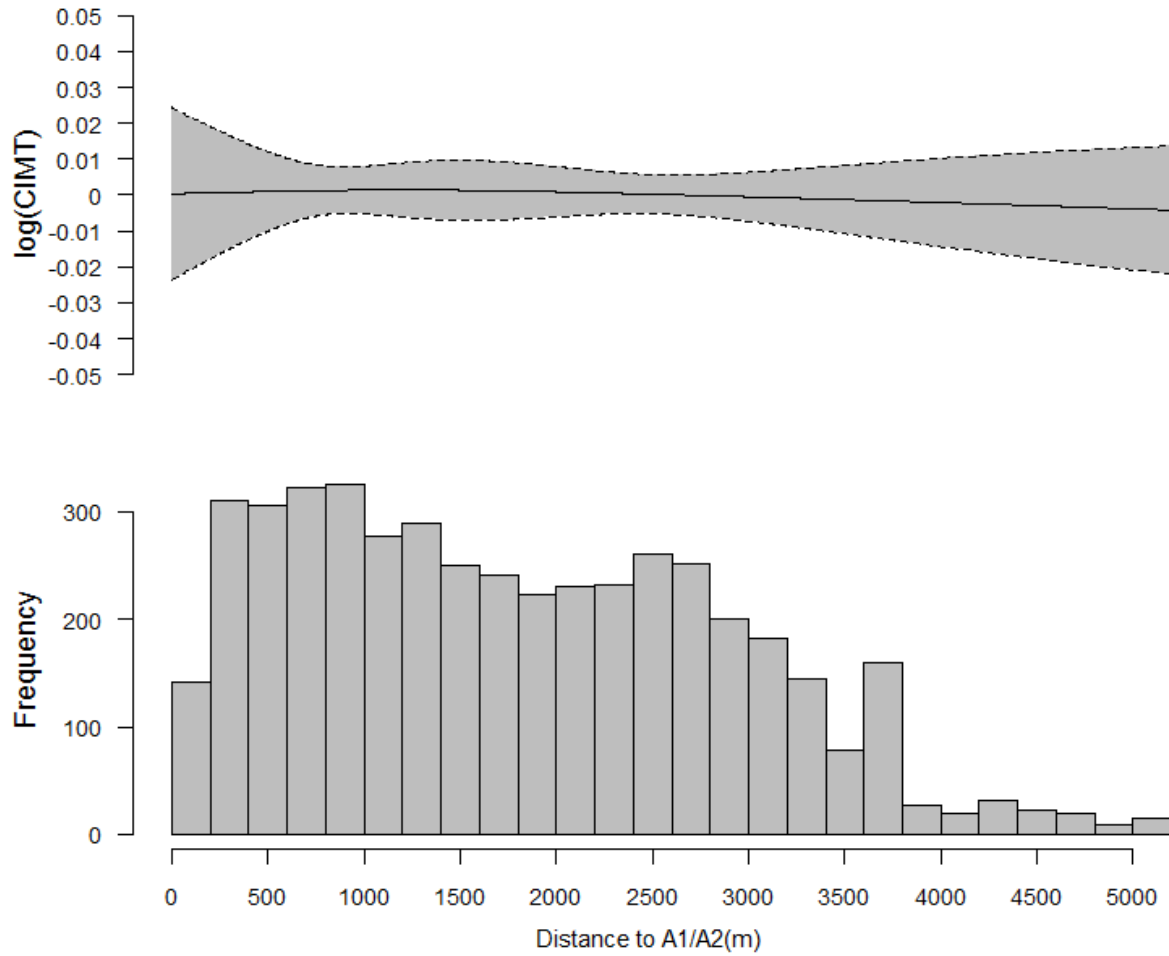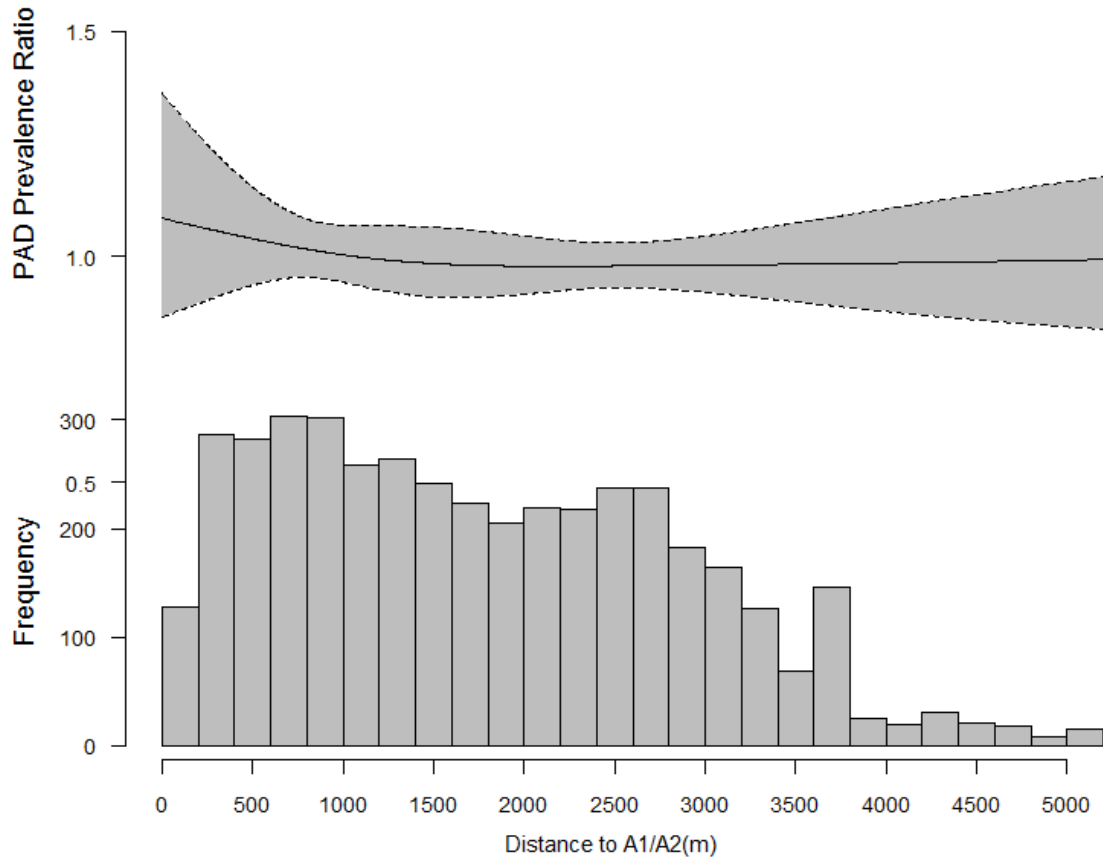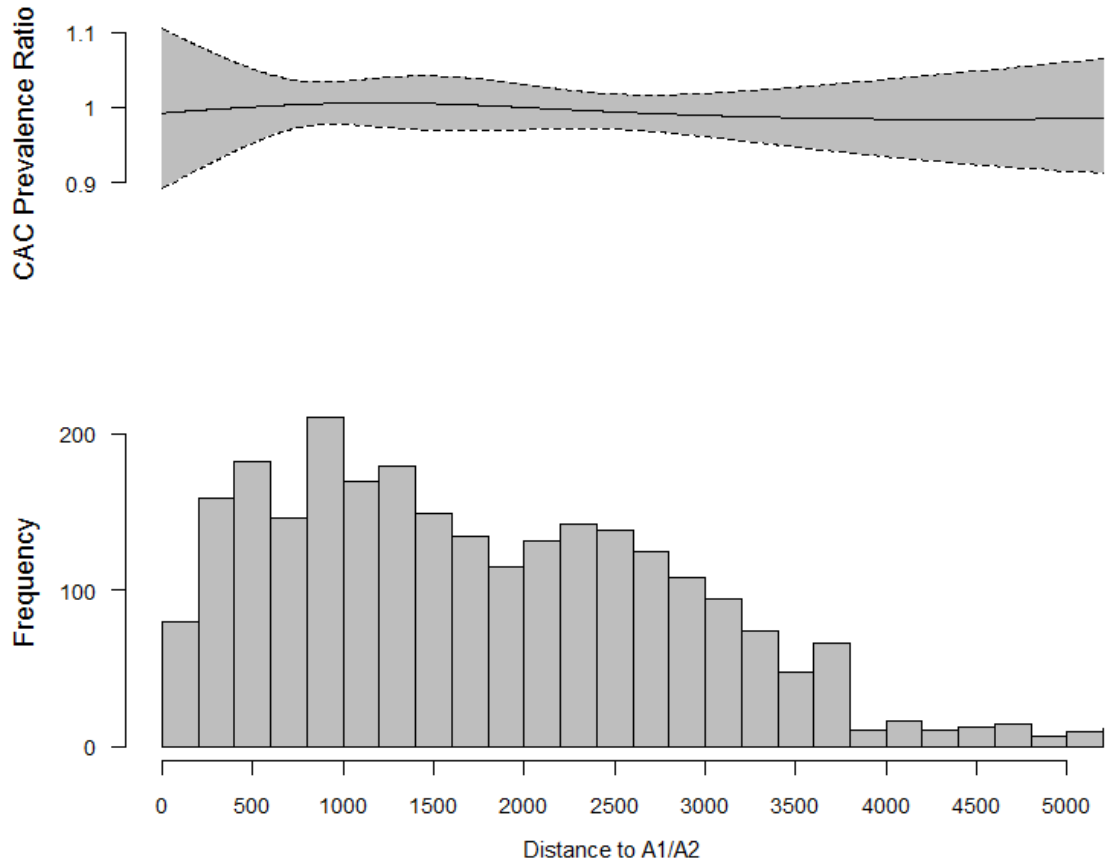Web Figure 1: Natural spline of the association between distance to A1/A2 roads with 3 df and log CIMT in a fully adjusted model. Shaded region, 95% confidence interval.

