Child autistic traits, food selectivity and diet quality: A population-based study Harris et al.
Online Supplementary Material

Supplementary Table 1. Food fussiness subscale from the Children's Eating Behaviour

Questionnaire used to assess 'food selectivity' in the current study

#	Item
1	My child refuses new foods at first
2	My child enjoys tasting new foods*
3	My child enjoys a wide variety of foods*
4	My child is difficult to please with meals
5	My child is interested in tasting food s/he hasn't tasted before*
6	My child decides that s/he doesn't like a food, even without tasting it

^{*}Indicates reverse-scored items; items are scored on a 5-point Likert scale from 1 (*Never*) to 5 (*Always*)

Supplementary Table 2. Non-imputed population characteristics¹

Child		N
Sex, % boys	2027 (49.4)	4092
Birthweight, g	3445.2 ± 570.2	4088
Ethnicity, % Dutch	2824 (69.2)	4082
$BMIz^2$, 6 y	0.2 ± 0.8	3713
Age at diet quality assessment, y	8.1 ± 0.2	4085
Energy intake ³ , kcal/d	1483.8 ± 371.5	4092
Mother		N
Age at inclusion, y	31.8 ± 4.4	4092
Educational level ⁴		3948
High	1376 (34.9)	
Mid- high	1042 (26.4)	
Mid- low	1043 (26.4)	
Low	487 (12.3)	

¹Values are mean ± SD or frequency (percent); ²Sex- and age-adjusted Body Mass Index (BMIz) standard deviation score calculated using Dutch Reference growth curves (30); ³Dervied from Food Frequency Questionnaire at 8 y; ⁴Education levels include: low (<3 years of secondary school), mid-low (>3 years of secondary school; intermediate vocational training; first year of higher vocational training), mid-high (higher vocational training; Bachelor's degree) and high (university level).

Supplementary Table 3. Bivariate Pearson's correlations coefficients (r) for main study variables¹

	Autistic traits ² – 3 y	Autistic traits ² – 6 y	Autistic traits ³ – 6 y	Food selectivity ⁴ – 4 y	Diet quality score ⁵ – 8 y
Autistic traits ² – 1.5 y	0.43	0.31	0.30	0.10	-0.08
Autistic traits ² – 3 y	-	0.49	0.38	0.14	-0.06
Autistic traits $^2 - 6$ y	-	-	0.59	0.13	-0.06
Autistic traits ³ – 6 y	-	-	-	0.09	-0.08
Food selectivity ⁴ – 4 y	-	-	-	-	-0.19

¹*P*<0.001 for all coefficients; *n* ranges from 3281-3691; ²Pervasive Developmental Problems subscale from the Child Behavior Checklist/1.5-5 (20); ³Social Responsiveness Scale (22); ⁴Food fussiness subscale of the Children's Eating Behaviour Questionnaire (29); ⁵Developed by van der Velde et al.(28)

Supplementary Table 4. Multiple Linear Regressions showing associations between autistic traits at various child ages and food component scores¹

