

Table S1. Components of the Plant Based Scores: PDI, hPDI, and uPDI ^{1,2}

| Plant Food Groups | Description with examples | Recommendation for 2,000 kcal diet (USDA, (1)) | Recommendation for 2,000 kcal diet (Chinese dietary guidelines, (2)) | PDI | hPDI | uPDI |
|-------------------|---|--|--|-----------------|-----------------|----------------|
| Healthy | | | | | | |
| Whole grains | Whole grain breakfast cereal, other cooked breakfast cereal, cooked oatmeal, dark bread, brown rice, other grains, bran, wheat germ, popcorn | ≥ 3 oz/day | ≥ 3 oz/day | Positive scores | Positive scores | Reverse scores |
| Fruits | Fresh fruits (e.g. grapes, prunes, bananas, cantaloupe, watermelon, apples, pears, oranges, grapefruit, strawberries, blueberries, peaches, apricots, dates and plums) and dried fruits (e.g. raisins) | 2 cups/day | 2 cups/day | Positive scores | Positive scores | Reverse scores |
| Vegetables | Tomatoes, tomato juice, tomato sauce, broccoli, cabbage, cauliflower, Brussel's sprouts, carrots, mixed vegetables, seaweed, yellow/winter squash, eggplant, zucchini, yams, sweet potatoes, spinach cooked, spinach raw, kale, chard greens, iceberg /head lettuce, romaine or leaf lettuce, celery, mushrooms, beets, alfalfa sprouts, garlic, avocado and corn | 2½ cups/day | 3 cups/day | Positive scores | Positive scores | Reverse scores |
| Nuts | Nuts, peanut butter | 1 oz/day | 1 oz/day | Positive scores | Positive scores | Reverse scores |
| Legumes | String beans, tofu, soybeans, beans, lentils, peas and lima beans | 0.9 oz/day | 0.9 oz/day | Positive scores | Positive scores | Reverse scores |
| Vegetable oils | Oil-based salad dressing, vegetable oil used for cooking | 27 g/day | 30 g/day | Positive scores | Positive scores | Reverse scores |
| Tea and coffee | Tea, coffee, and decaffeinated coffee | 2 cups/day | 2 cups/day | Positive scores | Positive scores | Reverse scores |

Less healthy

| | | | | | | |
|---------------------------|--|-------------|-------------|-----------------|----------------|-----------------|
| Fruit juices | Apple juice, orange juice, grapefruit juice, other fruit juices | 223 gm/day | ≤ 3 oz/day | Positive scores | Reverse scores | Positive scores |
| Refined grains | Refined grain breakfast cereal, white bread, English muffins, bagels, rolls, muffins, biscuits, white rice, pancakes, waffles, crackers, and pasta | ≤ 85 gm/day | ≤ 90 gm/day | Positive scores | Reverse scores | Positive scores |
| Potatoes | French fries, baked and mashed potatoes, potato and corn chips | 90 gm/day | 90 gm/day | Positive scores | Reverse scores | Positive scores |
| Sugar sweetened beverages | Colas with caffeine and sugar, colas without caffeine but with sugar, other carbonated beverages with sugar, noncarbonated fruit drinks with sugar | <1 cup/day | <1 cup/day | Positive scores | Reverse scores | Positive scores |
| Sweets and desserts | Chocolates, candy bars, candy without chocolate, cookies (home-baked and ready-made), brownies, doughnuts, cake (home-baked and ready-made), sweet roll (home-baked and ready-made), pie (home-baked and readymade), jams, jellies, preserves, syrup and honey | ≤ 85 gm/day | ≤ 90 gm/day | Positive scores | Reverse scores | Positive scores |

Animal Food Groups

| | | | | | | |
|------------------|--|------------|------------|----------------|----------------|----------------|
| Dairy | Skim low fat milk, whole milk, cream, sour cream, sherbet, ice cream, yogurt, cottage and ricotta cheese, cream cheese, other cheese | 245 ml/day | 3 cups/day | Reverse scores | Reverse scores | Reverse scores |
| Egg | All fried, scrambled, omelettes, and boiled eggs | 11 gm/day | 0.4 oz/day | Reverse scores | Reverse scores | Reverse scores |
| Fish and seafood | Canned tuna, dark meat fish, other fish, shrimp, lobster, scallops | 105 gm/day | 105 gm/day | Reverse scores | Reverse scores | Reverse scores |
| Total meat | Chicken and turkey with skin, chicken and turkey without skin, bacon, hot dogs, | 105 gm/day | 105 gm/day | Reverse scores | Reverse scores | Reverse scores |

| | | | | | | |
|----------------------------------|---|------------|------------|----------------|----------------|----------------|
| | processed meats, liver, hamburger, beef-pork-lamb mixed dish, beef-pork-lamb main dish | | | | | |
| Miscellaneous animal-based foods | Pizza, chowder/cream soup, added butter/lard, mayonnaise and other creamy salad dressing, soup, gravy, and salad dressing | 105 gm/day | 105 gm/day | Reverse scores | Reverse scores | Reverse scores |

¹ Plant Based Diet Score (PDI), healthy PDI (hPDI), unhealthy PDI (uPDI). ² Participants with an intake equal or higher country than country-specific cut-offs for 12 food groups (fruits, vegetables, legumes, vegetable oils, tea/coffee, refined grains, potatoes, sweets/desserts, animal fat, eggs, total meat, and miscellaneous foods) were assigned a score of four. The remaining participants were divided into tertiles of intake. We divided the remaining six groups that were consumed in very low amounts (nuts, fish or shellfish, fruit juice, whole grains, dairy products, and sugar-sweetened beverages) as consumed (score = 1) or not consumed (score = 0).

References

1. Us department of agriculture, us department of health and human services. *Scientific report of the 2015 dietary guidelines advisory committee: Advisory report to the secretary of health and human services and the secretary of agriculture*. Washington (dc): Us department of health and human services; 2015. [cited 2017 jan 9]. Available from: <https://health.gov/dietaryguidelines/2015-scientific-report>.
2. The food and agriculture organization of the united nations. 2016. Food-based dietary guidelines. China

Table S2. Characteristics of all INTERMAP participants by hPDI and uPDI, adjusted for age, gender and sample, n=4,680

