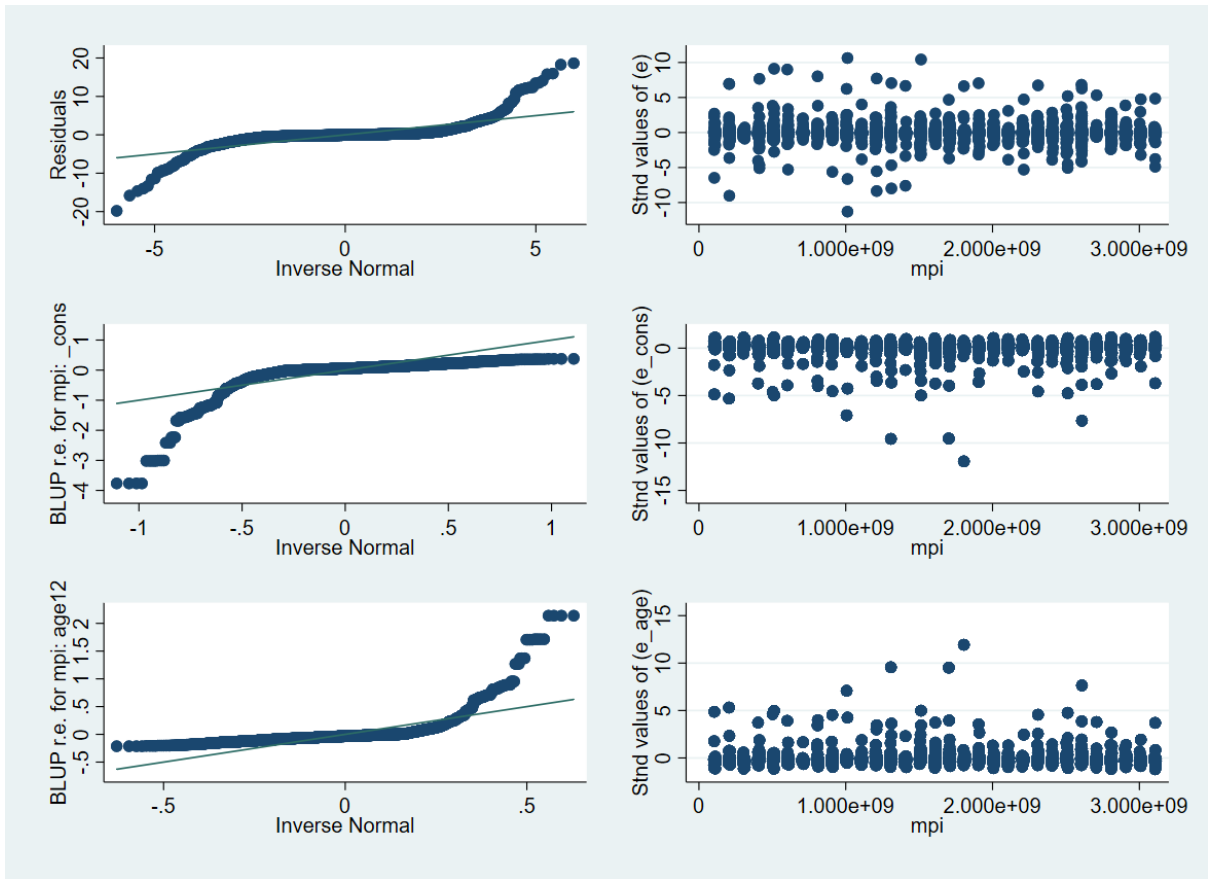


**Appendix Table 1.** Comparison of baseline characteristics between children in the study sample and those excluded because of missing data.

