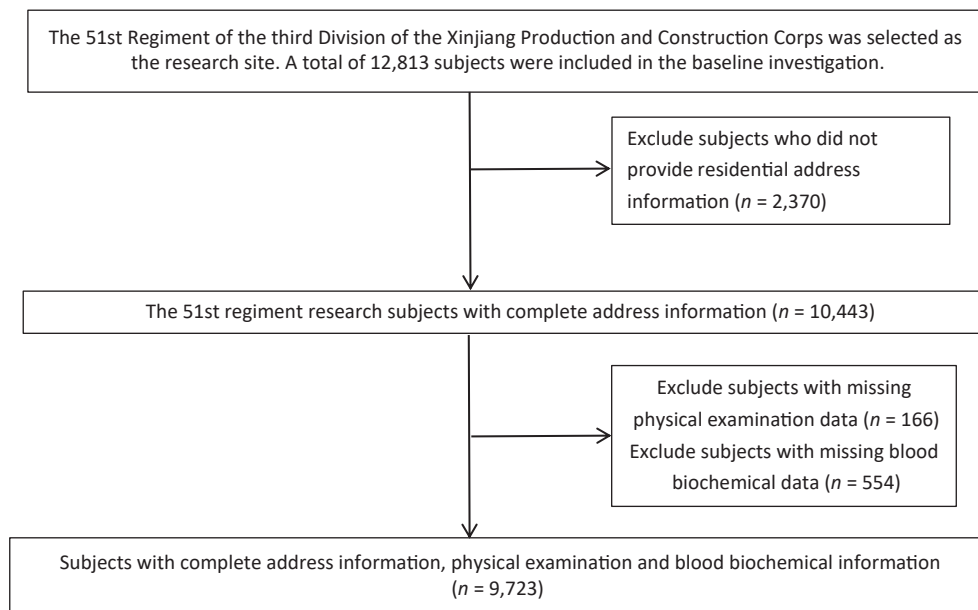
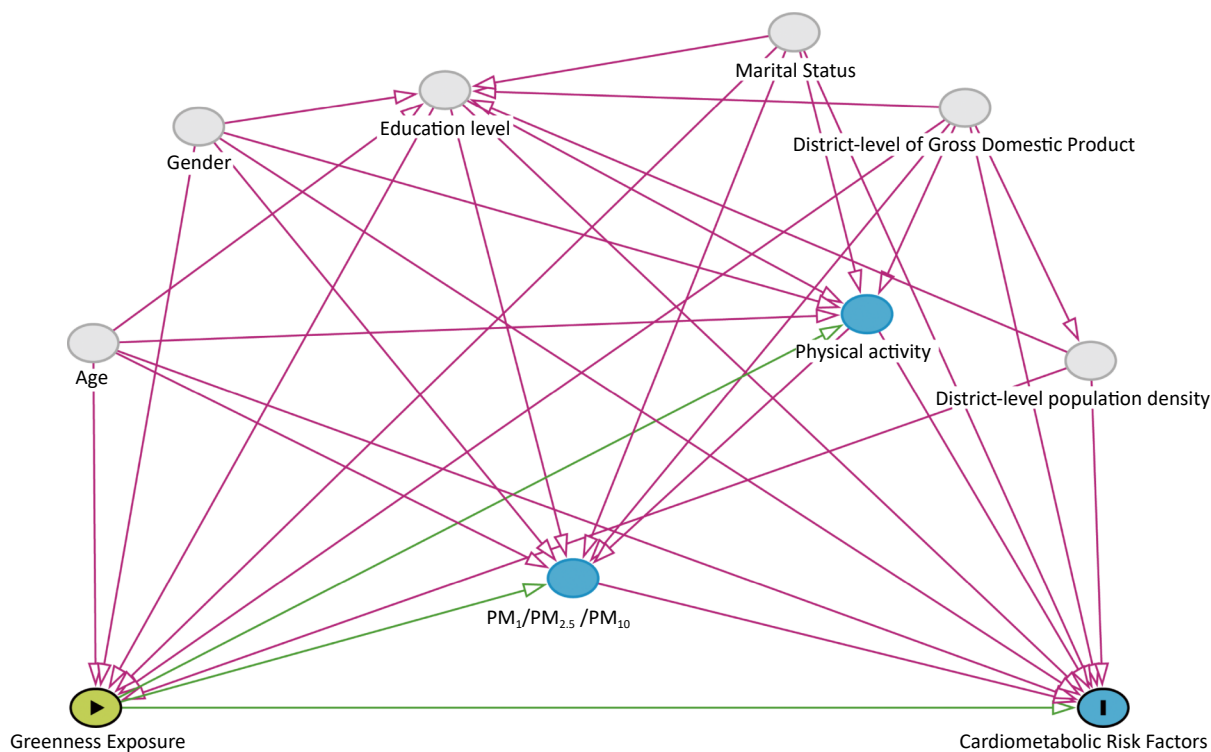


