|  |  |
| --- | --- |
| **Supplementary table 1**: Components of each DASH food group based on Fung et al. (1) | |
| **DASH food group** | **Food group component** |
| Fruit\* | All fruit (including fresh, canned and cooked) & dried fruit & pure fruit juices† |
| Vegetables\* | All vegetables ( including fresh, canned and cooked) & pure vegetables juices ‡ |
| Nuts and legumes D | Beans, nuts & seeds |
| Low-fat dairy§ D | Low fat, skimmed & semi-skimmed milk |
| Whole grains D | All wholegrain breads and crackers & cereals |
| Red and processed meat | D | Beef, lamb, pork & processed red meat ( including sausages) & processed poultry |
| Free sugars | All free sugars from carbonated soft drinks & sugar sweetened fruit drinks, sugars added to foods and within purchased products consumed. |
| Sodium | Sodium naturally occurring in foods and added to ready meals and purchased products. Salt added at the table or during cooking is also included if quantified by the participant. |
| \* Includes disaggregated fruit and vegetables components of meals and snacks  † excluding sugar sweetened fruit drinks, e.g. sugar sweetened or sugar sweetened cordial/concentrated fruit drink  ‡ excluding potatoes prepared in all methods  D Derived groups  § Excludes reduced fat ice cream and dairy desserts. Low fat yogurt or yogurt drinks were not included as it was not possible to separate them in the database  | Includes disaggregated red and processed meat components of composite dishes. Processed red meat included bacon and ham | |

**Table S2.** Results of the quantile regression models estimating median (or 80th centile for sugar-sweetened beverages) intake of DASH items and including level of education as socioeconomic predictor

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Fruit  (g/day) | | | Vegetables  (g/day) | | | Whole grains  (g/day) | | | Low-fat dairy products  (g/day) | | | Nuts, seeds and legums  (g/day) | | | Red and processed meat  (g/day) | | | Sugar-sweetened beverages  (g/day) | | | Sodium  (g/day) | | |
|  | ß | SE | *P*-value | ß | SE | *P*-value | ß | SE | *P*-value | ß | SE | *P*-value | ß | SE | *P*-value | ß | SE | *P*-value | ß | SE | *P*-value | ß | SE | *P*-value |
| (Intercept) | 86.2 | 9.3 | <.001 | 166.7 | 8.5 | <.001 | 56.0 | 5.6 | <.001 | 144.6 | 11.8 | <.001 | -0.9 | 3.1 | .773 | 131.2 | 5.7 | <.001 | 239.5 | 29.3 | <.001 | 3564.1 | 71.0 | <.001 |
| Female sex | 14.2 | 2.6 | <.001 | -1.3 | 2.6 | .632 | -2.6 | 1.9 | .157 | -4.7 | 3.9 | .228 | 0.0 | 0.6 | .959 | -28.8 | 1.7 | <.001 | -54.9 | 10.6 | .001 | -556.6 | 21.4 | <.001 |
| Non-white | 11.5 | 6.4 | .073 | 40.5 | 5.7 | <.001 | 0.9 | 3.3 | .795 | -44.6 | 4.9 | <.001 | 11.1 | 2.6 | <.001 | -22.1 | 3.9 | <.001 | -23.1 | 17.1 | <.176 | -356.6 | 49.7 | <.001 |
| Age | 1.5 | 0.1 | <.001 | 0.9 | 0.1 | <.001 | 0.9 | 0.1 | <.001 | 0.8 | 0.1 | <.001 | 0.0 | 0.0 | .044 | -0.1 | 0.0 | .019 | -6.5 | 0.4 | <.001 | -5.7 | 0.7 | <.001 |
| Age2 | -0.013 | 0.0033 | <.001 | -0.0361 | 0.0036 | <.001 | -0.0018 | 0.0027 | .512 | -0.0102 | 0.0059 | .084 | -0.0022 | 0.0005 | <.001 | -0.0058 | 0.0022 | .010 | 0.14 | 0.02 | <.001 | -0.0373 | 0.0289 | .197 |
| Survey year | -1.0 | 0.6 | .075 | -1.1 | 0.6 | .061 | 0.8 | 0.4 | .038 | -2.8 | 1.4 | .052 | 0.2 | 0.1 | .114 | -1.4 | 0.3 | <.001 | -4.0 | 1.9 | .035 | -42.9 | 4.4 | <.001 |
| EDU2 | -33.7 | 4.4 | <.001 | -31.4 | 3.7 | <.001 | -10.9 | 2.5 | <.001 | 0.8 | 11.4 | .946 | -5.7 | 1.0 | <.001 | 5.6 | 2.2 | .011 | 36.2 | 11.5 | <.001 | -2.7 | 27.7 | .921 |
| EDU3 | -50.3 | 4.2 | <.001 | -45.7 | 3.8 | <.001 | -20.5 | 2.7 | <.001 | -33.7 | 12.0 | .005 | -7.7 | 0.9 | <.001 | 7.6 | 2.3 | .001 | 62.6 | 12.5 | <.001 | -59.0 | 28.9 | .041 |
| EDU4 | -77.8 | 4.0 | <.001 | -65.0 | 4.1 | <.001 | -28.2 | 2.8 | <.001 | -22.5 | 12.2 | .064 | -8.4 | 0.8 | <.001 | 10.0 | 2.4 | <.001 | 22.7 | 11.9 | .055 | -105.3 | 29.3 | <.001 |
| EDU2 x Survey year |  |  |  |  |  |  |  |  |  | -0.8 | 2.2 | .719 |  |  |  |  |  |  |  |  |  |  |  |  |
| EDU3 x Survey year |  |  |  |  |  |  |  |  |  | 5.4 | 2.3 | .017 |  |  |  |  |  |  |  |  |  |  |  |  |
| EDU4 x Survey year |  |  |  |  |  |  |  |  |  | 2.7 | 2.2 | .223 |  |  |  |  |  |  |  |  |  |  |  |  |