Web Figure 2: Natural spline of the association between distance to A1/A2 roads with 3 df and prevalence ratio for PAD in a fully adjusted model. Shaded region, 95% confidence interval.
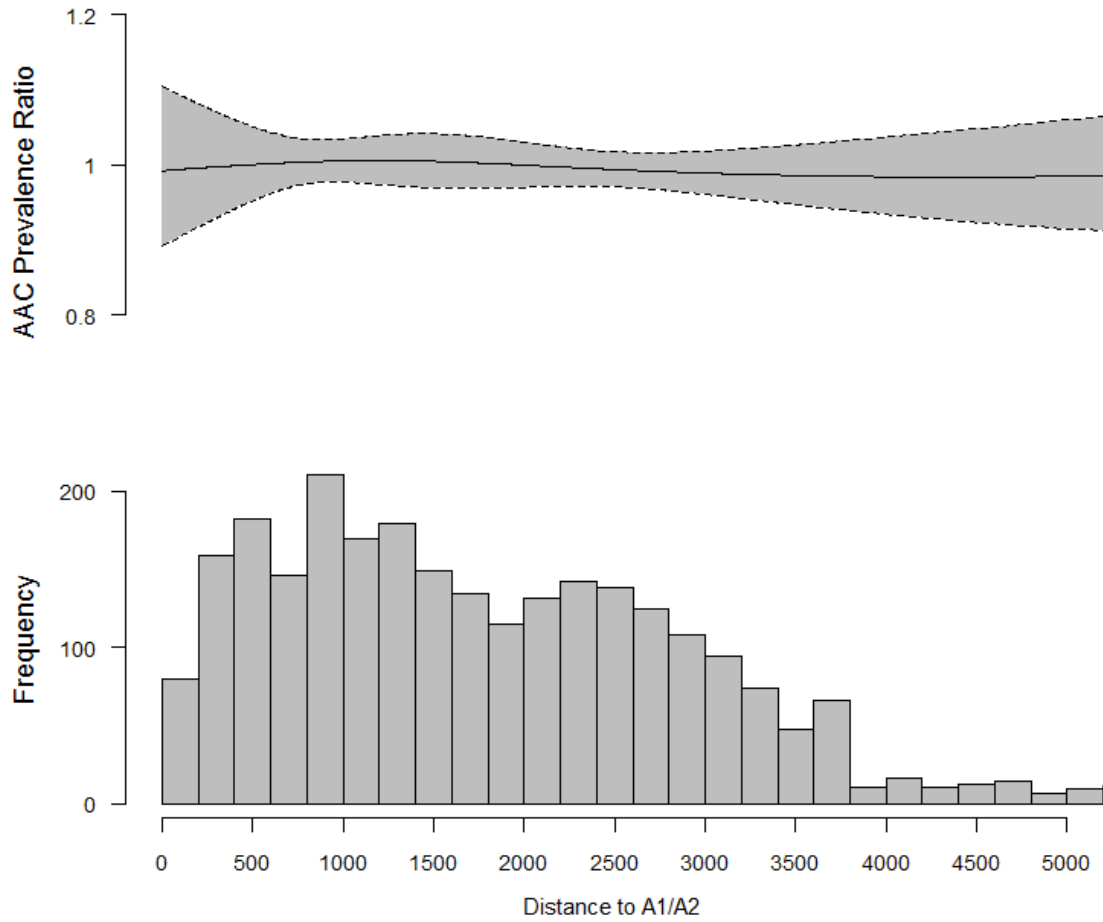
Web Figure 3: Natural spline of the association between distance to A1/A2 roads with 3 df and prevalence ratio for CAC in a fully adjusted model. Shaded region, 95% confidence interval.