| Variable | Quartile 1 | Quartile 2 | Quartile 3 | Quartile 4 | P |
|---|----------------------|----------------------|----------------------|----------------------|---------|
| HEALTHY PLANT-BASED DIET INDEX | | | | | |
| N | 1233 | 1046 | 1258 | 1143 | |
| Median hPDI | 25 | 29 | 31 | 35 | |
| PDI | 26.1 (25.9, 26.3) | 28.1 (27.9, 28.3) | 29.6 (29.4, 29.8) | 31.6 (31.4, 31.8) | <0.0001 |
| uPDI | 31.8 (31.6, 32.0) | 30.3 (30.1, 30.5) | 29.1 (28.9, 29.3) | 27.1 (26.9, 27.4) | <0.0001 |
| Men (%) | 53.5 | 52.6 | 51.4 | 44.1 | |
| Current smokers (%) | 30.0 | 26.0 | 23.2 | 18.5 | |
| Taking dietary supplements (%) | 27.3 | 30.2 | 37.4 | 44.1 | |
| History of cardiovascular disease or diabetes mellitus (%) | 10.8 | 11.4 | 14.4 | 13.5 | |
| Use of antihypertensive, cardiovascular disease or diabetes medication (%) | 29.5 | 30.7 | 29.9 | 27.4 | |
| Family history of hypertension (%) | 51.4 | 53.2 | 57.3 | 56.7 | |
| Adhering to special diet (%) | 9.3 | 11.8 | 13.4 | 19.3 | |
| Age (y) | 48.9 (48.5, 49.2) | 48.6 (48.3, 49.0) | 49.2 (48.9, 49.5) | 49.9 (49.6, 50.3) | <0.0001 |
| Education (y) | 12.0 (11.9, 12.2) | 12.2 (12.0, 12.4) | 12.4 (12.3, 12.5) | 12.7 (12.5, 12.8) | <0.0001 |
| Engagement in moderate and heavy physical activity during work and leisure time (hours/d) | 3.4 (3.2, 3.6) | 3.6 (3.4, 3.8) | 3.5 (3.3, 3.7) | 3.4 (3.2, 3.6) | 0.27 |
| Systolic BP (mm Hg) | 120.2 (119.3, 121.0) | 119.8 (118.9, 120.6) | 118.4 (117.5, 119.2) | 117.7 (116.9, 118.6) | 0.0007 |
| Diastolic BP (mm Hg) | 74.7 (74.2, 75.3) | 74.2 (73.6, 74.8) | 73.5 (72.9, 74.1) | 73.3 (72.7, 73.8) | 0.004 |
| BMI (kg/m ²) | 26.0 (26.7, 27.3) | 26.7 (26.4, 27.0) | 26.3 (26.0, 26.6) | 25.7 (25.4, 26.0) | <0.0001 |
| Total energy intake (kcal/d) | 2273 (2242, 2304) | 2174 (2143, 2206) | 2113 (2084, 2142) | 2034 (2003, 2066) | <0.0001 |
| Urinary sodium (mmol/24-hour) | 183.8 (180.2, 187.4) | 178.8 (173.1, 180.4) | 168.8 (165.5, 172.2) | 158.0 (156.4, 164.7) | 0.03 |
| Urinary potassium (mmol/24-hour) | 49.2 (48.1, 50.2) | 51.3 (50.3, 52.4) | 54.3 (53.3, 55.2) | 58.7 (57.7, 59.8) | <0.0001 |
| Components of the Plant Based Scores (g/1000 kcal) | | | | | |
| <u>Healthy</u> | | | | | |
| Whole grains | 5 (4, 6) | 9 (8, 10) | 12 (11, 13) | 18 (17, 19) | <0.0001 |
| Fruit | 31 (27, 35) | 53 (49, 56) | 65 (62, 68) | 90 (86, 94) | <0.0001 |
| Vegetables (excluding potatoes) | 131 (127, 136) | 154 (150, 159) | 178 (174, 182) | 222 (218, 227) | <0.0001 |

| | | | | | |
|---|-------------------|-------------------|-------------------|-------------------|---------|
| Nuts | 2 (1, 2) | 2 (2, 2) | 2 (2, 3) | 3 (2, 3) | <0.0001 |
| Legumes | 28 (26, 30) | 34 (32, 36) | 40 (38, 42) | 54 (52, 57) | <0.0001 |
| Vegetable oils | 5 (5, 5) | 7 (7, 7) | 8 (7, 8) | 8 (8, 9) | <0.0001 |
| Tea and coffee | 179 (166, 192) | 219 (205, 232) | 260 (248, 272) | 327 (314, 340) | <0.0001 |
| Less healthy | | | | | |
| Fruit juices | 25 (22, 28) | 25 (22, 28) | 29 (27, 32) | 24 (21, 27) | 0.04 |
| Refined grains | 210 (205, 214) | 187 (182, 192) | 188 (184, 192) | 178 (173, 182) | <0.0001 |
| Potatoes | 31 (30, 33) | 29 (27, 30) | 24 (23, 26) | 19 (17, 20) | <0.0001 |
| Sugar sweetened beverages | 92 (85, 98) | 79 (73, 86) | 65 (59, 71) | 49 (43, 59) | <0.0001 |
| Sweets and desserts | 35 (34, 37) | 33 (32, 35) | 29 (27, 30) | 24 (22, 25) | <0.0001 |
| Animal Food Groups | | | | | |
| Dairy | 65 (60, 69) | 73 (68, 78) | 76 (72, 80) | 91 (86, 95) | <0.0001 |
| Egg | 9 (9, 10) | 10 (9, 10) | 8 (8, 9) | 7 (6, 7) | <0.0001 |
| Fish and seafood | 16 (15, 17) | 16 (15, 17) | 17 (16, 18) | 20 (19, 21) | <0.0001 |
| Meat | 53 (52, 55) | 48 (46, 49) | 43 (42, 44) | 36 (34, 37) | <0.0001 |
| Animal fat | 4 (4, 4) | 3 (2, 3) | 2 (2, 2) | 1 (1, 2) | <0.0001 |
| Miscellaneous animal-based foods | 34 (32, 36) | 32 (31, 34) | 30 (28, 31) | 27 (25, 29) | <0.0001 |
| Nutrients (%) | | | | | |
| Total protein | 15 (15, 15) | 15 (15, 15) | 15 (15, 15) | 15 (15, 16) | <0.0001 |
| Total carbohydrates | 52 (51, 52) | 53 (52, 53) | 53 (52, 53) | 54 (53, 54) | 0.0003 |
| Dietary fiber (g/1000 kcal) | 8 (8, 8) | 9 (9, 10) | 11 (10, 11) | 12 (12, 12) | <0.0001 |
| Total fat | 30 (29, 30) | 29 (29, 30) | 28 (28, 29) | 27 (27, 28) | <0.0001 |
| Saturated fatty acids | 10 (10, 10) | 9 (9, 9) | 9 (8, 9) | 8 (8, 8) | <0.0001 |
| Polyunsaturated fatty acids | 6 (6, 6) | 7 (6, 7) | 7 (7, 7) | 7 (7, 7) | <0.0001 |
| Monounsaturated fatty acids | 11 (11, 11) | 11 (11, 11) | 10 (10, 11) | 10 (10, 10) | <0.0001 |
| Alcohol intake (g/d) | 10 (9, 12) | 10 (9, 11) | 11 (10, 12) | 11 (10, 12) | 0.52 |
| UNHEALTHY PLANT-BASED DIET INDEX | | | | | |
| N | 1133 | 1073 | 1297 | 1177 | |
| Median uPDI | 23 | 29 | 32 | 36 | |
| PDI | 28.8 (28.6, 29.0) | 28.6 (28.4, 28.9) | 28.9 (28.7, 29.1) | 29.0 (28.7, 29.2) | 0.20 |

