Supplemental Material

**Prenatal exposure to ambient air pollution and traffic and indicators of adiposity in early childhood:
The Healthy Start study**

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Table of contents

Table S1. Comparison between mother-child pairs included in this study and the full potentially eligible Healthy Start study population.

Characteristic	Participants included in this study (n = 738)	Potentially eligible Healthy Start study population (n = 1382)
	n (%) or median (25th - 75th percentiles)	n (%) or median (25th - 75th percentiles)
Child's sex (boys)	389 (52.7)	695 (51.8)
Maternal age at delivery (years)	29.0 (23.0 - 33.0)	28.0 (22.0 - 32.0)
Pre-pregnancy BMI (kg/m^2)		
Normal weight/underweight (<25.0)	382 (51.8)	759 (55.0)
Overweight (25.0 - 30.0)	203 (27.5)	346 (25.1)
Obesity (≥30.0)	153 (20.7)	275 (19.9)
Parity		
Primiparous	353 (47.8)	662 (47.9)
Multiparous	385 (52.2)	720 (52.1)
Race/ethnicity		
Non-Hispanic white	406 (55.0)	738 (53.4)
Hispanic	179 (24.3)	347 (25.1)
Non-Hispanic black	114 (15.5)	210 (15.2)
Other	39 (5.3)	87 (6.3)
Maternal level of education		
Less than 12th grade or high school degree	219 (29.7)	453 (32.8)
Some college	166 (22.5)	325 (23.5)
Four years of college	168 (22.8)	304 (22.0)
Graduate degree	185 (25.1)	300 (21.7)
Maternal smoking during pregnancy (yes)	46 (6.2)	120 (8.7)
Median income in the Census tract ($)	56749.0 (43182.0 - 83085.0)	55809.0 (43585.0 - 82736.0)

Abbreviations: BMI = body mass index.

Table S2. Indicators of adiposity at age 4-6 years and exposure to ambient $PM_{2.5}$ and O_3 and traffic at the residential address during pregnancy by maternal level of education and quartiles of median income in the Census tract.

Characteristic n (%) or median (25th - 75th percentiles)	Maternal level of education			
	Less than 12th grade or high school degree	Some college	Four years of college	Graduate degree
Overweight	43 (19.7)	24 (14.5)	20 (12.1)	17 (9.3)
Waist circumference (cm)	51.0 (49.0 - 53.9)	51.0 (49.0 - 53.6)	50.9 (48.6 - 53.4)	50.7 (49.0 - 53.5)
Percent fat mass	19.8 (15.6 - 24.2)	19.5 (14.7 - 24.1)	19.2 (15.3 - 23.1)	20.0 (15.4 - 24.3)
FMI (kg/m^2)	3.0 (2.3 - 3.9)	2.9 (2.2 - 3.7)	2.8 (2.3 - 3.6)	3.0 (2.3 - 3.7)
Full pregnancy average $PM_{2.5}$ ($\mu g/m^3$)	7.5 (7.1 - 7.9)	7.5 (7.0 - 7.9)	7.4 (6.9 - 7.8)	7.5 (7.1 - 7.8)
Full pregnancy average 8-hr max O_3 (ppb)	44.1 (41.3 - 47.1)	44.3 (41.7 - 47.4)	44.4 (41.8 - 47.2)	42.6 (39.2 - 45.5)
Distance to nearest highway (m)	681.1 (307.0 - 1551.6)	775.0 (410.0 - 1792.7)	844.8 (426.7 - 1688.4)	1086.4 (542.7 - 1704.8)
Distance to nearest non-highway major roadway (m)	139.7 (60.8 - 295.4)	193.1 (79.4 - 318.7)	133.2 (67.1 - 313.6)	149.2 (70.7 - 319.7)
	Median income in the Census tract ($)			
	Quartile 1 (<43182.0)	Quartile 2 (43182.0 - 56749.0)	Quartile 3 (56749.0 - 83085.0)	Quartile 4 (≥83085.0)
Overweight	34 (18.7)	29 (15.7)	23 (12.6)	18 (9.8)
Waist circumference (cm)	51.2 (48.6 - 54.0)	50.6 (48.7 - 53.5)	51.0 (49.3 - 53.3)	50.9 (48.8 - 53.5)
Percent fat mass	20.0 (15.3 - 24.6)	19.6 (15.0 - 23.5)	18.8 (14.6 - 22.9)	20.5 (16.4 - 24.2)
FMI (kg/m^2)	3.0 (2.3 - 3.9)	3.0 (2.2 - 3.6)	2.9 (2.1 - 3.6)	3.1 (2.4 - 3.7)
Full pregnancy average $PM_{2.5}$ ($\mu g/m^3$)	7.5 (7.1 - 7.9)	7.6 (7.0 - 7.9)	7.5 (7.1 - 8.0)	7.3 (6.9 - 7.7)
Full pregnancy average 8-hr max O_3 (ppb)	43.3 (40.9 - 46.2)	43.6 (40.7 - 47.1)	43.8 (40.7 - 46.9)	44.5 (42.1 - 46.8)
Distance to nearest highway (m)	444.9 (265.3 - 818.0)	874.7 (470.6 - 1661.3)	1185.4 (483.7 - 2013.2)	1363.3 (629.5 - 2053.3)
Distance to nearest non-highway major roadway (m)	126.5 (38.2 - 255.5)	126.9 (54.5 - 233.2)	166.8 (73.4 - 328.2)	244.4 (84.5 - 503.6)

Abbreviations: FMI = fat mass index; $PM_{2.5}$ = fine particulate matter; O_3 = ozone.