SUPPLEMENTAL MATERIALS



Supplementary Figure S1. Flow chart of inclusion and exclusion of research subjects.



Supplementary Figure S2. Directed acyclic graph for the association between residential greenness and cardiometabolic risk factors, showing potential confounders and mediators.

Supplementary Table S1. Distributions and inter-correlations (Spearman correlation coefficients) for NDVI and air pollutants

Variables	Median (IQR)	Min	Max	NDVI _{250-m}	NDVI _{500-m}	NDVI _{1000-m}	PM ₁	PM _{2.5}	PM ₁₀
NDVI _{250-m}	0.26 (0.08)	0.11	0.38	1	0.944 ^a	0.688 ^a	0.460 ^a	0.149 ^a	-0.162 ^a
NDVI _{500-m}	0.30 (0.07)	0.15	0.37		1	0.823 ^a	0.394 ^a	0.183 ^a	-0.147 ^a
NDVI _{1000-m}	0.32 (0.06)	0.18	0.37			1	0.490 ^a	0.441 ^a	-0.062 ^a
PM ₁	27.07 (0.07)	26.20	27.50				1	0.517 ^a	0.039 ^a
PM _{2.5}	92.13 (0.40)	89.40	93.60					1	0.649 ^a
PM ₁₀	301.43 (3.87)	297.63	305.17						1

Note. IQR, interquartile range; Min: minimum; Max: maximum; NDVI, normalized difference vegetation index; PM₁, submicron particulate matter; PM_{2.5}, fine particulate matter; PM₁₀, inhalable particulate matter. ^aStatistically significant correlation ($P < 0.05$).

Supplementary Table S2. Association between quartile NDVI_{500-m} and cardiometabolic risk factors

Cardiometabolic risk factors	Adjusted OR (95% CI) ^a
Hypertension	
Q1	1 (Reference)
Q2	0.755 (0.615–0.927)
Q3	0.709 (0.574–0.877)
Q4	0.722 (0.589–0.885)
<i>P</i> value for trend	0.002
Obesity	
Q1	1 (Reference)
Q2	0.729 (0.472–1.124)
Q3	0.634 (0.399–1.007)
Q4	0.494 (0.325–0.751)
<i>P</i> value for trend	0.001
Type 2 diabetes	
Q1	1 (Reference)
Q2	1.020 (0.806–1.290)
Q3	0.656 (0.416–1.035)
Q4	0.638 (0.416–0.977)
<i>P</i> value for trend	0.020
Dyslipidemia	
Q1	1 (Reference)
Q2	1.020 (0.806–1.290)
Q3	0.709 (0.553–0.909)
Q4	0.771 (0.610–0.973)
<i>P</i> value for trend	0.007
Risk factor aggregation	
Q1	1 (Reference)
Q2	0.759 (0.540–1.067)

Continued

Cardiometabolic risk factors	Adjusted OR (95% CI) ^a
Q3	0.584 (0.407–0.840)
Q4	0.511 (0.366–0.715)
<i>P</i> value for trend	< 0.001

Note. OR, odds ratio; CI, confidence interval; NDVI, normalized difference vegetation index. ^aAdjusted for age, sex, education level, and marital status.