| | | | | | |
|---|----------------------|----------------------|----------------------|----------------------|---------|
| hPDI | 31.5 (31.3, 31.7) | 29.6 (29.4, 29.8) | 28.5 (28.3, 28.7) | 26.9 (26.7, 27.1) | <0.0001 |
| Men (%) | 47.7 | 50.3 | 50.1 | 53.4 | |
| Current smokers (%) | 22.7 | 22.8 | 23.3 | 25.7 | |
| Taking dietary supplements (%) | 30.9 | 34.6 | 37.0 | 36.1 | |
| History of cardiovascular disease or diabetes mellitus (%) | 12.6 | 12.5 | 13.7 | 11.3 | |
| Use of antihypertensive, cardiovascular disease or diabetes medication (%) | 32.8 | 30.4 | 28.7 | 26.9 | |
| Family history of hypertension (%) | 51.2 | 56.0 | 55.7 | 55.7 | |
| Adhering to special diet (%) | 16.2 | 14.3 | 12.6 | 10.9 | |
| Age (y) | 49.9 (49.5, 50.2) | 49.6 (49.3, 49.9) | 48.9 (48.6, 49.2) | 48.4 (48.1, 48.8) | <0.0001 |
| Education (y) | 12.8 (12.6, 13.0) | 12.3 (12.1, 12.4) | 12.2 (12.0, 12.3) | 12.1 (11.9, 12.2) | <0.0001 |
| Engagement in moderate and heavy physical activity during work and leisure time (hours/d) | 3.4 (3.3, 3.6) | 3.4 (3.2, 3.6) | 3.4 (3.3, 3.6) | 3.6 (3.4, 3.7) | 0.64 |
| Systolic BP (mm Hg) | 118.6 (117.6, 119.5) | 118.9 (118.0, 119.7) | 119.3 (118.5, 120.1) | 119.3 (118.4, 120.1) | 0.70 |
| Diastolic BP (mm Hg) | 73.8 (73.1, 74.4) | 74.0 (73.4, 74.5) | 74.0 (73.5, 74.6) | 74.0 (73.4, 74.6) | 0.93 |
| BMI (kg/m ²) | 26.4 (26.1, 26.7) | 26.3 (26.1, 26.6) | 26.4 (26.1, 26.7) | 26.5 (26.2, 26.8) | 0.88 |
| Total energy intake (kcal/d) | 2041 (2007, 2074) | 2117 (2086, 2149) | 2174 (2145, 2203) | 2260 (2229, 2291) | <0.0001 |
| Alcohol intake (g/d) | 10 (9, 11) | 10 (9, 11) | 10 (9, 11) | 12 (11, 13) | 0.02 |
| Urinary sodium (mmol/24-hour) | 173.2 (169.6, 176.8) | 180.4 (177.1, 183.7) | 182.0 (178.5, 185.6) | 185.2 (181.4, 189.1) | 0.0002 |
| Urinary potassium (mmol/24-hour) | 58.3 (57.2, 59.4) | 54.8 (53.8, 55.8) | 52.7 (51.8, 53.7) | 47.9 (46.9, 48.9) | <0.0001 |
| Components of the Plant Based Scores (g/1000 kcal) | | | | | |
| <u>Healthy</u> | | | | | |
| Whole grains | 15 (14, 16) | 12 (11, 13) | 9 (8, 10) | 8 (7, 9) | <0.0001 |
| Fruit | 89 (85, 93) | 59 (55, 62) | 52 (48, 55) | 40 (36, 43) | <0.0001 |
| Vegetables (excluding potatoes) | 215 (210, 220) | 188 (183, 192) | 161 (157, 165) | 124 (120, 129) | <0.0001 |
| Nuts | 3 (2, 3) | 2 (2, 2) | 2 (2, 2) | 2 (1, 2) | 0.0007 |
| Legumes | 52 (49, 54) | 45 (43, 47) | 37 (35, 39) | 23 (21, 25) | <0.0001 |
| Vegetable oils | 10 (10, 10) | 8 (7, 8) | 6 (6, 7) | 4 (4, 5) | <0.0001 |
| Tea and coffee | 333 (319, 348) | 274 (261, 287) | 226 (214, 238) | 155 (142, 168) | <0.0001 |
| <u>Less healthy</u> | | | | | |
| Fruit juices | 22 (19, 26) | 25 (22, 28) | 27 (24, 29) | 29 (26, 32) | 0.04 |

| | | | | | |
|----------------------------------|----------------|----------------|----------------|----------------|---------|
| Refined grains | 158 (153, 163) | 194 (190, 199) | 204 (200, 209) | 206 (201, 210) | <0.0001 |
| Potatoes | 22 (20, 24) | 25 (23, 26) | 28 (26, 29) | 28 (27, 30) | <0.0001 |
| Sugar sweetened beverages | 37 (30, 44) | 57 (51, 63) | 82 (76, 88) | 106 (100, 113) | <0.0001 |
| Sweets and desserts | 20 (19, 22) | 26 (25, 28) | 33 (32, 35) | 40 (39, 42) | <0.0001 |
| <u>Animal Food Groups</u> | | | | | |
| Dairy | 76 (71, 81) | 75 (70, 79) | 77 (73, 81) | 75 (70, 79) | 0.81 |
| Egg | 11 (10, 12) | 9 (9, 10) | 8 (7, 8) | 6 (5, 6) | <0.0001 |
| Fish and seafood | 20 (19, 21) | 18 (17, 19) | 17 (16, 18) | 15 (14, 16) | <0.0001 |
| Meat | 54 (52, 55) | 47 (46, 49) | 42 (41, 44) | 37 (36, 39) | <0.0001 |
| Animal fat | 1 (1, 2) | 2 (2, 2) | 3 (3, 3) | 4 (4, 4) | <0.0001 |
| Miscellaneous animal-based foods | 18 (17, 20) | 28 (27, 30) | 35 (33, 36) | 42 (40, 44) | <0.0001 |
| <u>Nutrients (%)</u> | | | | | |
| Total protein | 17 (16, 17) | 16 (15, 16) | 15 (15, 15) | 14 (13, 14) | <0.0001 |
| Total carbohydrates | 49 (49, 50) | 52 (52, 53) | 54 (53, 54) | 55 (55, 56) | <0.0001 |
| Dietary fiber (g/1000 kcal) | 12 (11, 12) | 10 (10, 10) | 10 (10, 10) | 9 (8, 9) | <0.0001 |
| Total fat | 30 (30, 30) | 29 (29, 29) | 28 (28, 29) | 28 (27, 28) | <0.0001 |
| Saturated fatty acids | 9 (9, 9) | 9 (9, 9) | 9 (9, 9) | 9 (9, 9) | 0.99 |
| Polyunsaturated fatty acids | 7 (7, 7) | 7 (6, 7) | 6 (6, 7) | 6 (6, 6) | <0.0001 |
| Monounsaturated fatty acids | 11 (11, 11) | 11 (10, 11) | 10 (10, 11) | 10 (10, 10) | <0.0001 |

¹ Plant Based Diet Score (PDI), healthy PDI (hPDI), unhealthy PDI (uPDI)

Table S3. Characteristics of Western participants by hPDI and uPDI, adjusted for age, gender and sample, n=2,696¹

| Variable | Quartile 1 | Quartile 2 | Quartile 3 | Quartile 4 | P |
|---|--------------------------------|-------------------------|-------------------------|-------------------------|---------|
| | HEALTHY PLANT BASED DIET INDEX | | | | |
| N | 754 | 549 | 750 | 643 | |
| Median HPDI | 27 | 29 | 32 | 35 | |
| PDI | 28.7 (28.5, 28.9) | 30.6 (30.3, 30.8) | 31.9 (31.7, 32.1) | 33.8 (33.5, 34.0) | <0.0001 |
| UPDI | 33.6 (33.4, 33.9) | 32.5 (32.2, 32.8) | 31.2 (30.9, 31.5) | 29.5 (29.2, 29.8) | <0.0001 |
| Men (%) | 53.6 | 54.3 | 49.2 | 46.4 | |
| Current smokers (%) | 20.2 | 15.3 | 17.1 | 14.3 | |
| Taking dietary supplements (%) | 41.9 | 46.3 | 49.7 | 59.1 | |
| History of cardiovascular disease or diabetes mellitus (%) | 14.32 | 13.11 | 15.87 | 15.24 | |
| Use of antihypertensive, cardiovascular disease or diabetes medication (%) | 29.47 | 30.7 | 29.9 | 27.4 | |
| Family history of hypertension (%) | 63.79 | 64.48 | 65.33 | 63.45 | |
| Adhering to special diet (%) | 12.2 | 17.3 | 19.33 | 27.22 | |
| On vegetarian dietary pattern (%) | 0 | 1.28 | 0.93 | 4.20 | |
| Age (y) | 48.9 (48.5, 49.3) | 48.9 (48.5, 49.4) | 49.4 (49.0, 49.8) | 49.4 (48.9, 49.8) | 0.18 |
| Education (y) | 14.3 (14.1, 14.5) | 14.4 (14.2, 14.6) | 14.5 (14.4, 14.7) | 14.9 (14.7, 15.1) | 0.0002 |
| Engagement in moderate and heavy physical activity during work and leisure time (hours/d) | 3.0 (2.8, 3.2) | 3.3 (3.0, 3.5) | 3.0 (2.8, 3.2) | 2.9 (2.7, 3.2) | 0.20 |
| SBP (mm Hg) | 120.33 (119.37, 121.30) | 119.91 (118.78, 121.03) | 118.38 (117.41, 119.34) | 117.40 (116.35, 118.45) | 0.0002 |
| DBP (mm Hg) | 75.10 (74.44, 75.75) | 74.80 (74.05, 75.57) | 73.74 (73.09, 74.39) | 73.38 (72.67, 74.09) | 0.001 |
| BMI (kg/m ²) | 29.25 (28.85, 29.65) | 29.05 (28.58, 29.52) | 28.44 (28.05, 28.85) | 27.58 (27.14, 28.01) | <0.0001 |
| Total energy intake (kcal/d) | 2379 (2338, 2415) | 2252 (2205, 2300) | 2186 (2145, 2226) | 2069 (2024, 2113) | <0.0001 |
| Alcohol intake (g/d) | 8 (7, 9) | 8 (7, 9) | 8 (7, 9) | 8 (7, 10) | 0.18 |
| Urinary sodium (mmol/24, hour) | 162.08 (159.80, 165.37) | 157.40 (155.56, 161.25) | 156.43 (155.51, 160.14) | 150.27 (148.30, 154.24) | <0.001 |
| Urinary potassium (mmol/24, hour) | 55.79 (54.45, 57.12) | 57.36 (55.79, 58.92) | 60.77 (59.44, 62.11) | 64.66 (63.21, 66.11) | <0.0001 |