Table S3. Unadjusted associations of exposure to $PM_{2.5}$ and O_3 at the residential address during pregnancy with indicators of adiposity at age 4-6 years.

Exposure (increment)	Overweight	Waist circumference	Percent fat mass	FMI
	OR (95% CI)	β (95% CI)	β (95% CI)	β (95% CI)
Trimester 1 average $PM_{2.5}$ (1.3 µg/m³)	1.06 (0.82, 1.38)	**0.44 (0.04, 0.85)**	-0.11 (-0.76, 0.54)	0.00 (-0.12, 0.12)
Trimester 2 average $PM_{2.5}$ (1.3 µg/m³)	1.00 (0.76, 1.31)	**0.42 (0.01, 0.83)**	0.46 (-0.20, 1.12)	0.09 (-0.03, 0.22)
Trimester 3 average $PM_{2.5}$ (1.3 µg/m³)	0.98 (0.75, 1.30)	-0.31 (-0.73, 0.11)	**-1.30 (-1.97, -0.63)**	**-0.21 (-0.34, -0.08)**
Full pregnancy average $PM_{2.5}$ (0.9 µg/m³)	1.07 (0.79, 1.45)	0.40 (-0.05, 0.86)	-0.53 (-1.28, 0.22)	-0.06 (-0.20, 0.08)
Trimester 1 average 8-hr max O_3 (20.4 ppb)	**0.65 (0.44, 0.97)**	**-0.85 (-1.43, -0.27)**	**-1.69 (-2.64, -0.74)**	**-0.33 (-0.51, -0.16)**
Trimester 2 average 8-hr max O_3 (18.0 ppb)	1.32 (0.91, 1.92)	-0.02 (-0.58, 0.54)	-0.13 (-1.07, 0.80)	0.00 (-0.17, 0.17)
Trimester 3 average 8-hr max O_3 (18.7 ppb)	**1.62 (1.09, 2.42)**	0.33 (-0.25, 0.90)	**1.59 (0.65, 2.53)**	**0.30 (0.12, 0.47)**
Full pregnancy average 8-hr max O_3 (5.8 ppb)	1.23 (0.91, 1.67)	-0.38 (-0.83, 0.06)	-0.17 (-0.91, 0.57)	-0.03 (-0.17, 0.11)

Abbreviations: $PM_{2.5}$ = fine particulate matter; O_3 = ozone; FMI = fat mass index.
Associations are shown for an interquartile range increase in exposure. Statistically significant results are highlighted in bold (p <0.05).

Table S4. Associations of exposure to $PM_{2.5}$ and O_3 at the residential address during pregnancy with indicators of adiposity at age 4-6 years - model 2.

Exposure (increment)	Overweight OR (95% CI)	Waist circumference β (95% CI)	Percent fat mass β (95% CI)	FMI β (95% CI)
Trimester 1 average $PM_{2.5}$ (1.3 µg/m^3)	0.95 (0.71, 1.29)	-0.07 (-0.46, 0.33)	-0.13 (-0.79, 0.52)	-0.04 (-0.16, 0.08)
Trimester 2 average $PM_{2.5}$ (1.3 µg/m^3)	1.05 (0.77, 1.41)	0.33 (-0.07, 0.72)	**0.70 (0.05, 1.34)**	**0.13 (0.01, 0.25)**
Trimester 3 average $PM_{2.5}$ (1.3 µg/m^3)	1.03 (0.74, 1.44)	-0.23 (-0.64, 0.17)	**-1.21 (-1.88, -0.54)**	**-0.19 (-0.31, -0.06)**
Full pregnancy average $PM_{2.5}$ (0.9 µg/m^3)	1.05 (0.74, 1.48)	0.03 (-0.40, 0.46)	-0.25 (-0.98, 0.48)	-0.04 (-0.17, 0.10)
Trimester 1 average 8-hr max O_3 (20.4 ppb)	1.02 (0.45, 2.34)	0.00 (-1.03, 1.04)	**-2.87 (-4.60, -1.13)**	**-0.41 (-0.73, -0.08)**
Trimester 2 average 8-hr max O_3 (18.0 ppb)	1.25 (0.59, 2.63)	-0.23 (-1.17, 0.71)	-0.27 (-1.83, 1.29)	-0.02 (-0.31, 0.27)
Trimester 3 average 8-hr max O_3 (18.7 ppb)	1.30 (0.60, 2.86)	-0.89 (-1.91, 0.13)	**1.99 (0.27, 3.71)**	0.26 (-0.06, 0.58)
Full pregnancy average 8-hr max O_3 (5.8 ppb)	1.23 (0.75, 2.00)	-0.41 (-1.00, 0.19)	-0.55 (-1.55, 0.46)	-0.08 (-0.27, 0.11)

Abbreviations: $PM_{2.5}$ = fine particulate matter; O_3 = ozone; FMI = fat mass index.
Statistically significant results are highlighted in bold (p <0.05).
Associations are shown for an interquartile range increase in exposure. Associations are adjusted for child's sex, child's age, maternal age at delivery, pre-pregnancy BMI, parity, race/ethnicity, maternal level of education, maternal smoking during pregnancy, season of birth and median income in the Census tract.