Supplementary Table S3. Associations of per IQR increase in NDVI_{500-m} with cardiometabolic risk factors after additional adjustment for cigarette smoking, alcohol drinking and family history of cardiometabolic risk factors

Cardiometabolic risk factors	Adjusted OR (95% CI)
Hypertension	
Main model ^a	0.897 (0.836–0.962)
Main model ^a + smoking	0.895 (0.834–0.960)
Main model ^a + drinking	0.898 (0.837–0.963)
Main model ^a + family history of cardiometabolic risk factors	0.899 (0.838–0.964)
Obesity	
Main model ^a	0.795 (0.695–0.910)
Main model ^a + smoking	0.793 (0.694–0.906)
Main model ^a + drinking	0.795 (0.695–0.910)
Main model ^a + family history of cardiometabolic risk factors	0.797 (0.697–0.911)
Type 2 diabetes	
Main model ^a	0.849 (0.740–0.974)
Main model ^a + smoking	0.850 (0.740–0.976)
Main model ^a + drinking	0.849 (0.740–0.975)
Main model ^a + family history of cardiometabolic risk factors	0.863 (0.754–0.989)
Dyslipidemia	
Main model ^a	0.895 (0.825–0.971)
Main model ^a + smoking	0.896 (0.826–0.973)
Main model ^a + drinking	0.897 (0.827–0.973)
Main model ^a + family history of cardiometabolic risk factors	0.897 (0.829–0.972)
Risk factor aggregation	
Main model ^a	0.796 (0.716–0.885)
Main model ^a + smoking	0.796 (0.716–0.884)
Main model ^a + drinking	0.797 (0.717–0.886)
Main model ^a + family history of cardiometabolic risk factors	0.800 (0.721–0.887)

Note. OR, odds ratio; CI, confidence interval; NDVI, normalized difference vegetation index. Family history of cardiometabolic risk factors including family history of hypertension, family history of diabetes and family history of cardiovascular disease. Family history is defined as at least one parent or sibling with the illness. ^aAdjusted for age, sex, education level, and marital status.

Supplementary Table S4. Association of NDVI_{500-m} per IQR increase with different types of hypertension and obesity

Cardiometabolic risk factors	Adjusted OR (95% CI)
Hypertension (SBP ≥ 140 mmHg or DBP ≥ 90 mmHg)	0.897 (0.836–0.962)
ISH (SBP ≥ 140 mmHg and DBP < 90 mmHg)	0.892 (0.822–0.969)
IDH (SBP < 140 mmHg and DBP ≥ 90 mmHg)	0.998 (0.861–1.155)
SDH (SBP ≥ 140 mmHg and DBP ≥ 90 mmHg)	0.913 (0.826–1.009)
Obesity (BMI ≥ 28 kg/m ²)	0.795 (0.695–0.910)
abdominal obesity (WC ≥ 90 cm or 85 cm for men or women) ^[4]	0.956 (0.849–1.077)
abdominal obesity (WHtR ≥ 0.5) ^[2]	0.930 (0.807–1.073)
abdominal obesity (BF% ≥ 25% or 30% for men or women) ^[3]	0.814 (0.726–0.912)

Note. OR, odds ratio; CI, confidence interval; NDVI, normalized difference vegetation index; ISH, isolated systolic hypertension; IDH, Isolated diastolic hypertension; SDH, systolic-diastolic hypertension; SBP, systolic blood pressure; DBP, diastolic blood pressure; BMI, body mass index; WC, waist circumference; WHtR, waist to height ratio; BF%, percent body fat. Adjusted for age, gender, education level, and marital status. WHtR = WC (cm) / height (cm); BF% = $(1.2 \times \text{BMI}) + (0.23 \times \text{age}) - 5.4$ ^[4].

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