Components of the Plant Based Scores (g/1000 kcal)**Healthy**

| | | | | | |
|---------------------------------|----------------|----------------|----------------|----------------|---------|
| Whole grains | 11 (9, 12) | 15 (14, 17) | 19 (18, 21) | 28 (26, 29) | <0.0001 |
| Fruit | 33 (28, 37) | 51 (46, 56) | 61 (57, 66) | 89 (84, 94) | <0.0001 |
| Vegetables (excluding potatoes) | 126 (121, 131) | 144 (138, 150) | 166 (160, 170) | 210 (205, 216) | <0.0001 |
| Nuts | 1 (1, 2) | 2 (1, 2) | 3 (2, 3) | 3 (3, 4) | 0.0002 |
| Legumes | 10 (8, 12) | 15 (13, 17) | 20 (17, 21) | 29 (27, 31) | <0.0001 |
| Vegetable oils | 6 (5, 7) | 7 (6, 8) | 7 (7, 8) | 9 (8, 9) | <0.0001 |
| Tea and coffee | 221 (202, 239) | 274 (251, 295) | 322 (304, 341) | 382 (362, 403) | <0.0001 |

Less healthy

| | | | | | |
|---------------------------|----------------|----------------|---------------|-------------|---------|
| Fruit juices | 52 (46, 57) | 45 (41, 50) | 44 (39, 50) | 29 (25, 34) | <0.0001 |
| Refined grains | 69 (66, 72) | 70 (67, 74) | 68 (65, 71) | 63 (60, 67) | 0.02 |
| Potatoes | 39 (37, 41) | 36 (34, 39) | 31 (29, 33) | 24 (22, 26) | <0.0001 |
| Sugar sweetened beverages | 138 (128, 147) | 124 (113, 135) | 108 (98, 118) | 86 (76, 97) | <0.0001 |
| Sweets and desserts | 42 (40, 43) | 38 (37, 41) | 33 (32, 35) | 27 (26, 29) | <0.0001 |

Animal Food Groups

| | | | | | |
|----------------------------------|-------------|---------------|---------------|----------------|---------|
| Animal fat | 5 (4, 5) | 3 (3, 4) | 3 (2, 3) | 2 (1, 2) | <0.0001 |
| Dairy | 88 (82, 95) | 103 (96, 110) | 103 (97, 110) | 115 (109, 123) | <0.0001 |
| Egg | 5 (4, 5) | 4 (3, 5) | 4 (4, 5) | 3 (2, 3) | <0.0001 |
| Fish and seafood | 7 (6, 8) | 8 (7, 9) | 8 (7, 9) | 9 (8, 9) | 0.82 |
| Meat | 68 (66, 70) | 63 (60, 65) | 58 (56, 61) | 48 (46, 51) | <0.0001 |
| Miscellaneous animal based foods | 26 (22, 25) | 21 (19, 23) | 19 (18, 21) | 17 (15, 19) | <0.0001 |

Nutrients (%)

| | | | | | |
|-----------------------------|-------------|-------------|-------------|-------------|---------|
| Total protein | 15 (15, 16) | 16 (15, 16) | 16 (15, 16) | 16 (16, 16) | 0.15 |
| Vegetable protein | 5 (5, 5) | 5 (5, 5) | 6 (5, 6) | 6 (6, 6) | <0.0001 |
| Animal protein | 11 (11, 11) | 10 (10, 11) | 10 (9, 10) | 9 (9, 9) | <0.0001 |
| Total carbohydrates | 47 (46, 47) | 48 (47, 49) | 49 (48, 49) | 50 (50, 51) | <0.0001 |
| Dietary fiber (g/1000 kcal) | 8 (7, 8) | 9 (8, 9) | 10 (10, 10) | 12 (12, 12) | <0.0001 |

| | | | | | |
|------------------------------|-------------------|-------------------|-------------------|-------------------|---------|
| Dietary starch | 22 (22, 22) | 23 (23, 24) | 24 (23, 24) | 26 (24, 25) | <0.0001 |
| Total fat | 35 (34, 35) | 33 (32, 34) | 32 (32, 33) | 31 (30, 31) | <0.0001 |
| Saturated fatty acids | 12 (12, 12) | 11 (11, 12) | 11 (11, 11) | 10 (10, 10) | <0.0001 |
| Polyunsaturated fatty acids | 7 (6, 7) | 7 (7, 7) | 7 (7, 7) | 7 (6, 7) | 0.05 |
| Monounsaturated fatty acids | 12 (12, 13) | 12 (12, 12) | 12 (12, 12) | 11 (11, 12) | <0.0001 |
| Trans-fatty acids | 2.0 (1.9, 2.0) | 2.0 (1.8, 2.0) | 1.8 (1.7, 1.8) | 1.6 (1.5, 1.7) | <0.0001 |
| Cholesterol (mg/1000kcal) | 145 (142, 149) | 134 (129, 138) | 128 (124, 132) | 108 (104, 112) | <0.0001 |
| Beta-carotene (mcg/1000kcal) | 1321 (1198, 1445) | 1571 (1427, 1714) | 1841 (1718, 1964) | 2343 (2209, 2477) | <0.0001 |
| Calcium (mg/1000kcal) | 345 (336, 355) | 364 (353, 374) | 391 (382, 400) | 419 (409, 429) | <0.0001 |
| Iron (mg/1000kcal) | 7 (7, 7) | 7 (7, 7) | 8 (7, 8) | 8 (8, 9) | <0.0001 |
| Magnesium (mg/1000kcal) | 129 (127, 132) | 142 (139, 144) | 154 (151, 156) | 174 (171, 177) | <0.0001 |
| Phosphorus (mg/1000kcal) | 571 (563, 580) | 589 (579, 600) | 615 (607, 623) | 647 (637, 656) | <0.0001 |
| Potassium (mg/1000kcal) | 1249 (1225, 1272) | 1351 (1323, 1378) | 1442 (1419, 1466) | 1612 (1587, 1638) | <0.0001 |
| Retinol (mcg/1000kcal) | 217 (201, 234) | 214 (195, 233) | 215 (199, 232) | 213 (195, 231) | 0.99 |
| Selenium (mcg/1000kcal) | 55.6 (54, 57) | 57 (55, 59) | 57 (55, 59) | 58 (56, 60) | 0.22 |
| Vitamin E (mg/1000kcal) | 4 (4, 4) | 4 (4, 5) | 5 (4, 5) | 5 (5, 6) | <0.0001 |
| Vitamin A (IU/1000kcal) | 2930 (2715, 3145) | 3336 (3085, 3587) | 3791 (3577, 4006) | 4623 (4387, 4856) | <0.0001 |
| Vitamin C (mg/1000kcal) | 42 (39, 44) | 47 (44, 50) | 54 (51, 56) | 63 (60, 65) | <0.0001 |
| Vitamin B6 (mg/1000kcal) | 3.5 (3.4, 3.6) | 3.5 (3.4, 3.6) | 3.6 (3.5, 3.6) | 3.5 (3.4, 3.6) | 0.66 |
| Niacin (mg/1000kcal) | 45 (44, 46) | 44 (43, 46) | 44 (43, 45) | 43 (42, 44) | 0.07 |