Table S5. Unadjusted associations of exposure to traffic at the residential address during pregnancy with indicators of adiposity at age 4-6 years.

Exposure	Overweight	Waist circumference	Percent fat mass	FMI
	OR (95% CI)	β (95% CI)	β (95% CI)	β (95% CI)
Distance to highway (m)				
Quartile 1 (<404.24)	**2.78 (1.46, 5.28)**	**1.39 (0.50, 2.28)**	0.74 (-0.71, 2.20)	**0.32 (0.05, 0.59)**
Quartile 2 (404.24 - 866.43)	1.46 (0.73, 2.93)	**0.94 (0.06, 1.83)**	0.30 (-1.17, 1.76)	0.17 (-0.10, 0.45)
Quartile 3 (866.43 - 1688.56)	**2.37 (1.24, 4.55)**	0.73 (-0.16, 1.61)	0.77 (-0.71, 2.25)	0.23 (-0.04, 0.51)
Quartile 4 (≥1688.56)	ref	ref	ref	ref
Distance to other major roadway (m)				
Quartile 1 (<68.01)	1.19 (0.66, 2.14)	0.25 (-0.64, 1.14)	0.45 (-1.00, 1.90)	0.09 (-0.18, 0.37)
Quartile 2 (68.01 - 152.89)	1.14 (0.63, 2.06)	0.26 (-0.63, 1.15)	0.80 (-0.65, 2.25)	0.13 (-0.14, 0.40)
Quartile 3 (152.89 - 307.58)	1.03 (0.56, 1.88)	-0.15 (-1.04, 0.74)	1.19 (-0.28, 2.65)	0.19 (-0.08, 0.46)
Quartile 4 (≥307.58)	ref	ref	ref	ref
Traffic density within 150m (vehicles*km/day) [a]				
Quartiles 1 and 2 combined (0.00 - 437.04)	ref	ref	ref	ref
Quartile 3 (437.04 - 2846.08)	1.09 (0.65, 1.83)	0.61 (-0.17, 1.39)	0.32 (-0.95, 1.59)	0.07 (-0.17, 0.31)
Quartile 4 (≥2846.08)	1.27 (0.77, 2.09)	0.05 (-0.73, 0.83)	0.06 (-1.23, 1.35)	0.01 (-0.23, 0.25)
Traffic density within 250m (vehicles*km/day)				
Quartile 1 (0.00)	ref	ref	ref	ref
Quartile 2 (0.00 - 3276.04)	1.07 (0.59, 1.94)	0.53 (-0.38, 1.44)	0.25 (-1.24, 1.74)	0.08 (-0.20, 0.36)
Quartile 3 (3276.04 - 9493.52)	0.84 (0.46, 1.54)	0.12 (-0.75, 1.00)	-0.70 (-2.14, 0.74)	-0.14 (-0.41, 0.13)
Quartile 4 (≥9493.52)	1.31 (0.75, 2.28)	0.20 (-0.68, 1.07)	0.31 (-1.12, 1.73)	0.08 (-0.18, 0.35)
Traffic density within 500m (vehicles*km/day)				
Quartile 1 (<9478.13)	ref	ref	ref	ref
Quartile 2 (9478.13 - 23058.84)	0.69 (0.37, 1.28)	0.31 (-0.59, 1.21)	-0.29 (-1.77, 1.19)	-0.04 (-0.31, 0.24)
Quartile 3 (23058.84 - 42550.53)	0.80 (0.44, 1.44)	-0.02 (-0.92, 0.88)	0.18 (-1.30, 1.65)	0.04 (-0.23, 0.32)
Quartile 4 (≥42550.53)	1.18 (0.68, 2.06)	0.73 (-0.17, 1.63)	-0.06 (-1.52, 1.41)	0.07 (-0.20, 0.35)

Traffic density within 1000m (vehicles*km/day)				
Quartile 1 (<64368.33)	ref	ref	ref	ref
Quartile 2 (64368.33 - 111625.29)	1.17 (0.63, 2.19)	0.54 (-0.36, 1.44)	0.79 (-0.69, 2.28)	0.17 (-0.11, 0.45)
Quartile 3 (111625.29 - 160574.81)	1.70 (0.94, 3.07)	0.76 (-0.14, 1.66)	0.66 (-0.81, 2.13)	0.20 (-0.08, 0.47)
Quartile 4 (≥160574.81)	1.25 (0.67, 2.32)	0.66 (-0.24, 1.56)	0.29 (-1.20, 1.78)	0.16 (-0.12, 0.44)

Abbreviations: FMI = fat mass index. Statistically significant results are highlighted in bold (p <0.05).

