Table S1. Baseline characteristics of US INTERMAP participants, *n*=2,195

|  |  |
| --- | --- |
| Variable |  |
| Men | Women | All |
|  *n* | 1,103 | 1,092 | 2,195 |
| Age (y) | 49.1 (5.4) | 49.2 (5.4) | 49.1 (5.4) |
| Education (y) | 15.4 (3.1) | 14.5 (2.9) | 15.0 (3.0) |
| Current smokers (%) | 211 (19.1) | 158 (14.5) | 369 (16.8) |
| Alcohol intake (g/d) | 10.5 (17.2) | 3.3 (7.3) | 6.9 (13.7) |
| Engagement in moderate and heavy physical activity (h/d) | 3.5 (3.3) | 3.0 (3.0) | 3.2 (3.1) |
| Taking dietary supplements (%) | 518 (47) | 618 (56.6) | 1136 (51.8) |
| BMI (kg/m2) | 29.1 (5.1) | 28.7 (6.6) | 28.9 (5.9) |
| Systolic BP (mm Hg) | 120.4 (12.7) | 116.8 (14.8) | 118.6 (13.9) |
| Diastolic BP (mm Hg) | 75.7 (9.6) | 71.1 (9.2) | 73.4 (9.7) |
| History of cardiovascular disease or diabetes mellitus (%) | 175 (15.9) | 168 (15.4) | 343 (15.6) |
| Use of antihypertensive and/or cardiovascular disease treatment (%) | 261 (23.7) | 256 (23.4) | 517 (23.6) |
| Family history of hypertension (%) | 688 (62.4) | 803 (73.5) | 1,491 (68.0) |
| Adhering to energy restricted diet (%) | 45 (4.0) | 106 (9.7) | 151 (6.9) |
| Total energy intake (kcal/24-hour) | 2,609 (694) | 1,876(474) | 2,244 (699) |
| Total fiber (g/1000 kcal) | 8.6 (3.2) | 9.4 (3.5) | 9.0 (3.4) |
| Insoluble fiber (g/1000 kcal) | 5.1 (2.2) | 5.7 (2.4) | 5.4 (2.3) |
| Soluble fiber (g/1000 kcal) | 2.7 (1.0) | 3.0 (1.2) | 2.9 (1.1) |
| Sugar (%kcal) | 25.9 (8.5) | 27.4 (7.8) | 26.7 (8.2) |
| Total protein (%kcal) | 15.5 (3.2) | 15.6 (3.2) | 15.5 (3.2) |
| Total fat (%kcal) | 33.3 (6.7) | 32.6 (7.1) | 32.9 (6.9) |
| Urinary sodium (mmol/24-hour) | 182.7 (62.4) | 142.3 (48.3) | 162.6 (59.4) |
| Urinary magnesium (mmol/24-hour) | 4.7 (1.6) | 3.8 (1.4) | 4.2 (1.6) |
| Urinary calcium (mmol/24-hour) | 4.6 (2.3) | 3.9 (2.0) | 4.3 (2.2) |
| Urinary potassium (mmol/24-hour) | 64.4 (21.5) | 50.8 (17.9) | 57.7 (20.9) |
| \* Mean (SD) or percent (%) |  |  |  |

Table S2. Estimated mean difference in BP associated with 2 SD higher intakes of total fibre, insoluble fibre, and soluble fibre in sub cohorts 1

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|   | SBP |   | DBP |   |
|  | Not adjusted for BMI | Adjusted for BMI |   | Not adjusted for BMI | Adjusted for BMI |   |
| Model 3 | *n* | Difference | 95% CI | *p* | Difference | 95% CI | *p* | Difference | 95% CI | *p* | Difference | 95% CI | *p* |
|  |  | *mm Hg* | *mm Hg* |  | *mm Hg* | *mm Hg* |  | *mm Hg* | *mm Hg* |  | *mm Hg* | *mm Hg* |  |
| Non-hypertensive participants 2 |  |  |  |  |  |  |  |  |
| Total fiber (g/1000 kcal) | 1,421 | -2.81 | (-4.03, -1.58) | <0.0001 | -2.05 | (-3.22, -0.89) | 0.001 | -1.92 | (-2.84, -0.99) | <0.0001 | -1.43 | (-2.33, -0.54) | 0.002 |
| Insoluble fiber (g/1000 kcal) 3 | 1,421 | -2.51 | (-4.34, -0.68) | 0.01 | -1.89 | (-3.63, -0.15) | 0.03 | -2.43 | (-3.82, -1.05) | 0.001 | -2.04 | (-3.37, -0.71) | 0.003 |
| Soluble fiber (g/1000 kcal) 4 | 1,421 | -0.40 | (-2.20, 1.40) | 0.67 | -0.43 | (-2.05, 1.37) | 0.7 | 0.40 | (-0.96, 1.77) | 0.56 | 0.44 | (-0.87, 1.75) | 0.51 |
| Excluding participants with cardiovascular diseases or diabetes mellitus |
| Total fiber (g/1000 kcal) | 1,262 | -2.66 | (-3.93, -1.39) | <0.0001 | -1.90 | (-3.11, -0.69) | 0.002 | -2.02 | (-2.95, -1.08) | <0.0001 | -1.51 | (-2.41, -0.61) | 0.001 |
| Insoluble fiber (g/1000 kcal) 3 | 1,262 | -2.40 | (-4.31, -0.50) | 0.01 | -1.77 | (-3.57, 0.04) | 0.06 | -2.48 | (-3.88, -1.08) | 0.001 | -2.05 | (-3.39, -0.71) | 0.003 |
| Soluble fiber (g/1000 kcal) 4 | 1,262 | -0.40 | (-2.28, 1.49) | 0.68 | -0.37 | (-2.15, 1.42) | 0.69 | 0.41 | (-0.98, 1.80) | 0.56 | 0.43 | (-0.90, 1.76) | 0.53 |
| 1 For the sub cohort excluding non-hypertensive participants, 2SD fibers (g/1000 kcal) total fiber (6.9); insoluble fiber (4.8); soluble fiber (2.2); for the sub cohort excluding participants diagnosed with cardiovascular diseases or diabetes, 2SD fibers (g/1000 kcal) total fiber (6.8); insoluble fiber (4.7); soluble fiber (2.3). Model 1 was adjusted for age, gender, total energy (kcal/24-hour), total protein (%kcal), total fat (%kcal), total sugar (%kcal), and population sample. Model 2 was adjusted as model 1 variables plus adherence to energy restricted diet, smoking, alcohol intake (g/24-hour), hours engaged in moderate and heavy physical activity, dietary supplement use, educational level, family history of high BP. 2 Additionally adjusted for cardiovascular disease or diabetes diagnosis. 3 Additionally adjusted for soluble fiber (g/1000 kcal). 4 Additionally adjusted for insoluble fiber (g/1000 kcal). |