UNHEALTHY PLANT BASED DIET INDEX

| | | | | | |
|--------------------------------|-------------------|-------------------|-------------------|-------------------|---------|
| N | 597 | 655 | 715 | 729 | |
| Median UPDI | 27 | 30 | 33 | 36 | |
| PDI | 31 (30, 31) | 31 (30, 31) | 31 (31, 32) | 31 (31, 32) | 0.12 |
| HPDI | 33.1 (32.8, 33.4) | 31.3 (31.1, 31.6) | 30.1 (29.9, 30.4) | 29.1 (28.8, 29.3) | <0.0001 |
| Men (%) | 45.6 | 53.4 | 51.3 | 52.1 | |
| Current smokers (%) | 14.2 | 15.6 | 18.6 | 18.7 | |
| Taking dietary supplements (%) | 54.6 | 48.7 | 49.8 | 44.2 | |

| | | | | | |
|---|-------------------------|-------------------------|-------------------------|-------------------------|---------|
| History of cardiovascular disease or diabetes mellitus (%) | 18.1 | 13.3 | 14.7 | 13.3 | |
| Use of antihypertensive, cardiovascular disease or diabetes medication (%) | 32.8 | 30.4 | 28.7 | 26.9 | |
| Family history of hypertension (%) | 65.2 | 65.3 | 63.5 | 63.4 | |
| Adhering to special diet (%) | 26.0 | 18.9 | 18.0 | 13.5 | |
| Adhering to vegetarian dietary pattern (%) | 2.2 | 1.8 | 1.1 | 1.1 | |
| Age (y) | 50.1 (49.6, 50.5) | 49.5 (49.0, 49.9) | 48.7 (48.3, 49.1) | 48.5 (48.1, 48.9) | <0.0001 |
| Education (y) | 14.8 (14.6, 15.1) | 14.5 (14.3, 14.7) | 14.4 (14.2, 14.6) | 14.4 (14.2, 14.6) | 0.003 |
| Engagement in moderate and heavy physical activity during work and leisure time (hours/d) | 3.1 (2.9, 3.3) | 2.9 (2.8, 3.2) | 2.9 (2.7, 3.1) | 3.2 (2.9, 3.4) | 0.18 |
| SBP (mm Hg) | 117.24 (116.17, 118.30) | 118.91 (117.89, 118.94) | 120.40 (119.93, 121.36) | 121.43 (120.36, 122.02) | <0.05 |
| DBP (mm Hg) | 73.66 (72.94, 74.37) | 74.30 (73.61, 74.99) | 74.74 (74.09, 75.40) | 74.23 (73.51, 74.95) | 0.19 |
| BMI (kg/m ²) | 27.20 (26.86, 28.14) | 27.31 (26.93, 28.39) | 28.78 (28.38, 29.18) | 29.85 (29.01, 30.30) | <0.05 |
| Total energy intake (kcal/d) | 2077 (2031, 2123) | 2197 (2153, 2241) | 2250 (2208, 2292) | 2350 (2308, 2392) | <0.0001 |
| Alcohol intake (g/d) | 7 (6, 8) | 8 (7, 9) | 9 (8, 10) | 10 (9, 11) | 0.002 |
| Urinary sodium (mmol/24, hour) | 148.89 (144.62, 153.15) | 158.92 (155.07, 162.78) | 161.85 (157.76, 165.94) | 164.35 (160.12, 168.58) | <0.0001 |
| Urinary potassium (mmol/24, hour) | 64.87 (63.43, 66.32) | 61.63 (60.23, 63.04) | 58.89 (57.57, 60.21) | 54.87 (52.84, 55.59) | <0.0001 |
| Components of the Plant Based Scores (g/1000 kcal) | | | | | |
| Healthy | | | | | |
| Whole grains | 23 (22, 25) | 19 (18, 21) | 16 (15, 18) | 14 (13, 16) | <0.0001 |
| Fruit | 83 (78, 88) | 58 (53, 63) | 52 (47, 56) | 42 (38, 47) | <0.0001 |
| Vegetables (excluding potatoes) | 212 (207, 218) | 176 (171, 182) | 148 (144, 153) | 116 (112, 122) | <0.0001 |
| Nuts | 3 (3, 4) | 2 (2, 3) | 2 (2, 2) | 1 (1, 2) | <0.0001 |
| Legumes | 29 (26, 31) | 21 (19, 23) | 18 (16, 19) | 9 (7, 11) | <0.0001 |
| Vegetable oils | 10 (9, 11) | 8 (8, 9) | 7 (6, 7) | 4 (4, 5) | <0.0001 |
| Tea and coffee | 384 (363, 404) | 328 (309, 348) | 274 (256, 293) | 208 (187, 228) | <0.0001 |
| Less healthy | | | | | |
| Fruit juices | 37 (32, 43) | 42 (37, 47) | 43 (39, 48) | 46 (41, 50) | 0.16 |
| Refined grains | 63 (60, 67) | 66 (63, 69) | 68 (65, 71) | 71 (68, 75) | 0.002 |

| | | | | | |
|----------------------------------|-------------------|-------------------|-------------------|-------------------|---------|
| Potatoes | 28 (26, 31) | 33 (30, 35) | 34 (32, 37) | 34 (32, 37) | 0.0005 |
| Sugar sweetened beverages | 72 (62, 82) | 94 (84, 104) | 124 (115, 136) | 158 (148, 168) | <0.0001 |
| Sweets and desserts | 24 (22, 26) | 34 (32, 36) | 40 (38, 41) | 44 (42, 46) | <0.0001 |
| <u>Animal Food Groups</u> | | | | | |
| Animal fat | 2 (1, 2) | 3 (3, 3) | 4 (4, 5) | 5 (4, 5) | <0.0001 |
| Dairy | 101 (94, 108) | 99 (93, 106) | 102 (96, 108) | 105 (99, 112) | 0.66 |
| Egg | 3 (2, 3) | 5 (4, 5) | 3 (3, 4) | 5 (5, 6) | <0.0001 |
| Fish and seafood | 12 (11, 13) | 8 (7, 9) | 8 (7, 9) | 5 (4, 6) | <0.0001 |
| Meat | 55 (53, 57) | 57 (55, 59) | 61 (59, 63) | 64 (62, 66) | <0.0001 |
| Miscellaneous animal based foods | 13 (11, 15) | 18 (16, 20) | 22 (20, 24) | 29 (27, 31) | <0.0001 |
| <u>Nutrients (%)</u> | | | | | |
| Total protein | 17 (17, 17) | 16 (16, 16) | 15 (15, 15) | 14 (14, 14) | <0.0001 |
| Vegetable protein | 6 (5, 6) | 5 (5, 6) | 5 (5, 5) | 5 (5, 5) | <0.0001 |
| Animal protein | 9 (9, 10) | 9 (8, 9) | 10 (10, 11) | 11 (11, 12) | <0.0001 |
| Total carbohydrates | 46 (46, 47) | 48 (47, 48) | 49 (48, 49) | 51 (50, 51) | <0.0001 |
| Dietary fiber (g/1000 kcal) | 12 (11, 12) | 10 (10, 10) | 9 (9, 9) | 8 (8, 8) | <0.0001 |
| Dietary starch | 23 (22, 24) | 23 (23, 24) | 24 (23, 24) | 23 (22, 24) | 0.54 |
| Total fat | 33 (32, 33) | 33 (33, 34) | 33 (32, 33) | 33 (32, 33) | 0.39 |
| Saturated fatty acids | 10 (10, 11) | 11 (11, 11) | 11 (11, 11) | 11 (11, 11) | 0.003 |
| Polyunsaturated fatty acids | 7 (7, 7) | 7 (7, 7) | 7 (7, 7) | 6 (6, 7) | <0.0001 |
| Monounsaturated fatty acids | 12 (12, 12) | 12 (12, 12) | 12 (12, 12) | 12 (12, 12) | 0.25 |
| Trans-fatty acids | 1.6 (1.5, 1.7) | 1.8 (1.7, 1.9) | 1.9 (1.8, 1.9) | 2.0 (1.9, 2.0) | <0.0001 |
| Cholesterol (mg/1000kcal) | 141 (137, 146) | 132 (128, 137) | 126 (122, 130) | 118 (114, 122) | <0.0001 |
| Beta-carotene (mcg/1000kcal) | 2331 (2191, 2470) | 1885 (1753, 2017) | 1654 (1528, 1780) | 1277 (1150, 1403) | <0.0001 |
| Calcium (mg/1000kcal) | 398 (387, 409) | 380 (370, 390) | 374 (364, 384) | 366 (356, 376) | 0.0002 |
| Iron (mg/1000kcal) | 8 (7, 8) | 7 (7, 8) | 7 (7, 8) | 7 (6, 7) | <0.0001 |
| Magnesium (mg/1000kcal) | 168 (166, 171) | 154 (151, 157) | 145 (142, 148) | 132 (130, 135) | <0.0001 |
| Phosphorus (mg/1000kcal) | 656 (646, 666) | 616 (607, 625) | 590 (581, 599) | 567 (558, 576) | <0.0001 |