[a] For traffic density in a buffer of 150m around the home address, quartiles 1 and 2 were combined due to the large number of zero values.

Table S6. Associations of exposure to $PM_{2.5}$ and O_3 at the residential address during pregnancy with obesity (yes, no) and BMI z-scores (continuous) at age 4-6 years. [a]

Exposure (increment)	Obesity	BMI z-score
	OR (95% CI)	β (95% CI)
Trimester 1 average $PM_{2.5}$ (1.3 μg/m^3)	0.66 (0.38, 1.13)	0.00 (-0.11, 0.10)
Trimester 2 average $PM_{2.5}$ (1.3 μg/m^3)	1.37 (0.88, 2.15)	**0.11 (0.00, 0.21)**
Trimester 3 average $PM_{2.5}$ (1.3 μg/m^3)	0.74 (0.41, 1.34)	-0.03 (-0.13, 0.08)
Full pregnancy average $PM_{2.5}$ (0.9 μg/m^3)	0.71 (0.41, 1.24)	0.06 (-0.06, 0.18)
Trimester 1 average 8-hr max O_3 (20.4 ppb)	1.49 (0.28, 8.01)	-0.03 (-0.32, 0.27)
Trimester 2 average 8-hr max O_3 (18.0 ppb)	1.22 (0.36, 4.18)	-0.03 (-0.29, 0.22)
Trimester 3 average 8-hr max O_3 (18.7 ppb)	0.60 (0.18, 2.03)	-0.11 (-0.38, 0.16)
Full pregnancy average 8-hr max O_3 (5.8 ppb)	1.03 (0.48, 2.21)	-0.02 (-0.18, 0.15)

Abbreviations: $PM_{2.5}$ = fine particulate matter; O_3 = ozone; BMI = body mass index.
Associations are shown for an interquartile range increase in exposure.
Statistically significant results are highlighted in bold (p <0.05).
[a] Associations are adjusted for child's sex, child's age, maternal age at delivery, pre-pregnancy BMI, parity, race/ethnicity, maternal level of education, maternal smoking during pregnancy, season of birth and median income in the Census tract. Associations with $PM_{2.5}$ are additionally adjusted for the average 8-hour maximum O_3 concentration during the specified pregnancy period. Associations with O_3 are additionally adjusted for the average daily $PM_{2.5}$ concentration during the specified pregnancy period.

Table S7. Associations of exposure to traffic at the residential address during pregnancy with obesity (yes, no) and BMI z-scores (continuous) at age 4-6 years. [a]

Exposure	Obesity OR (95% CI)	BMI z-score β (95% CI)
Distance to highway (m)		
Quartile 1 (<404.24)	2.45 (0.81, 7.40)	**0.31 (0.09, 0.53)**
Quartile 2 (404.24 - 866.43)	1.82 (0.58, 5.69)	**0.39 (0.18, 0.61)**
Quartile 3 (866.43 - 1688.56)	2.37 (0.80, 7.05)	**0.40 (0.19, 0.61)**
Quartile 4 (≥1688.56)	ref	ref
Distance to other major roadway (m)		
Quartile 1 (<68.01)	0.51 (0.20, 1.32)	0.04 (-0.18, 0.26)
Quartile 2 (68.01 - 152.89)	0.54 (0.21, 1.37)	0.06 (-0.16, 0.27)
Quartile 3 (152.89 - 307.58)	0.49 (0.19, 1.24)	0.04 (-0.17, 0.25)
Quartile 4 (≥307.58)	ref	ref
Traffic density within 150m (vehicles*km/day) [b]		
Quartiles 1 and 2 combined (0.00 - 437.04)	ref	ref
Quartile 3 (437.04 - 2846.08)	0.96 (0.44, 2.11)	0.03 (-0.15, 0.22)
Quartile 4 (≥2846.08)	0.59 (0.24, 1.46)	-0.02 (-0.21, 0.16)
Traffic density within 250m (vehicles*km/day)		
Quartile 1 (0.00)	ref	ref
Quartile 2 (0.00 - 3276.04)	0.75 (0.31, 1.80)	0.15 (-0.06, 0.37)
Quartile 3 (3276.04 - 9493.52)	**0.27 (0.10, 0.76)**	-0.07 (-0.28, 0.14)
Quartile 4 (≥9493.52)	0.60 (0.25, 1.46)	0.02 (-0.19, 0.23)
Traffic density within 500m (vehicles*km/day)		
Quartile 1 (<9478.13)	ref	ref
Quartile 2 (9478.13 - 23058.84)	0.56 (0.22, 1.44)	-0.02 (-0.24, 0.19)
Quartile 3 (23058.84 - 42550.53)	**0.31 (0.11, 0.87)**	-0.15 (-0.37, 0.06)
Quartile 4 (≥42550.53)	0.76 (0.31, 1.90)	0.03 (-0.19, 0.24)
Traffic density within 1000m (vehicles*km/day)		
Quartile 1 (<64368.33)	ref	ref
Quartile 2 (64368.33 – 111625.29)	0.87 (0.32, 2.42)	0.07 (-0.15, 0.29)
Quartile 3 (111625.29 – 160574.81)	1.08 (0.41, 2.87)	0.18 (-0.05, 0.40)
Quartile 4 (≥160574.81)	0.94 (0.34, 2.60)	0.20 (-0.03, 0.43)