Web Figure 4: Natural spline of the association between distance to A1/A2 roads with 3 df and prevalence ratio for AAC in a fully adjusted model. Shaded region, 95% confidence interval.

Web Table 1: Baseline characteristics of participants with ABI

Characteristic	All (n=4443) [a]	<150 m (n=90)	150-300 m (n=149)	>300 m (n=4204)
		Residential distance to major roadways [b]		
Age, years, mean ± SD	55.2 ± 12.6	55.5 ± 13.0	58.4 ± 12.2	55.1 ± 12.6
Female, %	63.5	68.9	63.7	63.4
Body mass index, kg/m^3, mean ± SD	31.5 ± 6.9	32.3 ± 7.6	30.5 ± 6.3	31.5 ± 6.9
Education, %				
High school or less	37.1	37.8	34.9	37.2
College or vocational school	29.1	34.4	25.6	29.2
Graduate school	33.4	26.7	39.6	33.3
Household income, %				
Poor	12.1	12.2	5.4	12.3
Lower-middle	20.1	18.9	20.1	20.2
Upper-middle	25.7	13.3	24.8	26.0
Affluent	26.8	27.8	32.9	26.5
Alcohol consumption, %	46.0	41.1	38.9	46.4
Ever Smoker, %				
Never	67.9	68.9	75.8	67.6
Past	18.7	11.1	14.8	19.0
Current	12.7	20.0	9.4	12.7
Hypertension, %	61.0	48.9	65.8	61.1
Diabetes mellitus, %	20.5	15.6	19.5	20.6
Hyperlipidemia, %	55.2	61.0	57.0	55.0
History of CHD, stroke and MI, %	4.8	3.9	3.2	4.5

Fast food outlets, /1,000, mean ± SD	1.6 ± 2.5	2.0 ± 2.6	1.8 ± 2.4	1.6 ± 2.5
Grocery stores, /1,000, mean ± SD	2.7 ± 4.3	4.2 ± 5.3	4.1 ± 5.1	2.6 ± 4.2
ABI, mean ± SD	1.1 ± 0.2	1.1 ± 0.2	1.2 ± 0.2	1.1 ± 0.2

Abbreviations: ABI, ankle-branchial index; SD, standard deviation.

[a] Percent of missing data: BMI (0.05%), education (0.4%), household income (15.0%), alcohol consumption (0.3%), ever smoker (0.7%), hypertension (0.9%), diabetes (0.9%).

[b] Nearest major roadways = A1 or A2 roads.

Web Table 2: Association between categories of residential distance to nearest major roadway (A1) and carotid intima-media thickness (CIMT) and presence of peripheral arterial disease (PAD) at baseline, and presence of coronary artery calcification (CAC) or aortic artery calcification (AAC) at first follow-up. Estimates represent the relative percent difference in CIMT (95% CI) modeled as a continuous outcome, and prevalence ratios (95% CI) of PAD, CAC or AAC modeled as categorical outcomes.

