

1 **Table S1:** Time and age trends in free sugar intake from different food groups of 10,761 dietary records of 1,312 DONALD study participants (n = 660 boys, n = 652 girls)
 2 (3–18 years) between 1985 and 2016

	Age trend per year of age (3–18 years) ^a			Time trend per study year (1985–2016) ^b			Interaction of time and age
	Age β (p)	Age ² β (p)	Age ³ β (p)	Time β (p)	Time ² β (p)	Time ³ β (p)	Age x Time β (p)
FS from sweet bread & cakes							
Boys ^c							
Unadjusted model	0.1573 (0.0252)	-0.01782 (0.0180)	0.000460 (0.0586)	-0.06815 (0.0136)	0.005533 (0.0038)	-0.00010 (0.0087)	
Adjusted model	0.1517 (0.0305)	-0.01680 (0.0254)	0.000430 (0.0767)	-0.07273 (0.0084)	0.005750 (0.0026)	-0.00011 (0.0061)	
Girls ^d							
Unadjusted model	0.2285 (0.0017)	-0.02813 (0.0003)	0.000893 (0.0004)	-0.07492 (0.0062)	0.006724 (0.0004)	-0.00013 (0.0006)	
Adjusted model	0.2191 (0.0025)	-0.02665 (0.0006)	0.000849 (0.0007)	-0.07397 (0.0067)	0.006537 (0.0006)	-0.00013 (0.0008)	
FS from RTC							
Boys ^e							
Unadjusted model	0.3022 (<0.0001)	-0.02523 (0.0004)	0.000638 (0.0063)	0.1110 (<0.0001)	-0.00495 (0.0045)	0.000063 (0.0792)	
Adjusted model	0.3116 (<0.0001)	-0.02649 (0.0002)	0.000677 (0.0036)	0.1122 (<0.0001)	-0.00495 (0.0045)	0.000063 (0.0780)	
Girls ^f							
Unadjusted model	0.2673 (<0.0001)	-0.02361 (<0.0001)	0.000580 (0.0030)	0.04111 (<0.0001)	-0.00127 (<0.0001)		0.001045 (0.0359)
Adjusted model	0.2796 (<0.0001)	-0.02507 (<0.0001)	0.000626 (0.0013)	0.04267 (<0.0001)	-0.00124 (<0.0001)		0.000917 (0.0661)
FS from other sources^g							
Unadjusted model	0.003417 (0.9072)	-0.00280 (0.3713)	0.000138 (0.1773)	-0.03480 (0.0012)	0.002869 (<0.0001)	-0.00006 (<0.0001)	0.001437 (<0.0001)
Adjusted model	-0.00328 (0.9111)	-0.00229 (0.4644)	0.000123 (0.2296)	-0.03272 (0.0025)	0.002711 (0.0003)	-0.00006 (0.0002)	0.001512 (<0.0001)

3 Time and age trends were tested using polynomial mixed-effects regression models

4 FS=Free sugar

5 ^aAge=linear age trend, age²=quadratic age trend, age³=cubic age trend ^btime=linear time trend, time²=quadratic time trend, time³=cubic time trend

6 ^cModel contains a random statement for the family level with an unstructured covariance structure. Adjusted for number of weekdays per record (1/2/3).

7 ^dModel contains a random statement for the family level with factor analytic covariance structure and a random statement for the person level with an unstructured covariance
 8 structure. Adjusted for number of weekdays per record (1/2/3).