Abbreviations: BMI = body mass index. Statistically significant results are highlighted in bold (p <0.05).
[a] Associations are adjusted for child's sex, child's age, maternal age at delivery, pre-pregnancy BMI, parity, race/ethnicity, maternal level of education, maternal smoking during pregnancy, season of birth and median income in the Census tract.
[b] For traffic density in a buffer of 150m around the home address, quartiles 1 and 2 were combined due to the large number of zero values.

Table S8. Associations of exposure to $PM_{2.5}$ and O_3 at the residential address during pregnancy with indicators of adiposity at age 4-6 years in children whose mothers did not smoke during pregnancy (n = 692).

Exposure (increment)	Overweight	Waist circumference	Percent fat mass	FMI
	OR (95% CI)	β (95% CI)	β (95% CI)	β (95% CI)
Trimester 1 average $PM_{2.5}$ (1.3 µg/m³)	0.88 (0.63, 1.23)	-0.15 (-0.56, 0.27)	-0.29 (-0.96, 0.38)	-0.07 (-0.19, 0.06)
Trimester 2 average $PM_{2.5}$ (1.3 µg/m³)	1.07 (0.78, 1.47)	0.35 (-0.06, 0.76)	**0.73 (0.06, 1.39)**	**0.13 (0.01, 0.26)**
Trimester 3 average $PM_{2.5}$ (1.3 µg/m³)	1.11 (0.79, 1.56)	-0.16 (-0.58, 0.27)	**-1.00 (-1.69, -0.32)**	**-0.15 (-0.28, -0.02)**
Full pregnancy average $PM_{2.5}$ (0.9 µg/m³)	1.18 (0.82, 1.71)	0.04 (-0.43, 0.51)	-0.21 (-0.99, 0.58)	-0.02 (-0.17, 0.12)
Trimester 1 average 8-hr max O_3 (20.4 ppb)	0.87 (0.33, 2.32)	-0.33 (-1.50, 0.85)	**-2.71 (-4.65, -0.77)**	**-0.39 (-0.75, -0.02)**
Trimester 2 average 8-hr max O_3 (18.0 ppb)	1.57 (0.68, 3.62)	0.20 (-0.82, 1.23)	0.10 (-1.56, 1.75)	0.04 (-0.26, 0.35)
Trimester 3 average 8-hr max O_3 (18.7 ppb)	1.54 (0.65, 3.64)	-0.62 (-1.72, 0.48)	**2.18 (0.40, 3.96)**	0.32 (-0.01, 0.66)
Full pregnancy average 8-hr max O_3 (5.8 ppb)	**1.85 (1.06, 3.22)**	-0.11 (-0.78, 0.56)	-0.30 (-1.41, 0.81)	-0.02 (-0.23, 0.19)

Abbreviations: $PM_{2.5}$ = fine particulate matter; O_3 = ozone; FMI = fat mass index. Statistically significant results are highlighted in bold (p <0.05). Associations are shown for an interquartile range increase in exposure. Associations are adjusted for child's sex, child's age, maternal age at delivery, pre-pregnancy BMI, parity, race/ethnicity, maternal level of education, season of birth and median income in the Census tract. Associations with $PM_{2.5}$ are additionally adjusted for the average 8-hour maximum O_3 concentration during the specified pregnancy period. Associations with O_3 are additionally adjusted for the average daily $PM_{2.5}$ concentration during the specified pregnancy period.

Table S9. Associations of exposure to traffic at the residential address during pregnancy with indicators of adiposity at age 4-6 years in children whose mothers did not smoke during pregnancy (n = 692).