| | | | | | |
|--------------------------|-------------------|-------------------|-------------------|-------------------|---------|
| Potassium (mg/1000kcal) | 1636 (1609, 1662) | 1465 (1440, 1490) | 1356 (1332, 1380) | 1225 (1201, 1248) | <0.0001 |
| Retinol (mcg/1000kcal) | 199 (180, 217) | 222 (204, 240) | 218 (201, 234) | 219 (202, 236) | 0.27 |
| Selenium (mcg/1000kcal) | 62 (60, 64) | 58 (56, 60) | 55 (53, 57) | 54 (52, 56) | <0.0001 |
| Vitamin E (mg/1000kcal) | 5 (5, 5) | 5 (4, 5) | 4 (4, 5) | 4 (4, 4) | <0.0001 |
| Vitamin A (IU/1000kcal) | 4553 (4309, 4797) | 3888 (3658, 4119) | 3487 (3267, 3707) | 2862 (2641, 3084) | <0.0001 |
| Vitamin C (mg/1000kcal) | 62 (59, 65) | 52 (49, 55) | 47 (54, 50) | 44 (42, 47) | <0.0001 |
| Vitamin B6 (mg/1000kcal) | 3.6 (3.5, 3.7) | 3.6 (3.5, 3.7) | 3.5 (3.4, 3.6) | 3.4 (3.3, 3.5) | 0.007 |
| Niacin (mg/1000kcal) | 45 (44, 47) | 45 (44, 46) | 43 (42, 44) | 43 (42, 44) | 0.01 |

¹ Plant Based Diet Score (PDI), healthy PDI (hPDI), unhealthy PDI (uPDI)

Table S4. Characteristics of East Asian participants by hPDI and uPDI, adjusted for age, gender and sample, n=1,984¹

| Variable | Quartile 1 | Quartile 2 | Quartile 3 | Quartile 4 | P trend |
|---|--------------------------------|-------------------------|-------------------------|-------------------------|---------|
| | HEALTHY PLANT BASED DIET INDEX | | | | |
| N | 479 | 497 | 508 | 500 | |
| Median HPDI | 20 | 25 | 28 | 33 | |
| PDI | 21.7 (21.4, 22.1) | 24.5 (24.2, 24.8) | 26.6 (26.3, 26.9) | 28.8 (28.5, 29.2) | <0.0001 |
| UPDI | 29.9 (29.5, 30.3) | 27.4 (27.1, 27.7) | 25.7 (25.4, 26.1) | 23.2 (22.8, 23.6) | <0.0001 |
| Men (%) | 53 | 50.7 | 54.53 | 41.2 | |
| Current smokers (%) | 37.58 | 37.83 | 32.28 | 23.8 | |
| Taking dietary supplements (%) | 4.18 | 12.47 | 19.09 | 24.8 | |
| History of cardiovascular disease or diabetes mellitus (%) | 5.22 | 9.46 | 12.2 | 11.2 | |
| Use of antihypertensive, cardiovascular disease or diabetes medication (%) | 6 | 8 | 8 | 9 | |
| Family history of hypertension (%) | 31.94 | 40.64 | 45.47 | 48 | |
| Adhering to special diet (%) | 4.8 | 5.63 | 4.72 | 9.2 | |
| Adhering to vegetarian dietary pattern (%) | 0.2 | 0.8 | 1.0 | 0.6 | |
| Age (y) | 48.4 (47.8, 49.1) | 48.1 (47.6, 48.6) | 49.2 (48.7, 49.7) | 51.0 (50.4, 51.6) | <0.0001 |
| Education (y) | 8.7 (8.4, 8.9) | 9.1 (8.9, 9.3) | 9.3 (9.1, 9.5) | 9.6 (9.3, 9.8) | 0.002 |
| Engagement in moderate and heavy physical activity during work and leisure time (hours/d) | 3.8 (3.4, 4.2) | 4.0 (3.7, 4.3) | 4.3 (4.0, 4.6) | 4.1 (3.8, 4.5) | 0.41 |
| SBP (mm Hg) | 120.80 (119.50, 121.10) | 119.76 (118.33, 121.18) | 118.93 (117.56, 120.30) | 118.61 (117.30, 119.92) | |
| DBP (mm Hg) | 73.37 (72.51, 74.22) | 73.97 (73.03, 74.91) | 73.73 (72.82, 74.63) | 73.04 (72.18, 73.91) | 0.50 |
| BMI (kg/m ²) | 23.39 (23.13, 23.66) | 23.39 (23.10, 23.68) | 23.36 (23.07, 23.64) | 23.09 (22.83, 23.36) | 0.39 |
| Total energy intake (kcal/d) | 2058 (2021, 2095) | 2034 (1994, 2074) | 2064 (2026, 2103) | 2008 (1971, 2045) | 0.14 |
| Urinary sodium (mmol/24, hour) | 210.40 (204.75, 216.05) | 214.76 (208.57, 220.95) | 215.79 (209.84, 221.74) | 204.31 (198.63, 209.99) | 0.03 |
| Urinary potassium (mmol/24, hour) | 41.58 (40.44, 42.72) | 43.42 (42.18, 44.67) | 45.99 (44.80, 47.19) | 46.44 (45.30, 47.59) | <0.0001 |
| Components of the Plant Based Scores (g/1000 kcal) | | | | | |
| <u>Healthy</u> | | | | | |

| | | | | | |
|----------------------------------|----------------|----------------|----------------|----------------|---------|
| Whole grains | 0 (0, 1) | 1 (0, 1) | 1 (0, 1) | 1 (1, 1) | 0.02 |
| Fruit | 22 (15, 29) | 53 (48, 58) | 73 (68, 79) | 96 (90, 102) | <0.0001 |
| Vegetables (excluding potatoes) | 129 (120, 138) | 166 (159, 172) | 200 (193, 207) | 244 (236, 251) | <0.0001 |
| Nuts | 1 (1, 2) | 2 (1, 2) | 2 (2, 3) | 3 (3, 4) | <0.0001 |
| Legumes | 51 (45, 57) | 62 (58, 66) | 72 (68, 76) | 88 (83, 92) | <0.0001 |
| Vegetable oils | 5 (5, 6) | 6 (6, 6) | 7 (6, 7) | 8 (8, 8) | <0.0001 |
| Tea and coffee | 143 (128, 159) | 144 (132, 156) | 156 (144, 169) | 234 (220, 248) | <0.0001 |
| <u>Less healthy</u> | | | | | |
| Fruit juices | 6 (5, 7) | 2 (1, 3) | 1 (0, 2) | 2 (1, 3) | <0.0001 |
| Refined grains | 444 (431, 457) | 364 (354, 373) | 344 (334, 354) | 317 (305, 328) | <0.0001 |
| Potatoes | 15 (14, 17) | 16 (14, 17) | 17 (16, 19) | 15 (13, 16) | 0.12 |
| Sugar sweetened beverages | 16 (12, 19) | 13 (11, 16) | 6 (6, 11) | 2 (2, 6) | <0.0001 |
| Sweets and desserts | 25 (23, 27) | 22 (19, 24) | 25 (23, 28) | 20 (18, 22) | 0.04 |
| <u>Animal Food Groups</u> | | | | | |
| Animal fat | 2 (2, 2) | 2 (1, 2) | 2 (1, 2) | 1 (1, 1) | <0.0001 |
| Dairy | 33 (27, 38) | 30 (26, 35) | 35 (31, 40) | 54 (49, 59) | <0.0001 |
| Egg | 16 (14, 17) | 18 (17, 19) | 14 (13, 16) | 11 (10, 12) | <0.0001 |
| Fish and seafood | 25 (23, 27) | 27 (25, 29) | 31 (29, 33) | 38 (36, 41) | <0.0001 |
| Meat | 31 (29, 33) | 26 (24, 28) | 22 (21, 24) | 19 (17, 21) | <0.0001 |
| Miscellaneous animal based foods | 50 (46, 54) | 49 (46, 52) | 44 (40, 47) | 39 (36, 44) | 0.01 |
| <u>Nutrients (%)</u> | | | | | |
| Total protein | 14 (13, 14) | 14 (14, 15) | 14 (14, 15) | 15 (14, 15) | <0.0001 |
| Vegetable protein | 8 (7, 8) | 8 (8, 8) | 8 (8, 8) | 9 (8, 9) | <0.0001 |
| Animal protein | 6 (5, 6) | 5 (5, 6) | 6 (6, 7) | 6 (6, 7) | 0.001 |
| Total carbohydrates | 61 (61, 62) | 59 (58, 60) | 58 (57, 59) | 56 (56, 57) | <0.0001 |
| Dietary fiber (g/1000 kcal) | 8 (9, 10) | 10 (10, 11) | 11 (11, 11) | 12 (11, 12) | <0.0001 |
| Dietary starch | 49 (48, 50) | 45 (44, 46) | 43 (43, 44) | 40 (39, 41) | <0.0001 |
| Total fat | 21 (20, 21) | 23 (22, 24) | 23 (23, 24) | 24 (23, 24) | <0.0001 |

