**Supplemental Table 2:** Individual characteristics associated with an increase in fruit and vegetable consumptionbetween 1993 and 2005 using multivariable logistic regression models **(a)**, with a focus on the most consumed types of fruit and vegetables **(b)** (E3N-EPIC cohort study, *n*=58 193).

1. Fruit and vegetable consumption

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Increase in the ratio « consumption/energy intake » between 1993 and 2005** | | | | | |
|  | **Fruit and vegetables** | | **Fruit** | | **Vegetables** | |
|  | ***N=37 333*** | | ***N=37 304*** | | ***N=32 993*** | |
|  | **N (%)** | **ORa (95% CI)** | **N (%)** | **ORa (95% CI)** | **N (%)** | **ORa (95% CI)** |
| **Age (years)** |  |  |  |  |  |  |
| ≤ 47.1 | 10234 (70.4) | **REF** | 9893 (68.0) | **REF** | 9213 (63.3) | **REF** |
| 47.1 - 51.5 | 9966 (68.5) | 0.98 [0.93-1.04] | 9754 (67.0) | 1.02 [0.97-1.08] | 8905 (61.2) | 0.95 [0.90-1.00] |
| 51.5 - 57.2 | 9080 (62.5) | **0.85 [0.80-0.89]** | 9188 (63.2) | 0.96 [0.91-1.02] | 7993 (55.0) | **0.79 [0.75-0.84]** |
| > 57.2 | 8053 (55.3) | **0.71 [0.67-0.77]** | 8469 (58.2) | **0.86 [0.80-0.92]** | 6882 (47.3) | **0.63 [0.59-0.67]** |
| **BMI (Kg/m2)** |  |  |  |  |  |  |
| <18.5 | 1235 (64.6) | **0.88 [0.79-0.97]** | 1217 (63.7) | 0.91 [0.82-1.01] | 1113 (58.2) | **0.89 [0.80-0.98]** |
| 18.5 -25 | 29404 (64.8) | **REF** | 29245 (64.5) | **REF** | 25975 (57.3) | **REF** |
| 25 -30 | 5544 (61.0) | 0.98 [0.93-1.03] | 5670 (62.3) | 0.96 [0.91-1.01] | 4867 (53.5) | **1.05 [1.00-1.10]** |
| ≥30 | 1150 (62.9) | 1.08 [0.97-1.20] | 1172 (64.1) | 1.03 [0.92-1.14] | 1038 (56.8) | **1.28 [1.15-1.42]** |
| **Physical activity (MET-h/week)** |  |  |  |  |  |  |
| ≤ 23.1 | 9469 (65.1) | **REF** | 9435 (64.8) | **REF** | 8381 (57.6) | **REF** |
| 23.1 - 37.9 | 9510 (65.2) | **1.12 [1.06-1.18]** | 9423 (64.6) | **1.08 [1.03-1.14]** | 8338 (57.2) | **1.09 [1.03-1.14]** |
| 37.9 - 60.6 | 9311 (64.2) | **1.17 [1.11-1.23]** | 9347 (64.4) | **1.16 [1.10-1.22]** | 8282 (57.1) | **1.15 [1.09-1.21]** |
| > 60.6 | 9043 (62.2) | **1.21 [1.15-1.28]** | 9099 (62.5) | **1.16 [1.10-1.22]** | 7992 (54.9) | **1.18 [1.12-1.24]** |
| **Smoking status** |  |  |  |  |  |  |
| Non -smoker | 20005 (63.5) | **REF** | 20158 (64.0) | **REF** | 17567 (55.8) | **REF** |
| Former smoker | 12491 (64.7) | 0.99 [0.95-1.03] | 12465 (64.6) | 0.97 [0.93-1.01] | 11033 (57.2) | 1.00 [0.96-1.04] |
| Smoker | 4837 (65.2) | **0.88 [0.83-0.93]** | 4681 (63.1) | **0.81 [0.76-0.85]** | 4393 (59.2) | * 1. [0.91-1.02] |