	Overweight	Waist circumference	Percent fat mass	FMI
Exposure	OR (95% CI)	β (95% CI)	β (95% CI)	β (95% CI)
Distance to highway (m)				
Quartile 1 (<404.24)	**2.25 (1.09, 4.65)**	0.88 (-0.01, 1.77)	0.86 (-0.61, 2.32)	**0.29 (0.02, 0.57)**
Quartile 2 (404.24 - 866.43)	1.25 (0.58, 2.72)	0.71 (-0.16, 1.59)	0.73 (-0.71, 2.18)	0.23 (-0.04, 0.50)
Quartile 3 (866.43 - 1688.56)	**2.15 (1.07, 4.32)**	0.76 (-0.07, 1.60)	0.58 (-0.82, 1.98)	0.20 (-0.06, 0.46)
Quartile 4 (≥1688.56)	ref	ref	ref	ref
Distance to other major roadway (m)				
Quartile 1 (<68.01)	0.84 (0.43, 1.64)	0.08 (-0.79, 0.95)	0.04 (-1.39, 1.47)	0.00 (-0.27, 0.27)
Quartile 2 (68.01 - 152.89)	0.90 (0.47, 1.73)	-0.03 (-0.88, 0.82)	0.64 (-0.76, 2.04)	0.08 (-0.18, 0.35)
Quartile 3 (152.89 - 307.58)	0.87 (0.45, 1.69)	-0.01 (-0.87, 0.86)	0.55 (-0.89, 1.98)	0.08 (-0.18, 0.35)
Quartile 4 (≥307.58)	ref	ref	ref	ref
Traffic density within 150m (vehicles*km/day) [a]				
Quartiles 1 and 2 combined (0.00 - 437.04)	ref	ref	ref	ref
Quartile 3 (437.04 - 2846.08)	0.93 (0.53, 1.65)	0.22 (-0.52, 0.96)	0.25 (-0.96, 1.46)	0.03 (-0.19, 0.26)
Quartile 4 (≥2846.08)	1.02 (0.57, 1.83)	-0.21 (-0.96, 0.55)	-0.02 (-1.27, 1.23)	-0.03 (-0.27, 0.20)
Traffic density within 250m (vehicles*km/day)				
Quartile 1 (0.00)	ref	ref	ref	ref
Quartile 2 (0.00 - 3276.04)	0.99 (0.52, 1.87)	0.57 (-0.30, 1.43)	-0.11 (-1.53, 1.31)	0.01 (-0.26, 0.28)
Quartile 3 (3276.04 - 9493.52)	0.51 (0.25, 1.04)	-0.19 (-1.04, 0.65)	-1.02 (-2.42, 0.38)	-0.23 (-0.49, 0.04)
Quartile 4 (≥9493.52)	1.10 (0.58, 2.06)	-0.02 (-0.88, 0.84)	0.07 (-1.33, 1.48)	0.01 (-0.25, 0.28)
Traffic density within 500m (vehicles*km/day)				
Quartile 1 (<9478.13)	ref	ref	ref	ref
Quartile 2 (9478.13 - 23058.84)	0.56 (0.29, 1.10)	-0.01 (-0.86, 0.84)	0.06 (-1.34, 1.46)	-0.01 (-0.27, 0.26)
Quartile 3 (23058.84 - 42550.53)	0.56 (0.28, 1.12)	-0.43 (-1.30, 0.45)	0.20 (-1.25, 1.65)	0.00 (-0.27, 0.27)
Quartile 4 (≥42550.53)	1.02 (0.54, 1.94)	0.30 (-0.59, 1.19)	0.77 (-0.68, 2.22)	0.17 (-0.10, 0.45)

Traffic density within 1000m (vehicles*km/day)				
Quartile 1 (<64368.33)	ref	ref	ref	ref
Quartile 2 (64368.33 - 111625.29)	1.00 (0.49, 2.04)	0.20 (-0.68, 1.08)	1.29 (-0.17, 2.74)	0.23 (-0.05, 0.50)
Quartile 3 (111625.29 - 160574.81)	1.53 (0.78, 3.02)	0.51 (-0.40, 1.42)	**1.58 (0.08, 3.08)**	**0.32 (0.04, 0.61)**
Quartile 4 (≥160574.81)	1.06 (0.52, 2.18)	0.41 (-0.50, 1.33)	0.69 (-0.82, 2.20)	0.21 (-0.07, 0.50)

Abbreviations: FMI = fat mass index. Statistically significant results are highlighted in bold (p <0.05).

Associations are adjusted for child's sex, child's age, maternal age at delivery, pre-pregnancy BMI, parity, race/ethnicity, maternal level of education, season of birth and median income in the Census tract.

