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| **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 methodsD 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