Baseline predictors	Lost to follow-up (n=308)		Study sample (n=1111)		p value
	n	%	n	%	
<i>Maternal age at birth</i>					<0.001
16-24 years	108	49.8	334	30.1	
25-34 years	97	44.7	696	62.7	
35-44 years	12	5.5	81	7.3	
<i>Maternal education</i>					0.025
None	76	39.6	256	31.1	
Secondary	73	38.0	296	35.9	
A-levels	28	14.6	184	22.3	
Higher education	15	7.8	88	10.7	
<i>Maternal smoking during pregnancy</i>					<0.001
Non-smoker	134	52.1	740	66.6	
Smoker	123	47.9	371	33.4	
<i>Parental employment</i>					0.051
None employed	23	15.8	149	13.4	
One employed	67	45.9	417	37.5	
Both employed	56	38.4	545	49.1	
<i>Area deprivation</i>					<0.001
Affluent	41	13.4	282	25.4	
Intermediate	77	25.1	281	25.3	
Deprived	189	61.6	548	49.3	
<i>Child's age at baseline, months</i>	13.1 ± 2.0		12.8 ± 1.7		0.007
<i>Child's sex</i>					0.271
Male	156	50.6	602	54.2	
Female	152	49.4	509	45.8	
<i>Child's birthweight</i>					0.028
≥2.5kg	255	90.8	1048	94.3	
<2.5kg	26	9.3	63	5.7	
<i>Child's breastfeeding</i>					<0.001
Never	199	65.9	598	53.8	
<6 months	77	25.5	318	28.6	
≥6 months	26	8.6	195	17.6	
<i>Child's toothbrushing frequency</i>					0.080
No brushing	86	30.3	265	23.9	
Once a day	80	28.2	352	31.7	
Twice or more a day	118	41.6	494	44.5	
<i>Child's dmfs at baseline</i>	0.18 ± 0.07		0.05 ± 0.01		0.005

**Appendix Table 2.** Model building selection process based on the Likelihood Ratio test and the Akaike Information Criterion (AIC).

Models	Interaction with time	Likelihood ratio test				AIC
		Log-likelihood	df	X <sup>2</sup> value	p value	
M0	Model with main effects	-8056.25	25			16162.49
M1	M0 + Age X Maternal age at birth	-8054.57	27	3.35	0.187	16163.14
M2	M0 + Age X Maternal education	-8045.03	29	22.44	<0.001	16148.05
M3	M0 + Age X Maternal smoking during pregnancy	-8045.00	26	22.50	<0.001	16141.99
M4	M0 + Age X Parental employment	-8043.25	27	26.00	<0.001	16140.49
M5	M0 + Age X Area deprivation	-8050.37	27	11.75	0.003	16154.74
M6	M0 + Age X Child's sex	-8055.63	26	1.23	0.267	16163.26
M7	M0 + Age X Child's birth weight	-8056.21	26	0.08	0.780	16164.42
M8	M0 + Age X Child's breastfeeding	-8053.38	27	5.74	0.057	16160.76
M9	M0 + Age X Initial SSB intake	-8049.95	26	12.60	<0.001	16151.89
M10	M0 + Age X Deviation in SSB intake	-8050.13	26	12.24	<0.001	16152.25
M11	M0 + Age X Child's toothbrushing frequency	-8052.77	27	6.96	0.031	16159.53
M12	M4 + Age X Maternal education	-8035.38	31	15.73	0.003	16132.76
M13	M12 + Age X Area deprivation	-8034.79	33	1.17	0.557	16135.59
M14	M12 + Age X Maternal smoking during pregnancy	-8030.82	28	7.04	0.001	16117.64
M15	M14 + Age X child's sex	-8030.29	29	1.07	0.301	16118.57
M16	M14 + Age X child's birth weight	-8030.76	29	0.12	0.728	16119.52
M17	M14 + Age X child's breastfeeding	-8030.76	33	0.12	1.000	16127.52
M18	M14 + Age X Initial SSB intake	-8028.29	29	5.07	0.024	16114.57
M19	M18 + Age X Deviation SSB intake	-8020.41	34	15.75	0.008	16108.82
M20	M19 + Age X Child's toothbrushing frequency	-8017.07	36	5.43	0.056	16110.14



**Appendix Figure.** Examining the normality assumption of the final linear mixed effects (LME) model presented in Table 3. Left panel shows normal probability plots for the raw residuals at level-1 and level-2. Right panel shows plots of standardized residuals at level-1 and level-2 vs. *ID* numbers.