All models included sex (reference category: male), ethnic group (reference category: whites), age (centered at mean), age2, survey year and the highest education attainment (reference category: degree or equivalent). EDU2: Higher education below degree level; EDU3: GCSE; EDU4: No qualification

**Table S3.** Results of the quantile regression models estimating median (or 80th centile for sugar-sweetened beverages) intake of DASH items and including NSSEC-8 as socioeconomic predictor

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Fruit  (g/day) | | | Vegetables  (g/day) | | | Whole grains  (g/day) | | | Low-fat dairy products (g/day) | | | Nuts, seeds and legums (g/day) | | | Red and processed meat  (g/day) | | | Sugar-sweetened beverages (g/day) | | | Sodium  (mg/day) | | |
|  | ß | SE | *P*-value | ß | SE | *P*-value | ß | SE | *P*-value | ß | SE | *P*-value | ß | SE | *P*-value | ß | SE | *P*-value | ß | SE | *P*-value | ß | SE | *P*-value |
| (Intercept) | 58.5 | 9.2 | <.001 | 148.3 | 8.3 | <.001 | 50.8 | 5.5 | <.001 | 135.3 | 10.2 | <.001 | -4.3 | 2.3 | .066 | 135.7 | 5.5 | <.001 | 257.9 | 27.2 | <.001 | 3537.3 | 68.1 | <.001 |
| Female sex | 15.9 | 2.7 | <.001 | 2.1 | 2.7 | .442 | -1.6 | 1.8 | .389 | -4.6 | 3.8 | .227 | 0.4 | 0.5 | .482 | -29.1 | 1.6 | <.001 | -54.3 | 10.0 | <.001 | -560.8 | 21.6 | <.001 |
| Non-white | 26.8 | 6.5 | <.001 | 44.5 | 5.2 | <.001 | 3.1 | 3.5 | .372 | -42.7 | 5.1 | <.001 | 12.9 | 2.0 | <.001 | -24.9 | 3.9 | <.001 | -28.4 | 15.4 | .065 | -349.7 | 46.5 | <.001 |
| Age | 1.2 | 0.1 | <.001 | 0.5 | 0.1 | <.001 | 0.7 | 0.0 | <.001 | 0.8 | 0.1 | <.001 | 0.0 | 0.0 | .299 | -0.1 | 0.0 | .181 | -6.3 | 0.3 | <.001 | -6.4 | 0.6 | <.001 |
| Age2 | -0.0159 | 0.0036 | <.001 | -0.0405 | 0.0035 | <.001 | -0.0045 | 0.0026 | .082 | -0.0088 | 0.0053 | .096 | -0.0031 | 0.0005 | <.001 | -0.0066 | 0.0019 | .001 | 0.13 | 0.01 | <.001 | -0.0713 | 0.0290 | .014 |