[a] For traffic density in a buffer of 150m around the home address, quartiles 1 and 2 were combined due to the large number of zero values.
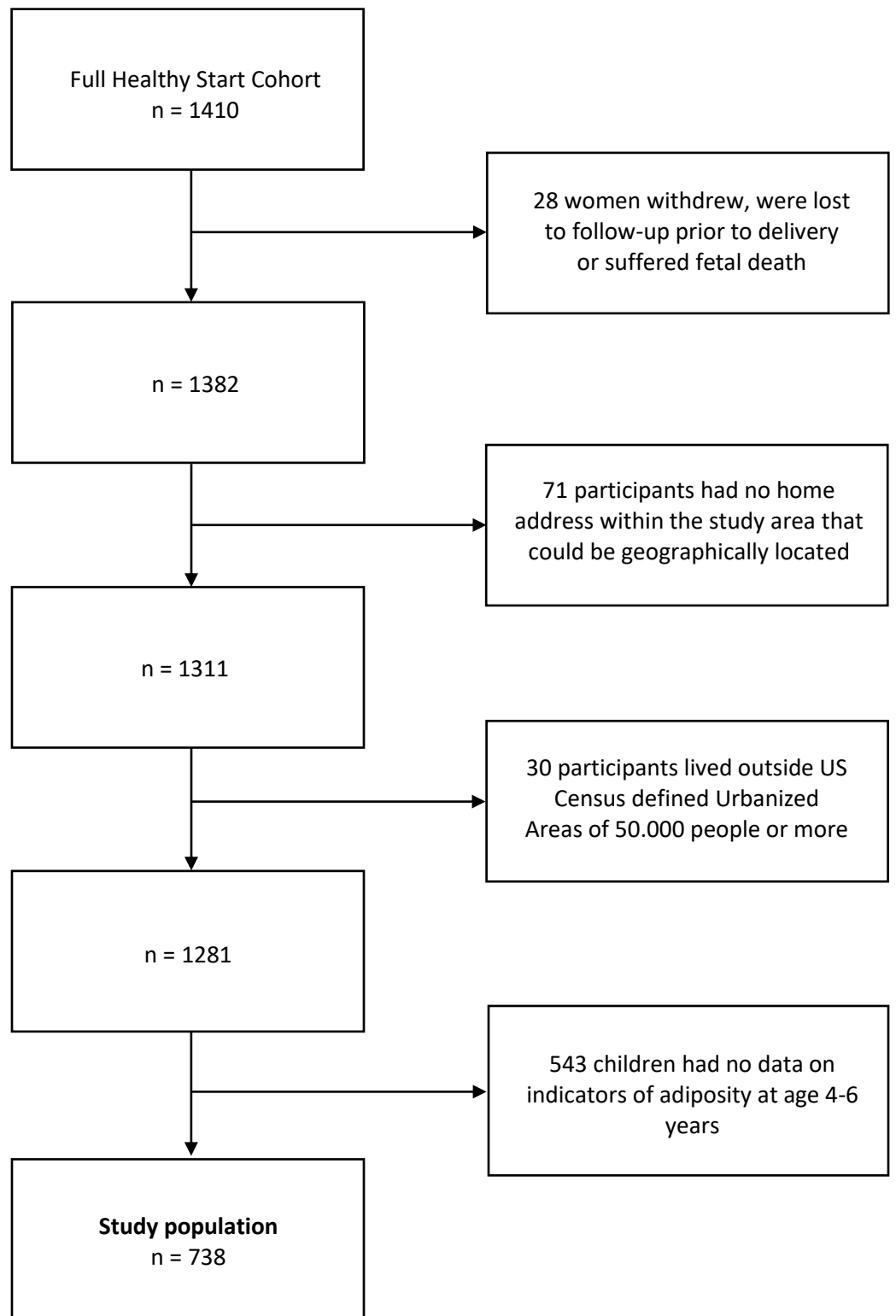
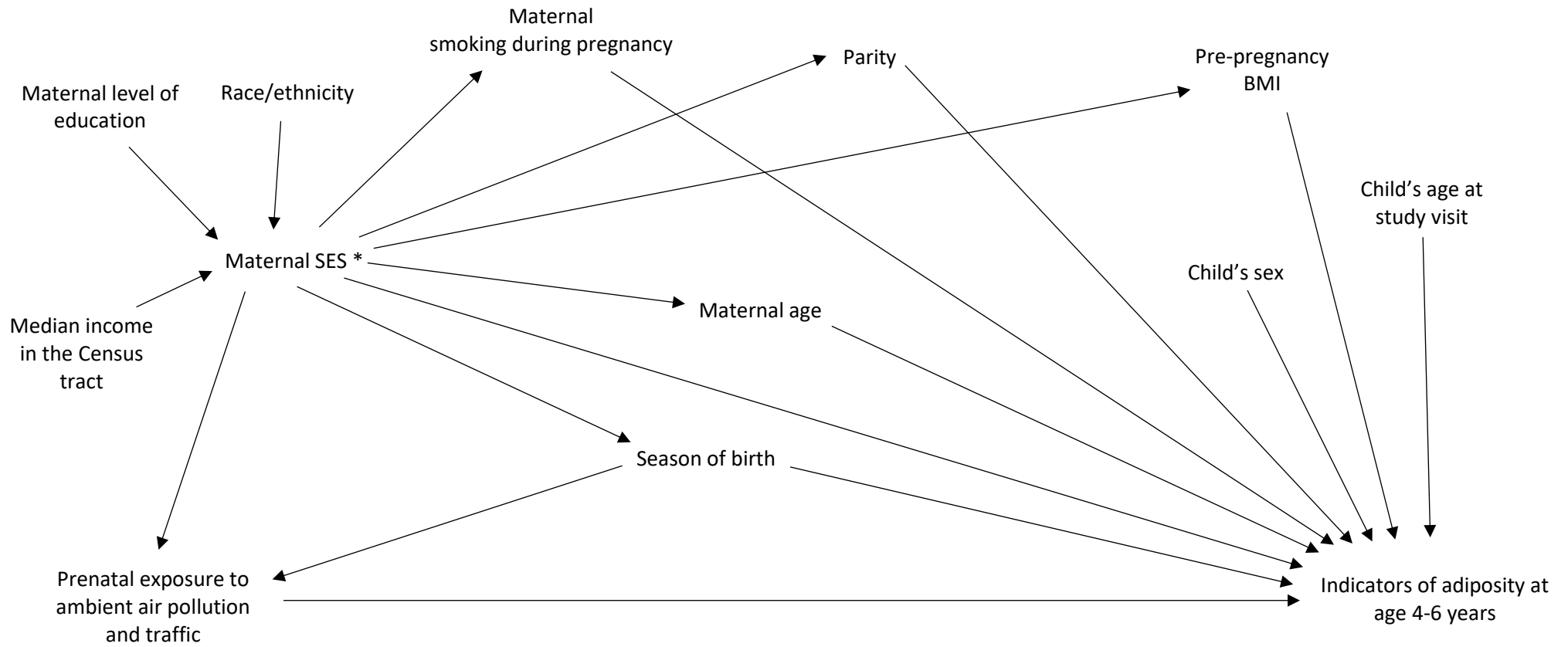Figure S1. Flow diagram of study participants.