| | | | | | |
|--------------------------------------|-------------------|-------------------|-------------------|-------------------|---------|
| Saturated fatty acids | 6 (5, 6) | 6 (6, 6) | 6 (6, 6) | 6 (5, 6) | 0.49 |
| Polyunsaturated fatty acids | 4 (5, 6) | 6 (5, 6) | 7 (6, 7) | 7 (6, 7) | <0.0001 |
| Monounsaturated fatty acids | 8 (7, 8) | 8 (8, 9) | 9 (8, 9) | 9 (8, 9) | <0.0001 |
| Trans-fatty acids | 0.3 (0.3, 0.4) | 0.4 (0.3, 0.4) | 0.3 (0.3, 0.4) | 0.3 (0.3, 0.3) | <0.0001 |
| Dietary cholesterol (mg/1000kcal) | 157 (148, 167) | 162 (155, 169) | 145 (137, 152) | 138 (129, 146) | 0.0003 |
| Alcohol intake (g/d) | 13 (11, 14) | 13 (12, 15) | 13 (12, 15) | 15 (13, 16) | 0.28 |
| Dietary beta-carotene (mcg/1000kcal) | 1014 (896, 1132) | 1255 (1167, 1343) | 1452 (1359, 1544) | 1868 (1763, 1972) | <0.0001 |
| Dietary calcium (mg/1000kcal) | 188 (177, 198) | 217 (210, 224) | 242 (235, 250) | 307 (298, 315) | <0.0001 |
| Dietary iron (mg/1000kcal) | 5.8 (5.6, 5.9) | 6.2 (6.1, 6.4) | 6.5 (6.4, 6.6) | 7.0 (6.8, 7.1) | <0.0001 |
| Dietary magnesium (mg/1000kcal) | 130 (127, 133) | 135 (133, 137) | 144 (142, 147) | 159 (157, 162) | <0.0001 |
| Dietary phosphorus (mg/1000kcal) | 479 (469, 489) | 492 (484, 500) | 509 (501, 517) | 556 (547, 565) | <0.0001 |
| Dietary potassium (mg/1000kcal) | 1020 (992, 1047) | 1107 (1087, 1128) | 1216 (1194, 1237) | 1428 (1403, 1452) | <0.0001 |
| Dietary retinol (mcg/1000kcal) | 171 (142, 200) | 160 (138, 181) | 100 (77, 123) | 60 (34, 85) | <0.0001 |
| Dietary selenium (mcg/1000kcal) | 52 (49, 55) | 53 (51, 55) | 55 (53, 57) | 63 (60, 65) | <0.0001 |
| Dietary vitamin E (mg/1000kcal) | 3.8 (3.6, 4.0) | 5.0 (4.9, 5.1) | 5.6 (5.4, 5.7) | 5.9 (5.8, 6.1) | <0.0001 |
| Dietary vitamin A (IU/1000kcal) | 2260 (2044, 2477) | 2625 (2463, 2787) | 2756 (2585, 2926) | 3313 (3121, 3505) | <0.0001 |
| Dietary vitamin C (mg/1000kcal) | 40 (37, 44) | 52 (49, 55) | 57 (54, 60) | 68 (65, 72) | <0.0001 |
| Dietary vitamin B6 (mg/1000kcal) | 2.4 (2.3, 2.5) | 2.7 (2.6, 2.7) | 2.9 (2.8, 3.0) | 3.1 (3.0, 3.2) | <0.0001 |
| Dietary niacin (mg/1000kcal) | 29 (28, 30) | 29 (28, 30) | 30 (29, 31) | 31 (31, 32) | 0.002 |

UNHEALTHY PLANT BASED DIET INDEX

| | | | | | |
|--|-------------------|-------------------|-------------------|-------------------|---------|
| N | 536 | 418 | 582 | 448 | |
| Median UPDI | 20 | 25 | 29 | 33 | |
| PDI | 26.0 (25.6, 26.4) | 25.2 (24.8, 25.5) | 25.4 (25.1, 25.7) | 25.2 (24.8, 25.8) | 0.02 |
| HPDI | 29.6 (29.2, 29.9) | 27.2 (26.9, 27.5) | 25.9 (25.6, 26.2) | 23.5 (23.2, 23.9) | <0.0001 |
| Men (%) | 50 | 45.45 | 48.63 | 55.58 | |
| Current smokers (%) | 32.09 | 34.21 | 29.04 | 37.28 | |
| Taking dietary supplements (%) | 4.48 | 12.44 | 21.31 | 22.99 | |
| History of cardiovascular disease or diabetes mellitus (%) | 6.53 | 11.24 | 12.37 | 8.04 | |