		Autistic traits ³		Autistic trait trajectory ⁴
Food component =	1.5 y n=3629	3 y n=3679	6 y n=3898	Low and stable (referent group) vs. High and increasing
Food component score ²	β (95%CI)	β (95%CI)	β (95%CI)	β (95%CI)
Fruit	-0.02 (-0.03, -0.01)	-0.01 (-0.02, -0.004)	-0.01 (-0.02, -0.004)	-0.04 (-0.08, -0.01)
Vegetables	-0.02 (-0.03, -0.01)	-0.02 (-0.03, -0.01)	-0.02 (-0.02, -0.01)	-0.05 (-0.08, -0.01)
Whole grains	-0.02 (-0.02, -0.01)	-0.01 (-0.02, -0.01)	-0.01 (-0.02, -0.00002)	-0.03 (-0.07, 0.01)
Fish	-0.01 (-0.02, 0.01)	-0.02 (-0.03, -0.003)	-0.03 (-0.04, -0.01)	-0.09 (-0.15, -0.03)
Legumes	0.00 (-0.02, 0.01)	0.00 (-0.01, 0.01)	0.00 (-0.02, 0.01)	-0.01 (-0.06, -0.05)
Nuts	-0.01 (-0.02, 0.01)	0.00 (-0.01, 0.01)	0.00 (-0.01, 0.01)	0.00 (-0.05, 0.05)
Dairy	0.00 (-0.01, 0.01)	0.00 (-0.01, 0.01)	0.00 (-0.02, 0.01)	0.00 (-0.06, 0.05)
Oils	-0.01 (-0.02, -0.004)	-0.01 (-0.02, 0.003)	-0.01 (-0.02, 0.001)	-0.04 (-0.08, 0.002)
Sugary drinks	-0.002 (-0.01, 0.01)	0.00 (-0.01, 0.01)	0.00 (-0.01, 0.003)	-0.01 (-0.04, 0.03)
Processed meat	-0.001 (-0.01, 0.01)	0.01 (-0.002, 0.01)	0.00 (-0.005, 0.01)	0.00 (-0.03, 0.03)

¹Values are pooled standardized regression coefficients (95% Confidence Intervals). All models adjust for the child energy intake, sex, age, ethnicity, birth weight, BMIz score (6 y), maternal age at recruitment and education. ²Derived from van der Velde et al.(28).

³Measured using the Child Behavior Checklist/1.5-5 (20). ⁴Latent Class Growth Analysis categories: Low and stable (*n*=3885, 95%) and High and increasing (*n*=207, 5%)

Supplementary Table 5. Multiple Linear Regressions showing associations between food selectivity at child age 4 y and food component scores at 8 y¹

<u></u>	Food selectivity ³
Food component score ²	β (95%CI)
Fruit	-0.03 (-0.04, -0.03)
Vegetables	-0.05 (-0.06, -0.04)
Whole grains	0.00 (-0.01, 0.004)
Fish	-0.07 (-0.08, -0.05)
Legumes	-0.05 (-0.07, -0.04)
Nuts	-0.02 (-0.03, -0.01)
Dairy	0.00 (-0.01, 0.01)
Oils and soft margarines	-0.01 (-0.02, 0.003)
Sugar containing beverages	0.00 (-0.003, 0.01)
High-fat and processed meat	0.00 (-0.01, 0.002)

¹Values are pooled standardized regression coefficients (95% Confidence Intervals), *n*=3360. All models adjust for child energy intake, sex, age, ethnicity, birth weight, BMIz score (6 y), maternal age at recruitment and education. ²Derived from van der Velde et al.(28). ³Food fussiness subscale from the Children's Eating Behaviour Questionnaire (29)

Supplementary Table 6. Direct and indirect effects of the associations between autistic traits at 1.5 y and food component scores at 8 y through food selectivity at 4 y^1 (n=3360)

Mediation model	β (95%CI)
Fruit score ²	
Autistic traits ³ (direct effect)	-0.07 (-0.11, -0.04)
Food selectivity ⁴ (indirect effect)	-0.01 (-0.02, -0.01)
Vegetables score ²	
Autistic traits ³ (direct effect)	-0.06 (-0.09, -0.03)
Food selectivity ⁴ (indirect effect)	-0.02 (-0.02, -0.01)

¹Values are standardized regression coefficients (95% Confidence Intervals). Models adjust for the child energy intake, sex, age, ethnicity, birth weight, BMIz score (6 y), maternal age at recruitment and education. ²Derived from van der Velde et al.(28). ³Measured using the Pervasive Developmental Problems subscale from the Child Behavior Checklist/1.5-5 (20). ⁴Food fussiness subscale from the Children's Eating Behaviour Questionnaire (29)

Supplementary Figure 1. Study participant flow chart