Figure S2. Directed acyclic graph for the associations of exposure to ambient air pollution and traffic at the residential address during pregnancy with indicators of adiposity at age 4-6 years. Abbreviations: SES = socioeconomic status; BMI = body mass index.
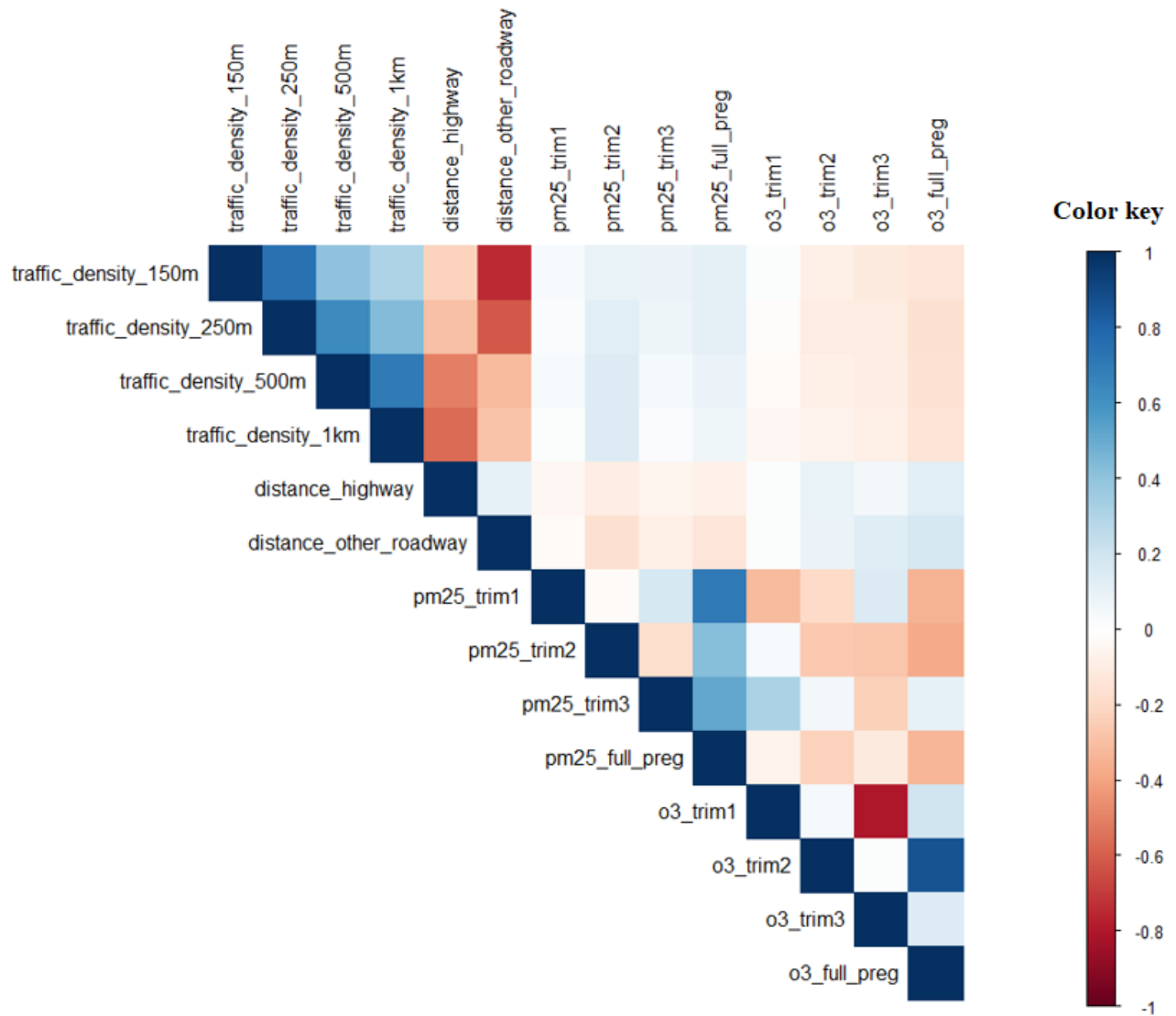* Unmeasured

Figure S3. Spearman correlations between prenatal exposure to traffic and ambient air pollution among 738 participants of the Healthy Start study. Blue squares represent positive correlations; orange and red squares represent negative correlations. Abbreviations: PM$_{2.5}$ = fine particulate matter; O$_3$ = ozone.