| Survey year | -0.4 | 0.6 | .545 | -0.7 | 0.6 | .237 | 0.6 | 0.4 | .105 | -1.7 | 0.8 | .030 | 0.2 | 0.1 | .056 | -1.6 | 0.3 | <.001 | -5.4 | 1.9 | .004 | -42.5 | 4.3 | <.001 |
| NSSEC8 (LMP) | -16.8 | 4.7 | <.001 | -11.9 | 4.9 | .015 | -6.5 | 2.9 | .023 | 1.3 | 5.4 | .817 | -3.2 | 0.9 | .001 | 2.8 | 2.4 | .237 | 36.9 | 12.8 | .004 | -11.1 | 30.3 | .714 |
| NSSEC8 (INT) | -35.2 | 5.9 | <.001 | -32.4 | 5.4 | <.001 | -10.6 | 3.3 | .001 | 3.6 | 8.0 | .655 | -4.8 | 1.1 | <.001 | 8.5 | 2.9 | .004 | 21.5 | 13.2 | .104 | 20.3 | 37.4 | .587 |
| NSSEC8 (SEO) | -33.9 | 5.6 | <.001 | -20.9 | 5.1 | <.001 | -11.0 | 3.8 | .004 | -6.3 | 7.3 | .387 | -5.5 | 1.1 | <.001 | 9.5 | 3.0 | .002 | 12.1 | 15.2 | .428 | -17.3 | 40.5 | .668 |
| NSSEC8 (LST) | -39.2 | 6.0 | <.001 | -33.7 | 5.7 | <.001 | -16.8 | 3.6 | <.001 | -4.6 | 7.3 | .529 | -6.2 | 0.9 | <.001 | 11.5 | 3.3 | .001 | 38.0 | 18.9 | .045 | -8.0 | 36.0 | .825 |
| NSSEC8 (SRO) | -55.9 | 4.9 | <.001 | -46.4 | 5.5 | <.001 | -19.0 | 3.3 | <.001 | -5.8 | 6.1 | .345 | -6.4 | 0.8 | <.001 | 3.9 | 2.7 | .154 | 23.9 | 15.6 | .012 | 9.1 | 35.3 | .797 |
| NSSEC8 (ROU) | -64.1 | 4.9 | <.001 | -55.9 | 4.8 | <.001 | -26.9 | 2.8 | <.001 | -9.1 | 6.1 | .135 | -6.4 | 0.9 | <.001 | 11.1 | 3.0 | <.001 | 21.6 | 17.6 | .220 | -33.7 | 34.9 | .335 |

All models included sex (reference category: male), ethnic group (reference category: whites), age (centered at mean), age2, survey year and occupation-based social class as defined by the National Statistics of Socioeconomic Classification (NSSEC8) (reference category: High managerial and professional). NSSEC8 (LMP): Low managerial and professional; NSSEC8 (INT): Intermediate; NSSEC8 (SEO): Small employers and own account workers, NSSEC8 (LST): Lower supervisory and technical; NSSEC8 (SRO): Semi routine; NSSEC8 (ROU): Routine

**Table S4.** Results of the quantile regression models estimating median (or 80th centile for sugar-sweetened beverages) intake of DASH items and including household income as socioeconomic predictor

