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Fig. S1 Age and time trends in **total sugar** intake of **969** dietary records of DONALD study participants (9–16 years), carried out at the same age as the urine samples were collected between 1990 and 2016, predicted by polynomial mixed-effects regression models (see Table S1)

**Table S1:** Age and time trends in total, free and added sugar of 969 dietary records of 478 DONALD study participants (9–16 years) between 1990 and 2016

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Age trend per year of age (8.5-16.5 years)** | **Time trend per study year (1990-2016)** | | |
| **Age**  **β (p)** | **Time**  **β (p)** | **TimexTime**  **β (p)** | **TimexTimexTime**  **β (p)** |
| **Total sugara**  Unadjusted model  Adjusted model | -0.3317 (0.0002)  -0.3146 (0.0005) | -0.1689 (0.5519)  -0.1442 (0.6105) | 0.03037 (0.2100)  0.02809 (0.2451) | -0.00117 (0.0473)  -0.00112 (0.0565) |
| **Added sugarb**  Unadjusted model  Adjusted model | -0.1179 (0.1398)  -0.1476 (0.0740) | 0.2717 (0.0140)  0.3281 (0.0029) | -0.01278 (0.0009)  -0.01379 (0.0003) | -  - |
| **Free sugarc**  Unadjusted model  Adjusted model | -0.1568 (0.0546)  -0.2235 (0.0015) | 0.006651 (0.9805)  0.02009 (0.9314) | 0.02459 (0.2809)  0.02080 (0.2671) | -0.00110 (0.0476)  -0.00090 (0.0472) |

Age and time trends were tested using polynomial mixed-effects regression models.

aModel contains a random statement for the family level with an unstructured covariance structure and a random statement for the person level with an unstructured covariance structure. Adjusted for weekdays per record (1/2/3)

b Model contains a random statement for the family level with an unstructured covariance structure and a random statement for the person level with an unstructured covariance structure. Adjusted for weekdays per record (1/2/3), high maternal education status (yes/no), sex (male/female)

cModel contains a repeated statement with a factor analytic covariance structure. Adjusted for weekdays per record (1/2/3), overweight status (yes/no), high maternal education status (yes/no), sex (male/female), maternal employment (yes/no)