1. Most consumed fruit and vegetables

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Increase in the ratio « consumption/energy intake » between 1993 and 2005** | | | | | | | | | | | | | | | | | | | |
|  | **Most consumed fruits**  **(mean intake in 1993 in grams ±SD)** | | | | | **Most consumed cooked vegetables**  **(mean intake in 1993 in grams ±SD)** | | | | | | | | | **Most consumed raw vegetables**  **(mean intake in 1993 in grams ±SD)** | | | | | |
|  | **Grapefruit** **(19.8±18.0)** | **Apple (26.8±20.5)** | **Pear (18.2±14.8)** | **Peach, nectarine (28.0±20.0)** | **Grapes (18.1±14.5)** | **Green bean (19.7±13.1)** | | **Zucchini (15.2±11.4)** | | **Carrot (14.7±10.7)** | | **Tomato (13.3±9.8)** | | **Endive (13.0±10.4)** | **Tomato** **(9.9±7.5)** | **Carrot (6.7±5.7)** | **Endive (6.5±5.5)** | **Cucumber (5.9±5.8)** | | **Radish (5.5±4.8)** |
|  | ***N=28 024*** | ***N=34 383*** | ***N=32 766*** | ***N=33 088*** | ***N=31 391*** | ***N=26 795*** | | ***N=30 564*** | | ***N=28 294*** | | ***N=26 388*** | | ***N=28 702*** | ***N=23 518*** | ***N=24 427*** | ***N=23 882*** | ***N=21 305*** | | ***N=23 951*** |
|  | **ORa (95% CI)** | | | | | | | | | | | | | | | | | | | |
| **Age (years)**  ***[Ref=≤ 47.1]*** |  |  |  |  |  |  |  | |  | |  | |  | |  |  |  |  |  | |
| 47.1 - 51.5 | 0.98 [0.94-1.03] | 1.01 [0.96-1.06] | 1.03 [0.98-1.08] | 1.05 [0.99-1.10] | **1.05 [1.00-1.10]** | **0.94 [0.89-0.99]** | **0.91 [0.86-0.96]** | | 0.95 [0.90-1.00] | | **0.93 [0.89-0.98]** | | 1.02 [0.97-1.07] | | **0.90 [0.86-0.95]** | **0.90 [0.85-0.94]** | **0.94 [0.90-0.99]** | **0.94 [0.90-0.99]** | 1.00 [0.95-1.05] | |
| 51.5 - 57.2 | 0.99 [0.94-1.04] | 1.03 [0.98-1.09] | 1.00 [0.95-1.05] | 1.05 [0.99-1.10] | 1.04 [0.99-1.10] | **0.83 [0.79-0.87]** | **0.75 [0.71-0.79]** | | **0.86 [0.82-0.91]** | | **0.78 [0.74-0.83]** | | **0.94 [0.89-0.99]** | | **0.82 [0.78-0.86]** | **0.88 [0.84-0.93]** | **0.85 [0.80-0.89]** | **0.85 [0.80-0.89]** | **0.93 [0.88-0.98]** | |
| > 57.2 | **0.90 [0.84-0.96]** | 0.91 [0.85-0.97] | **0.88 [0.82-0.94]** | 0.97 [0.90-1.03] | 0.99 [0.93-1.06] | **0.79 [0.74-0.85]** | **0.62 [0.58-0.66]** | | **0.86 [0.81-0.92]** | | **0.67 [0.63-0.72]** | | **0.83 [0.78-0.89]** | | **0.69 [0.64-0.74]** | **0.70 [0.66-0.75]** | **0.67 [0.62-0.71]** | **0.68 [0.63-0.72]** | **0.76 [0.71-0.81]** | |
| **BMI (Kg/m2)**  ***[Ref=18.5-25]*** |  |  |  |  |  |  |  | |  | |  | |  | |  |  |  |  |  | |
| <18.5 | 0.91 [0.82-1.00] | 0.93 [0.84-1.03] | **0.81 [0.74-0.90]** | **0.88 [0.80-0.97]** | **0.88 [0.80-0.97]** | 0.90 [0.81-1.00] | **0.89 [0.80-0.98]** | | **0.89 [0.80-0.98]** | | **0.86 [0.78-0.95]** | | 0.94 [0.85-1.04] | | **0.85 [0.77-0.94]** | **0.89 [0.80-0.98]** | **0.81 [0.73-0.89]** | **0.85 [0.77-0.94]** | **0.77 [0.70-0.85]** | |
