**Table S3. Characteristics of fathers, mothers and offspring according to the father's age of smoking onset in the imputed dataset.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|   |   | Nsw | Father's age of smoking onset |   |   |
| Variable | Nraw | <11 years | 11-12 years | 13-14 years | ≥15 years | Never | Pall | Pever |
| *Means (SD) or percentages in the father:* |
|  Date of birth | 66,243 | 36,380 | 1932.7 (17.3) | 1937.5 (18.7) | 1939.8 (18.1) | 1934.3 (18.1) | 1937.8 (21.1) | <0.001 | <0.001 |
|  Age at participation | 66,243 | 36,380 | 59.0 (16.0) | 55.2 (17.2) | 53.9 (16.9) | 56.7 (16.3) | 51.8 (17.9) | <0.001 | <0.001 |
|  Age at offspring birth | 66,243 | 36,380 | 30.4 (6.3) | 29.3 (6.4) | 29.0 (6.1) | 30.5 (6.3) | 31.0 (6.3) | <0.001 | <0.001 |
|  BMI (kg m-2) | 66,243 | 36,380 | 26.2 (3.7) | 26.2 (3.5) | 26.5 (3.6) | 26.1 (3.4) | 25.9 (3.2) | <0.001 | <0.001 |
|  Professional employment | 66,243 | 36,380 | 24% | 18% | 24% | 28% | 33% | <0.001 | <0.001 |
|  Full secondary education | 66,243 | 36,380 | 30% | 36% | 44% | 45% | 58% | <0.001 | 0.001 |
|  Current smoker | 48,023 | 25,867 | 92% | 87% | 87% | 85% | 0% | 99.000 | 0.038 |
|  Drink ≥ fortnightly | 66,243 | 36,380 | 60% | 63% | 64% | 56% | 47% | <0.001 | <0.001 |
|  |  |  |  |  |  |  |  |  |  |
| *Means (SD) or percentages in the mother:* |
|  Date of birth | 66,243 | 36,380 | 1936.2 (17.4) | 1940.9 (18.2) | 1942.7 (18.0) | 1937.5 (18.0) | 1940.8 (20.8) | <0.001 | <0.001 |
|  Age at participation | 66,243 | 36,380 | 53.6 (16.2) | 49.2 (16.2) | 48.3 (16.1) | 52.6 (15.9) | 50.0 (17.5) | <0.001 | <0.001 |
|  Age at offspring birth | 66,243 | 36,380 | 26.9 (5.7) | 25.8 (5.5) | 26.0 (5.5) | 27.2 (5.7) | 27.9 (5.7) | <0.001 | <0.001 |
|  BMI (kg m-2) | 66,243 | 36,380 | 26.3 (4.9) | 25.8 (4.8) | 25.6 (4.8) | 26.0 (4.6) | 25.8 (4.6) | 0.015 | 0.029 |
|  Professional employment | 66,243 | 36,380 | 7% | 13% | 17% | 18% | 27% | <0.001 | 0.006 |
|  Full secondary education | 66,243 | 36,380 | 28% | 39% | 44% | 39% | 53% | <0.001 | <0.001 |
|  Current smoker | 57,814 | 31,709 | 46% | 48% | 52% | 41% | 24% | <0.001 | <0.001 |
|  Drink ≥ fortnightly | 66,243 | 36,380 | 32% | 33% | 37% | 34% | 31% | <0.001 | 0.057 |
|  |  |  |  |  |  |  |  |  |  |
| *Means (SD) or percentages in the offspring:* |
|  Date of birth | 66,243 | 36,380 | 1963.1 (16.0) | 1966.8 (16.4) | 1968.7 (16.5) | 1964.7 (16.5) | 1968.8 (19.2) | <0.001 | <0.001 |
|  Age at participation | 66,243 | 36,380 | 29.1 (11.0) | 27.9 (10.9) | 26.6 (10.7) | 28.9 (11.0) | 27.2 (12.2) | <0.001 | <0.001 |
|  BMI (kg m-2) | 66,243 | 36,380 | 24.6 (4.5) | 24.3 (4.7) | 24.1 (4.4) | 24.1 (4.1) | 23.5 (4.0) | <0.001 | 0.561 |
|  Professional employment | 66,243 | 36,380 | 20% | 20% | 20% | 20% | 20% | 0.041 | 0.017 |
|  Full secondary education | 66,243 | 36,380 | 76% | 79% | 84% | 81% | 84% | <0.001 | 0.108 |
|  Current smoker | 66,243 | 36,380 | 41% | 40% | 37% | 31% | 18% | <0.001 | <0.001 |
|  Drink ≥ fortnightly | 66,243 | 36,380 | 56% | 58% | 62% | 62% | 58% | <0.001 | 0.449 |
|  Male sex | 66,243 | 36,380 | 52% | 44% | 50% | 51% | 52% | 0.171 | 0.162 |
|  |  |  |  |  |  |  |  |  |  |
| Maximum Nraw | 66,243 |  | 309 | 570 | 2,905 | 40,944 | 21,514 |  |  |
| Maximum Nsw |   | 36,380 | 160 | 294 | 1,631 | 22,102 | 12,193 |   |   |

Current smoker for parents is inferred smoking status at the time of the offspring's birth and for offspring it is from the time of BMI measurement. Observations (Nraw) were weighted by the reciprocal of the number of siblings (of either sex and age) analysed and Nsw is the sum of weights. P values are from unadjusted linear or logistic regressions of the variables against categories of paternal smoking onset age. Pever only compared the ever-smoking categories.