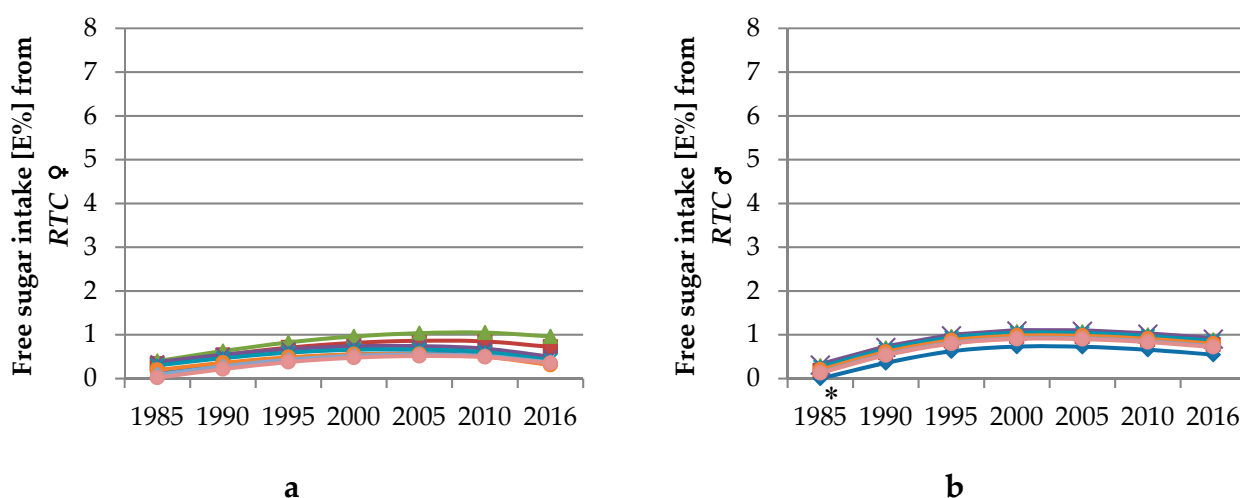
9 ^eModel contains a repeated statement with a heterogeneous toeplitz covariance structure. Adjusted for number of weekdays per record (1/2/3).

- 10 [¶]Model contains a repeated statement with a factor analytic covariance structure. Adjusted for number of weekdays per record (1/2/3).
- 11 [§]Model contains a repeated statement with a factor analytic covariance structure. Adjusted for number of weekdays per record (1/2/3), high maternal educational status (yes/no),
- 12 overweight status (yes/no), maternal employment (yes/no).
- 13



14 **Figure S1.** Time and age trends in FS intake from sweet bread & cakes among girls (a) and boys (b) of
 15 10,761 dietary records of 660 male and 652 female DONALD study participants (3-18 years) between
 16 1985 and 2016, predicted by polynomial mixed-effects regression models (see Table S1) (blue rhombi
 17 3/4-year-olds, red squares 5/6-year-olds, green triangles 7/8-year-olds, purple crosses 9/10-year-olds,
 18 turquoise stars 11/12-year-olds, orange circles 13/14-year-olds, light blue rhombi 15/16-year-olds,
 19 pink circles 17/18-year-olds).

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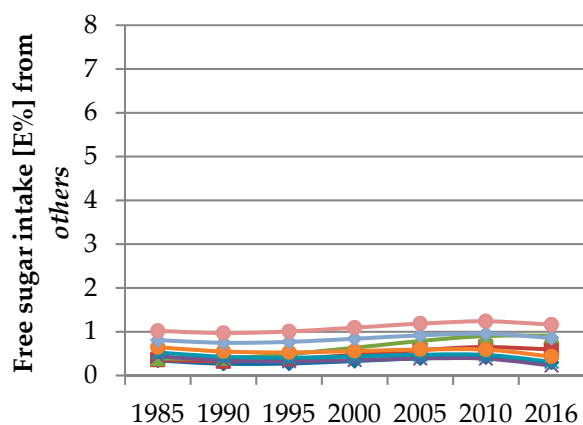


21 **Figure S2.** Time and age trends in FS intake from RTC among girls (a) and boys (b) of 10,761 dietary
 22 records of 660 male and 652 female DONALD study participants (3-18 years) between 1985 and 2016,
 23 predicted by polynomial mixed-effects regression models (see Table S1) (blue rhombi 3/4-year-olds,
 24 red squares 5/6-year-olds, green triangles 7/8-year-olds, purple crosses 9/10-year-olds, turquoise
 25 stars 11/12-year-olds, orange circles 13/14-year-olds, light blue rhombi 15/16-year-olds, pink circles
 26 17/18-year-olds).

27 * FS intake from RTC among 3/4 year olds in 1985 was set to 0, if the calculation of predicted
 28 values from the regression equations reveals values <0.

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31 **Figure S3.** Time and age trends in FS intake from *others* of 10,761 dietary records of 1,312 DONALD
32 study participants (3-18 years) between 1985 and 2016, predicted by polynomial mixed-effects
33 regression models (see Table S1) (blue rhombi 3/4-year-olds, red squares 5/6-year-olds, green
34 triangles 7/8-year-olds, purple crosses 9/10-year-olds, turquoise stars 11/12-year-olds, orange circles
35 13/14-year-olds, light blue rhombi 15/16-year-olds, pink circles 17/18-year-olds).

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