| | | | | | |
|---|-------------------------|-------------------------|-------------------------|-------------------------|---------|
| Use of antihypertensive, cardiovascular disease or diabetes medication (%) | 8 | 9 | 7 | 7 | |
| Family history of hypertension (%) | 35.63 | 41.39 | 46 | 43.08 | |
| Adhering to special diet (%) | 5.41 | 7 | 5.84 | 6.47 | |
| Adhering to vegetarian dietary pattern (%) | 0.4 | 0.5 | 0.9 | 0.9 | |
| Age (y) | 49.3 (48.7, 50.0) | 49.7 (49.1, 50.2) | 49.2 (48.7, 49.7) | 48.6 (47.9, 49.2) | 0.07 |
| Education (y) | 9.9 (9.6, 10.1) | 9.1 (8.9, 9.4) | 8.9 (8.7, 9.1) | 8.7 (8.4, 8.9) | <0.0001 |
| Engagement in moderate and heavy physical activity during work and leisure time (hours/d) | 3.8 (3.4, 4.2) | 4.0 (3.6, 4.3) | 4.1 (3.8, 4.4) | 4.2 (3.9, 4.5) | 0.24 |
| SBP (mm Hg) | 118.38 (117.02, 119.73) | 118.88 (117.64, 120.12) | 119.54 (118.14, 120.94) | 119.21 (117.83, 120.59) | 0.7 |
| DBP (mm Hg) | 73.51 (72.62, 74.40) | 73.42 (72.61, 74.24) | 73.98 (73.06, 74.91) | 73.11 (72.20, 74.01) | 0.61 |
| BMI (kg/m ²) | 23.40 (23.12, 23.68) | 23.34 (23.09, 23.60) | 23.06 (22.77, 23.34) | 23.37 (23.09, 23.66) | 0.3 |
| Total energy intake (kcal/d) | 2027 (1989, 2066) | 2036 (2001, 2071) | 2029 (1989, 2068) | 2090 (2043, 2137) | 0.03 |
| Urinary sodium (mmol/24, hour) | 203.82 (197.73, 209.90) | 211.15 (205.77, 216.53) | 211.72 (205.73, 217.71) | 215.96 (210.07, 221.85) | 0.04 |
| Urinary potassium (mmol/24, hour) | 49.42 (47.03, 51.40) | 44.43 (43.35, 45.51) | 43.47 (42.17, 44.63) | 39.18 (37.74, 40.62) | <0.0001 |
| Components of the Plant Based Scores (g/1000 kcal) | | | | | |
| <u>Healthy</u> | | | | | |
| Whole grains | 1 (1, 1) | 1 (0, 1) | 1 (0, 1) | 0 (0, 1) | 0.07 |
| Fruit | 80 (75, 85) | 69 (65, 74) | 57 (51, 62) | 39 (33, 44) | <0.0001 |
| Vegetables (excluding potatoes) | 214 (206, 223) | 202 (194, 209) | 180 (173, 187) | 140 (131, 148) | <0.0001 |
| Nuts | 2 (2, 3) | 2 (2, 2) | 2 (2, 2) | 1 (1, 2) | <0.0001 |
| Legumes | 95 (90, 100) | 81 (77, 86) | 59 (55, 64) | 34 (29, 39) | <0.0001 |
| Vegetable oils | 7 (7, 8) | 7 (7, 7) | 6 (6, 6) | 6 (5, 6) | <0.0001 |
| Tea and coffee | 204 (188, 219) | 204 (191, 217) | 166 (154, 178) | 100 (86, 114) | <0.0001 |
| <u>Less healthy</u> | | | | | |
| Fruit juices | 1 (0, 1) | 2 (1, 3) | 3 (2, 4) | 6 (5, 7) | <0.0001 |
| Refined grains | 254 (242, 266) | 371 (361, 381) | 421 (411, 430) | 431 (418, 442) | <0.0001 |
| Potatoes | 14 (13, 16) | 16 (14, 17) | 15 (14, 17) | 18 (16, 19) | 0.03 |
| Sugar sweetened beverages | 7 (3, 10) | 6 (3, 9) | 8 (6, 11) | 17 (15, 20) | <0.0001 |

| | | | | | |
|--------------------------------------|-------------------|-------------------|-------------------|------------------|---------|
| Sweets and desserts | 20 (17, 23) | 22 (20, 24) | 24 (21, 26) | 28 (26, 30) | <0.0001 |
| <u>Animal Food Groups</u> | | | | | |
| Animal fat | 2 (2, 2) | 2 (1, 2) | 2 (1, 2) | 1 (1, 1) | <0.01 |
| Dairy | 44 (38, 49) | 41 (37, 44) | 36 (32, 40) | 27 (23, 31) | <0.0001 |
| Egg | 22 (20, 23) | 16 (15, 18) | 12 (11, 13) | 8 (7, 9) | <0.0001 |
| Fish and seafood | 34 (31, 36) | 31 (29, 32) | 30 (28, 32) | 27 (25, 29) | 0.01 |
| Meat | 36 (34, 38) | 25 (23, 27) | 20 (19, 22) | 16 (14, 18) | <0.0001 |
| Miscellaneous animal based foods | 23 (20, 27) | 40 (37, 44) | 53 (50, 57) | 63 (58, 67) | <0.0001 |
| Nutrients (%) | | | | | |
| Total protein | 16 (16, 16) | 15 (14, 15) | 14 (14, 14) | 13 (13, 14) | <0.0001 |
| Vegetable protein | 8 (7, 8) | 8 (8, 8) | 8 (8, 8) | 9 (8, 9) | <0.0001 |
| Animal protein | 4 (4, 5) | 5 (5, 6) | 6 (6, 7) | 7 (6, 7) | <0.0001 |
| Total carbohydrates | 53 (52, 54) | 58 (58, 59) | 61 (60, 62) | 64 (63, 65) | <0.0001 |
| Dietary fiber (g/1000 kcal) | 11 (11, 11) | 11 (10, 11) | 10 (10, 10) | 10 (10, 11) | <0.0001 |
| Dietary starch | 36 (35, 37) | 44 (43, 45) | 47 (47, 48) | 50 (49, 51) | <0.0001 |
| Total fat | 27 (26, 28) | 23 (22, 24) | 21 (20, 21) | 19 (19, 20) | <0.0001 |
| Saturated fatty acids | 7 (6, 7) | 6 (6, 6) | 6 (6, 6) | 5 (5, 5) | <0.0001 |
| Polyunsaturated fatty acids | 7 (6, 7) | 7 (6, 7) | 6 (6, 6) | 5 (5, 6) | <0.0001 |
| Monounsaturated fatty acids | 11 (9, 10) | 9 (9, 10) | 8 (8, 8) | 7 (7, 8) | <0.0001 |
| Trans-fatty acids | 0.4 (0.3, 0.4) | 0.3 (0.3, 0.3) | 0.3 (0.2, 0.3) | 0.4 (0.3, 0.4) | 0.0006 |
| Dietary cholesterol (mg/1000kcal) | 202 (193, 211) | 157 (149, 164) | 130 (123, 137) | 107 (100, 116) | <0.0001 |
| Alcohol intake (g/d) | 13 (12, 15) | 14 (13, 16) | 13 (12, 15) | 13 (11, 14) | 0.61 |
| Dietary beta-carotene (mcg/1000kcal) | 1644 (1527, 1762) | 1486 (1391, 1582) | 1388 (1297, 1479) | 1031 (923, 1139) | <0.0001 |
| Dietary calcium (mg/1000kcal) | 284 (274, 294) | 248 (240, 256) | 230 (223, 238) | 184 (175, 193) | <0.0001 |
| Dietary iron (mg/1000kcal) | 7 (7, 8) | 6 (6, 5) | 6 (6, 6) | 5 (5, 6) | <0.0001 |
| Dietary magnesium (mg/1000kcal) | 148 (145, 151) | 146 (143, 148) | 145 (142, 147) | 130 (127, 133) | <0.0001 |
| Dietary phosphorus (mg/1000kcal) | 546 (536, 555) | 524 (516, 531) | 504 (497, 512) | 456 (447, 465) | <0.0001 |
| Dietary potassium (mg/1000kcal) | 1347 (1319, 1375) | 1249 (1226, 1271) | 1165 (1143, 1187) | 990 (965, 1016) | <0.0001 |

| | | | | | |
|----------------------------------|-------------------|-------------------|-------------------|-------------------|---------|
| Dietary retinol (mcg/1000kcal) | 120 (91, 148) | 103 (79, 126) | 113 (91, 136) | 155 (129, 181) | 0.02 |
| Dietary selenium (mcg/1000kcal) | 63 (60, 65) | 60 (58, 62) | 53 (51, 56) | 45 (42, 48) | <0.0001 |
| Dietary vitamin E (mg/1000kcal) | 6 (6, 6) | 5 (5, 5) | 5 (4, 5) | 4 (4, 5) | <0.0001 |
| Dietary vitamin A (IU/1000kcal) | 3141 (2926, 3355) | 2822 (2648, 2997) | 2693 (2526, 2859) | 2236 (2039, 2433) | <0.0001 |
| Dietary vitamin C (mg/1000kcal) | 66 (62, 70) | 58 (55, 61) | 50 (48, 53) | 42 (38, 45) | <0.0001 |
| Dietary vitamin B6 (mg/1000kcal) | 3.0 (2.9, 3.1) | 2.7 (2.6, 2.8) | 2.7 (2.7, 2.8) | 2.5 (2.4, 2.6) | <0.0001 |
| Dietary niacin (mg/1000kcal) | 31 (30, 32) | 30 (29, 31) | 29 (28, 30) | 28 (27, 29) | 0.002 |

¹ Plant Based Diet Score (PDI), healthy PDI (hPDI), unhealthy PDI (uPDI)