mathrm{CI}) \\ & \hline \end{aligned}$ | Hypertension aOR (95\%CI) |
| :---: | :---: | :---: | :---: |
| Heating ${ }^{\text {a }}$ |  |  |  |
| Model 1 | 1.61 (0.87, 2.35) * | 1.13 (0.68, 1.57) * | 1.12 (1.04, 1.20) * |
| Model 2 | 1.91 (1.13, 2.69) * | 1.15 (0.67, 1.63) * | 1.13 (1.04, 1.23) * |
| Model 3 | 2.09 (1.21, 2.97) * | 2.09 (1.21, 2.97) * | 2.09 (1.21, 2.97) * |
| Cooking ${ }^{\text {b }}$ |  |  |  |
| Model 1 | 0.36 (-0.32, 1.05) | 0.07 (-0.33, 0.46) | 1.02 (0.95, 1.09) |
| Model 2 | 0.55 (-0.15, 1.25) | 0.13 (-0.28, 0.54) | 1.03 (0.95, 1.11) |
| Model 3 | -0.37 (-1.16, 0.42) | -0.48 (-0.95, 0.02) | 0.96 (0.88, 1.05) |

${ }^{a}$ Reference: No heating/clean fuel user for heating; ${ }^{b}$ Reference: Clean fuel user for cooking.
Model 1: Adjusted for age, gender and BMI
Model 2: Additionally adjusted for smoking and drinking status, marriage, region, area of residence, CVD, DM, dyslipidemia and anti-hypertensive drug when the outcomes was systolic or diastolic BP.

Model 3: Additionally adjusted for indoor cooking when the exposure was indoor heating; or additionally adjust for indoor heating when the exposure was indoor cooking *p<0.05

Supplementary Table S3. Subgroup analysis on the association between solid indoor fuel use for heating and cooking with blood pressure and hypertension based on imputed data

|  | $\begin{aligned} & \text { SBP } \\ & \beta(95 \% \text { CI) } \end{aligned}$ | $\begin{aligned} & \hline \text { DBP } \\ & \beta(95 \% \mathrm{CI}) \\ & \hline \end{aligned}$ | Hypertension <br> aOR ( $95 \% \mathrm{CI}$ ) |
| :---: | :---: | :---: | :---: |
| Heating ${ }^{\text {a }}$ |  |  |  |
| Gender |  |  |  |
| Male | $1.94(0.70,3.18)$ * | $1.51(0.72,2.31)$ * | 1.16 (1.01, 1.33) * |
| Female | $2.12(0.90,3.33)$ * | 1.23 (0.54, 1.93) * | 1.14 (1.00, 1.31) * |
| Area of residence |  |  |  |
| Urban | $2.86(1.51,4.21)$ * | 1.87 (1.10, 2.64) * | $1.24(1.08,1.43)$ * |
| Rural | 1.17 (-0.03, 2.37) | 0.86 (0.11, 1.62) * | 1.03 (0.90, 1.19) |
| Geographic location |  |  |  |
| North | $2.20(0.91,3.49)$ * | $1.01(0.23,1.79)$ * | 1.16 (1.01, 1.34) * |
| South | 1.58 (0.35, 2.82) * | $1.11(0.35,1.88)$ * | 1.13 (0.98, 1.29) |
| Hypertension |  |  |  |
| Yes | $1.72(0.39,3.04)$ * | $1.00(0.20,1.80)$ * | NA |
| No | 0.68 (-0.10, 1.45) | 0.65 (0.11, 1.20) * | NA |
| Cooking ${ }^{\text {b }}$ |  |  |  |
| Gender |  |  |  |
| Male | -0.76 (-1.87, 0.35) | -0.68 (-1.38, 0.01) | 0.91 (0.80, 1.03) |
| Female | 0.04 (-1.07, 1.16) | -0.27 (-0.91, 0.38) | 1.02 (0.91, 1.16) |
| Area of residence |  |  |  |
| Urban | 0.02 (-1.31, 1.35) | -0.72 (-1.49, 0.05) | 1.00 (0.86, 1.15) |
| Rural | -0.50 (-1.49, 0.49) | -0.37 (-0.96, 0.23) | 0.94 (0.84, 1.05) |
| Geographic location |  |  |  |
| North | -0.51 (-1.67, 0.65) | -0.55 (-1.25, 0.15) | 0.98 (0.87, 1.12) |
| South | -0.38 (-1.45, 0.69) | -0.47 (-1.11, 0.17) | 0.93 (0.82, 1.05) |
| Hypertension |  |  |  |
| Yes | -0.14 (-1.35, 1.06) | -0.57 (-1.28, 0.15) | NA |
| No | -0.28 (-0.99, 0.42) | $-0.42(-0.90,0.05)$ | NA |

[^0]NA: Not applicable.

* $p<0.05$


[^0]:    ${ }^{a}$ Reference: No heating/clean fuel user for heating; ${ }^{\mathrm{b}}$ Reference: Clean fuel user for cooking. Model adjusted for age, gender, BMI, smoking and drinking status, marriage, region, area of residence, CVD, DM, dyslipidemia, anti-hypertensive drug when the outcomes was systolic or diastolic BP , and indoor cooking when the exposure was indoor heating, or indoor heating when the exposure was indoor cooking.