Outcome	Residential Distance to Major Roadways[c]			
	<150 m	150-300 m	>300 m	P_{trend}
CIMT	(n=32)	(n=94)	(n=4674)	
Model 1[a]	-0.70% (-8.07, 7.26)	2.06% (-2.46, 6.79)		0.52
Model 2[b]	3.68% (-6.21, 14.61)	0.84% (-4.02, 5.96)		0.53
Model 3[c]	5.57% (-4.42, 16.6)	0.61% (-4.30, 5.79)	0 (Ref.)	0.48
Model 4[d]	4.64% (-5.47, 15.83)	1.29% (-3.67, 6.51)	0 (Ref.)	0.40
PAD	(n=26)	(n=89)	(n=4328)	
Model 1[a]	0.94 (0.42, 2.12)	0.86 (0.55, 1.36)		0.54
Model 2[b]	1.25 (0.54, 2.96)	0.79 (0.47, 1.34)		0.57
Model 3[c]	1.19 (0.45, 2.86)	0.82 (0.49, 1.39)	0 (Ref.)	0.64
Model 4[d]	1.23 (0.53, 2.89)	0.81 (0.48, 1.37)	0 (Ref.)	0.61
CAC	(n=12)	(n=65)	(n=2617)	
Model 1[a]	0.98 (0.59, 1.62)	0.87 (0.65, 1.17)		
Model 2[b]	0.82 (0.34, 2.02)	0.93 (0.69, 1.25)		
Model 3[c]	0.57 (0.17, 1.92)	0.93 (0.68, 1.27)	0 (Ref.)	0.41
Model 4[d]	0.54 (0.16, 1.90)	0.90 (0.66, 1.24)	0 (Ref.)	0.31
AAC	(n=12)	(n=65)	(n=2616)	
Model 1[a]	0.99 (0.67, 1.46)	1.00 (0.84, 1.19)	0 (Ref.)	0.97
Model 2[b]	1.18 (0.82, 1.69)	1.11 (0.95, 1.29)	0 (Ref.)	0.13
Model 3[c]	1.09 (0.69, 1.72)	1.13 (0.96, 1.33)	0 (Ref.)	0.12
Model 4[d]	1.09 (0.68, 1.74)	1.12 (0.96, 1.32)	0 (Ref.)	0.15

[a] Adjusted for age (natural spline, 3 df) and sex.

[b] Additionally adjusted for household income, education, and neighborhood socioeconomic status.

[c] Additionally adjusted for BMI (natural spline, 3 df), smoking, physical activity(natural spline, 3 df), alcohol consumption, history of self-reported and physician-diagnosed coronary heart disease (CHD), myocardial infarction (MI), stroke and carotid angioplasty, and neighborhood food environment (number of fast food restaurants or grocery store within 1.5 miles from residence).

[d] Additionally adjusted for diabetes mellitus, hypertension, and hyperlipidemia.

[e] Nearest major roadways = A1 roads.

Web Table 3: Association between continuous residential distance to nearest major roadway (A1) and carotid intima-media thickness (CIMT) and presence of peripheral arterial disease (PAD) at baseline, and presence of coronary artery calcification (CAC) or aortic artery calcification (AAC) at the first follow-up. Estimates represent the relative percent difference in CIMT (95% CI) and prevalence ratios (95% CI) of PAD, CAC or AAC per 150-m increase in distance when distance is modeled on the natural scale or per doubling increase in distance when distance is modeled on a logarithmic scale.

Outcome and model	Residential distance to major roadways[c] (per doubling of increase in distance)	Residential distance to major roadways[c] (per 150-m increase in distance)
CIMT		
Model 1[a]	-0.36% (-0.85, 0.13)	-0.016% (-0.045, 0.014)
Model 2[b]	-0.17% (-0.72, 0.38)	-0.011% (-0.045, 0.022)
Model 3[c]	-0.12% (-0.69, 0.46)	-0.007% (-0.042, 0.028)
Model 4[d]	-0.05% (-0.64, 0.53)	-0.0008% (-0.036, 0.034)
PAD		
Model 1[a]	1.02 (0.97, 1.06)	1.00 (0.99, 1.004)
Model 2[b]	1.01 (0.95, 1.06)	1.00 (0.99, 1.003)
Model 3[c]	0.99 (0.94, 1.05)	0.99 (0.99, 1.003)
Model 4[d]	0.99 (0.94, 1.05)	0.99 (0.99, 1.003)
CAC		
Model 1[a]	0.98 (0.95, 1.01)	0.999 (0.997, 1.001)
Model 2[b]	**0.96 (0.93, 0.99)**	**0.997 (0.995, 0.999)**
Model 3[c]	0.97 (0.94, 1.01)	**0.997 (0.995, 0.999)**
Model 4[d]	0.97 (0.94, 1.01)	0.998 (0.995, 1.00004)
AAC		
Model 1[a]	1.01 (0.99, 1.03)	1.00 (0.99, 1.001)
Model 2[b]	0.99 (0.97, 1.02)	1.00 (0.99, 1.001)
Model 3[c]	0.99 (0.97, 1.02)	1.00 (0.99, 1.002)
Model 4[d]	0.99 (0.97, 1.02)	1.00 (0.99, 1.002)

[a] Adjusted for age (natural spline, 3 df) and sex.