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Fruit  (g/day) | | | Vegetables  (g/day) | | | Whole grains  (g/day) | | | Low-fat dairy products (g/day) | | | Nuts, seeds and legums (g/day) | | | Red and processed meat  (g/day) | | | Sugar-sweetened beverages (g/day) | | | Sodium  (mg/day) | | |
|  | ß | SE | *P*-value | ß | SE | *P*-value | ß | SE | *P*-value | ß | SE | *P*-value | ß | SE | *P*-value | ß | SE | *P*-value | ß | SE | *P*-value | ß | SE | *P*-value |
| (Intercept) | -10.9 | 9.6 | .257 | 97.7 | 10.6 | <.001 | 18.0 | 5.6 | .001 | 125.2 | 10.6 | <.001 | -10.4 | 3.0 | .001 | 139.8 | 5.5 | <.001 | 270.9 | 24.8 | <.001 | 3439.4 | 75.1 | <.001 |
| Female sex | 15.5 | 2.9 | <.001 | -2.7 | 3.2 | .411 | 0.0 | 1.8 | 1.000 | -7.0 | 3.9 | .077 | 0.0 | 0.6 | .998 | -29.7 | 1.7 | <.001 | -59.4 | 10.0 | .001 | -575.8 | 23.4 | <.001 |
| Non-white | 35.7 | 6.7 | <.001 | 49.4 | 7.2 | <.001 | 5.6 | 3.8 | .136 | -38.3 | 4.5 | <.001 | 12.8 | 2.6 | <.001 | -22.2 | 3.6 | <.001 | -33.0 | 13.8 | .017 | -293 | 48 | <.001 |
| Age | 1.2 | 0.1 | <.001 | 0.7 | 0.1 | <.001 | 0.8 | 0.1 | <.001 | 0.7 | 0.1 | <.001 | 0.0 | 0.0 | .135 | -0.1 | 0.0 | .104 | -6.4 | 0.3 | <.001 | -6 | 0.6 | <.001 |
| Age2 | -0.011 | 0.004 | .007 | -0.0366 | 0.0043 | <.001 | -0.0012 | 0.0027 | .664 | -0.0110 | 0.0055 | .044 | -0.0028 | 0.0006 | <.001 | -0.0065 | 0.0021 | 0.002 | 0.12 | 0.01 | .000 | -0.0837 | 0.0323 | .010 |
| Survey year | -0.5 | 0.6 | .412 | -0.9 | 0.7 | .175 | 0.9 | 0.4 | .013 | -2.0 | 0.8 | .016 | 0.3 | 0.1 | .036 | -1.6 | 0.3 | <.001 | -5.5 | 1.8 | .003 | -38.3 | 4.8 | <.001 |
| Income (Q1-Q2) | 19.2 | 3.9 | <.001 | 14.5 | 4.4 | .001 | 9.0 | 2.7 | .001 | 9.1 | 6.1 | .133 | 0.1 | 0.7 | .904 | 0.5 | 2.5 | .835 | 47.7 | 15.0 | .002 | 15.1 | 37.1 | .683 |
| Income (Q2-Q3) | 26.7 | 4.5 | <.001 | 28.9 | 4.8 | <.001 | 14.3 | 2.4 | <.001 | 9.1 | 5.7 | .108 | 0.9 | 0.8 | .269 | 3.8 | 2.5 | .128 | 15.8 | 9.9 | .112 | 57.7 | 36.3 | .112 |
| Income (Q3-Q4) | 44.2 | 5.0 | <.001 | 40.4 | 5.0 | <.001 | 18.7 | 2.9 | <.001 | 14.4 | 5.9 | .015 | 3.6 | 1.1 | .001 | -1.8 | 2.4 | .457 | 31.3 | 13.0 | .016 | 80.8 | 34.3 | .019 |
| Income (>=Q4) | 53.3 | 4.1 | <.001 | 56.1 | 5.4 | <.001 | 22.1 | 2.6 | <.001 | 9.5 | 5.4 | .082 | 6.2 | 1.0 | <.001 | 0.0 | 2.4 | .999 | 37.9 | 13.0 | .003 | 80 | 38.4 | .037 |

All models included sex (reference category: male), ethnic group (reference category: whites), age (centered at mean), age2, survey year and equalized household income (reference category: < 1st quintile of the distribution). Q2: 2nd quintile, Q3: 3rd quintile; Q4: 4th quintile