| 25 -30 | **0.94 [0.90-0.99]** | 0.99 [0.94-1.04] | 1.04 [0.99-1.09] | 1.05 [1.00-1.10] | 0.95 [0.90-1.00] | **1.13 [1.08-1.19]** | 1.02 [0.97-1.07] | | **1.06 [1.01-1.11]** | | **1.12 [1.06-1.17]** | | **1.09 [1.04-1.14]** | | 1.05 [0.99-1.10] | 1.02 [0.97-1.07] | **1.09 [1.03-1.14]** | **1.09 [1.04-1.14]** | **1.09 [1.04-1.15]** | |
| ≥30 | 0.94 [0.85-1.04] | 0.98 [0.89-1.09] | 0.99 [0.90-1.09] | 1.06 [0.95-1.17] | 0.98 [0.88-1.08] | **1.33 [1.20-1.48]** | 1.08 [0.97-1.19] | | **1.10 [0.99-1.22]** | | **1.20 [1.08-1.33]** | | **1.21 [1.09-1.34]** | | **1.26 [1.13-1.39]** | **1.11 [1.00-1.23]** | **1.29 [1.16-1.43]** | **1.25 [1.13-1.38]** | **1.18 [1.06-1.30]** | |
| **Physical activity *(MET-h/week)***  ***[Ref=≤ 23.1]*** |  |  |  |  |  |  |  | |  | |  | |  | |  |  |  |  |  | |
| 23.1 - 37.9 | **1.07 [1.02-1.12]** | **1.06 [1.00-1.11]** | **1.06 [1.01-1.11]** | **1.07 [1.01-1.12]** | **1.08 [1.03-1.14]** | 1.01 [0.96-1.06] | **1.07 [1.02-1.13]** | | 1.04 [0.99-1.09] | | **1.06 [1.00-1.11]** | | 1.04 [0.99-1.10] | | 1.04 [0.99-1.10] | **1.08 [1.02-1.13]** | **1.07 [1.02-1.13]** | **1.05 [1.00-1.10]** | **1.11 [1.05-1.16]** | |
| 37.9 - 60.6 | **1.12 [1.07-1.18]** | **1.10 [1.04-1.15]** | **1.06 [1.01-1.12]** | **1.07 [1.02-1.13]** | **1.08 [1.03-1.13]** | 1.03 [0.98-1.09] | **1.12 [1.06-1.17]** | | **1.09 [1.03-1.14]** | | **1.09 [1.04-1.15]** | | **1.10 [1.05-1.16]** | | **1.06 [1.00-1.11]** | **1.11 [1.06-1.17]** | **1.12 [1.06-1.17]** | **1.07 [1.02-1.12]** | **1.16 [1.11-1.22]** | |
| > 60.6 | **1.18 [1.13-1.24]** | **1.08 [1.03-1.14]** | **1.09 [1.03-1.14]** | **1.08 [1.03-1.14]** | **1.09 [1.03-1.14]** | 1.04 [0.98-1.09] | **1.10 [1.05-1.16]** | | **1.08 [1.03-1.14]** | | **1.14 [1.08-1.20]** | | 1.04 [0.99-1.10] | | **1.09 [1.04-1.15]** | **1.15 [1.09-1.21]** | **1.17 [1.11-1.23]** | **1.14 [1.08-1.19]** | **1.18 [1.12-1.24]** | |
| ***Smoking status***  ***[Ref= Non –smoker]*** |  |  |  |  |  |  |  | |  | |  | |  | |  |  |  |  |  | |
| Former smoker | 0.96 [0.93-1.00] | **0.95 [0.91-0.98]** | **0.94 [0.90-0.97]** | 0.96 [0.93-1.00] | 1.00 [0.97-1.04] | 0.99 [0.95-1.03] | 1.03 [0.99-1.07] | | 0.99 [0.95-1.03] | | 0.97 [0.94-1.01] | | 1.02 [0.98-1.06] | | 1.02 [0.98-1.06] | 1.03 [0.99-1.07] | **1.05 [1.01-1.09]** | **1.11 [1.07-1.15]** | **1.05 [1.01-1.09]** | |
| Smoker | **0.82 [0.78-0.87]** | **0.79 [0.75-0.84]** | **0.80 [0.75-0.84]** | **0.81 [0.77-0.86]** | **0.89 [0.84-0.94]** | 0.96 [0.91-1.02] | 0.96 [0.91-1.02] | | **0.85 [0.81-0.90]** | | **0.93 [0.88-0.99]** | | 1.00 [0.94-1.05] | | 1.04 [0.98-1.10] | 1.04 [0.98-1.10] | **1.06 [1.00-1.12]** | **1.12 [1.06-1.19]** | 1.05 [0.99-1.10] | |

BMI, Body Mass Index; MET, Metabolic equivalent.

a An odds ratio above 1 corresponds to a higher probability to increase their ratio “consumption/energy intake” between 1993 and 2005.

Models are multi-adjusted and further adjusted for individual and contextual socioeconomic factors, energy intake evolution between 1993 and 2005 and for baseline consumption of the food group considered.