[b] Additionally adjusted for household income, education, and neighborhood socioeconomic status.

[c] Additionally adjusted for BMI (natural spline, 3 df), smoking, physical activity(natural spline, 3 df), alcohol consumption, history of self-reported and physician-diagnosed coronary heart disease (CHD), myocardial infarction (MI), stroke and carotid angioplasty, and neighborhood food environment (number of fast food restaurants or grocery store within 1.5 miles from residence).

[d] Additionally adjusted for diabetes mellitus, hypertension, and hyperlipidemia

[e] Nearest major roadways = A1 roads.

Web Table 4: Association between categories of residential distance to nearest major roadways (A1/A2) and carotid intima-media thickness (CIMT) and presence of peripheral arterial disease (PAD) at baseline, and presence of coronary artery calcification (CAC) or aortic artery calcification (AAC) at first follow-up, among participants free of history of self-reported and physician-diagnosed coronary heart disease (CHD), stroke and carotid angioplasty. Estimates represent the relative percent difference in CIMT (95% CI) modeled as a continuous outcome, and prevalence ratios (95% CI) of PAD, CAC or AAC modeled as categorical outcomes.

Outcome	Residential distance to major roadways[e]			
	<150 m	150-300 m	>300 m	P_{trend}
CIMT	(*n*=91)	(*n*=138)	(*n*=4069)	
Model 1[a]	**4.78% (0.18, 9.59)**	0.45% (-3.17, 4.21)		0.13
Model 2[b]	4.12% (-1.16, 9.68)	0.37% (-3.63, 4.55)	0 (Ref.)	0.27
Model 3[c]	**4.74% (0.03, 9.45)**	0.30% (-3.83, 4.61)		0.22
Model 4[d]	**5.54% (0.07, 11.31)**	0.92% (-3.28, 5.31)		0.11
PAD	(*n*=82)	(*n*=133)	(*n*=3800)	
Model 1[a]	0.89 (0.55, 1.45)	0.87 (0.61, 1.22)		0.42
Model 2[b]	1.04 (0.62, 1.75)	0.78 (0.50, 1.22)	0 (Ref.)	0.46
Model 3[c]	1.04 (0.63, 1.73)	0.85 (0.54, 1.33)		0.64
Model 4[d]	1.09 (0.66, 1.82)	0.82 (0.52, 1.30)		0.66
CAC	(*n*=55)	(*n*=79)	(*n*=2418)	
Model 1[a]	0.85 (0.65, 1.12)	0.80 (0.62, 1.03)		0.04
Model 2[b]	0.87 (0.61, 1.24)	0.80 (0.60, 1.06)	0 (Ref.)	0.09
Model 3[c]	0.85 (0.58, 1.23)	0.79 (0.59, 1.06)		0.08
Model 4[d]	0.90 (0.61, 1.34)	0.77 (0.581, 1.03)		0.09
AAC	(*n*=55)	(*n*=79)	(*n*=2417)	
Model 1[a]	0.89 (0.75, 1.06)	0.95 (0.82, 1.11)		0.18
Model 2[b]	0.90 (0.73, 1.11)	1.00 (0.89, 1.20)	0 (Ref.)	0.85
Model 3[c]	0.90 (0.72, 1.11)	1.06 (0.91, 1.24)		0.99
Model 4[d]	0.91 (0.73, 1.14)	1.05 (0.90, 1.23)		0.99

[a] Adjusted for age (natural spline, 3 df) and sex.

[b] Additionally adjusted for household income, education, and neighborhood socioeconomic status.

[c] Additionally adjusted for BMI (natural spline, 3 df), smoking, physical activity(natural spline, 3 df), alcohol consumption, and neighborhood food environment (number of fast food restaurants or grocery store within 1.5 miles from residence).

[d] Additionally adjusted for diabetes mellitus, hypertension, and hyperlipidemia

[e] Nearest major roadways = A1 or A2 roads.