Figure S1. Flowchart showing the study subject selection procedure

Table S1. Spearman correlations between the different air pollutants

Air pollutants	CO	NO$_2$	O$_3$	PM$_{10}$	PM$_{2.5}$	SO$_2$
CO	1.00					
NO$_2$	0.48[*]	1.00				
O$_3$	-0.65[*]	-0.78[*]	1.00			
PM$_{10}$	0.41[*]	0.10[*]	-0.06[*]	1.00		
PM$_{2.5}$	0.42[*]	0.45[*]	-0.55[*]	0.31[*]	1.00	
SO$_2$	0.58[*]	0.29[*]	-0.24[*]	0.44[*]	0.09[*]	1.00

Table S2. Annual mean concentrations of the pollution factors categories by commuting mode in urban areas of Beijing during the study period

Variables	Car or Taxi	Walking	Cycling	Bus	Subway
mean PM_{10} ($\mu g/m^3$)	102.46 ± 4.68	102.44 ± 4.73	102.62 ± 3.43	102.66 ± 3.93	102.74 ± 4.12
mean $PM_{2.5}$ ($\mu g/m^3$)	77.50 ± 3.08	77.13 ± 3.29	77.74 ± 2.40	77.53 ± 2.61	77.39 ± 2.67
mean SO_2 ($\mu g/m^3$)	11.87 ± 1.31	11.95 ± 1.30	11.82 ± 1.11	11.91 ± 1.20	11.88 ± 1.14
mean CO (mg/m^3)	1.23 ± 0.06	1.23 ± 0.06	1.23 ± 0.05	1.24 ± 0.05	1.23 ± 0.05
mean NO_2 ($\mu g/m^3$)	59.42 ± 6.91	58.86 ± 7.08	59.62 ± 5.86	59.27 ± 6.02	58.76 ± 6.50
mean O_3 ($\mu g/m^3$)	36.86 ± 4.16	37.09 ± 4.00	36.66 ± 3.29	36.85 ± 3.63	37.19 ± 4.29

Data were shown in mean ± standard deviation.

CO, carbon monoxide; NO_2, nitrogen dioxide; O_3, ozone; PM_{10}, particulate matter ≤ 10 μm in aerodynamic diameter; $PM_{2.5}$, particulate matter ≤ 2.5 μm in aerodynamic diameter; SO_2: sulphur dioxide.

Table S3. Results of logistic regression models for the association between commuting mode and air pollutants on **overall obesity**[Δ]

Model	$PM_{2.5}$ [a]		SO_2 [b]		CO [c]		NO_2 [d]		O_3 [e]	
	OR (95% CI)	$P_{interaction}$	OR (95% CI)	$P_{interaction}$	OR (95% CI)	$P_{interaction}$	OR (95% CI)	$P_{interaction}$	OR (95% CI)	$P_{interaction}$
Total										
Car or Taxi	Reference	-	Reference	-	Reference	-	Reference	-	Reference	-
Walking	0.80(0.48,1.34)	0.9347	1.40(0.81,2.42)	**0.0247**	1.00(0.61,1.63)	0.2717	1.14(0.61,2.14)	0.4674	**0.60(0.36,0.98)**	0.2533
Cycling	0.64(0.36,1.15)	0.2874	0.87(0.48,1.61)	0.9542	0.68(0.38,1.21)	0.3816	1.03(0.53,2.02)	0.5306	1.00(0.62,1.59)	0.5170
Bus	1.26(0.82,1.92)	0.0513	1.16(0.74,1.83)	0.1587	1.12(0.72,1.75)	0.1940	1.07(0.63,1.80)	0.7543	0.67(0.44,1.01)	0.2084
Subway	0.93(0.61,1.43)	0.5867	0.74(0.46,1.20)	0.5892	1.01(0.65,1.55)	0.3622	1.13(0.66,1.93)	0.3146	0.73(0.48,1.12)	0.5231
Men										
Car or Taxi	Reference	-	Reference	-	Reference	-	Reference	-	Reference	-

	PM$_{2.5}$[a]		SO$_2$[b]		CO[c]		NO$_2$[d]		O$_3$[e]	
Walking	0.70(0.38,1.28)	0.8962	1.32(0.71,2.46)	**0.0399**	0.98(0.56,1.72)	0.2305	1.06(0.53,2.14)	0.5477	**0.45(0.25,0.80)**	0.0738
Cycling	**0.50(0.26,0.97)**	0.1351	0.64(0.32,1.27)	0.5066	0.57(0.30,1.07)	0.2484	0.93(0.45,1.93)	0.5151	1.00(0.60,1.67)	0.3558
Bus	1.21(0.74,1.97)	0.0811	0.99(0.59,1.65)	0.4115	1.07(0.65,1.76)	0.2382	1.09(0.62,1.93)	0.4648	**0.58(0.36,0.93)**	0.1386
Subway	0.81(0.49,1.34)	0.8851	**0.52(0.30,0.91)**	0.1151	0.86(0.52,1.41)	0.7027	0.72(0.39,1.33)	0.8618	0.85(0.52,1.37)	0.7467
Women										
Car or Taxi	Reference	-	Reference	-	Reference	-	Reference	-	Reference	-
Walking	1.01(0.36,2.84)	0.9652	2.80(0.76,10.26)	0.0916	1.79(0.57,5.59)	0.2730	1.17(0.25,5.44)	0.9790	1.15(0.40,3.32)	0.7476
Cycling	1.47(0.43,5.04)	0.7902	3.87(0.92,16.21)	0.1072	1.98(0.51,7.73)	0.5113	0.82(0.13,5.13)	0.4559	0.96(0.31,2.95)	0.5941
Bus	1.40(0.57,3.43)	0.6334	**3.48(1.12,10.85)**	**0.0408**	2.22(0.76,6.52)	0.1964	0.94(0.24,3.64)	0.3782	1.00(0.41,2.45)	0.7436
Subway	1.37(0.56,3.31)	0.5351	**3.17(1.03,9.75)**	**0.0418**	2.33(0.84,6.43)	0.1017	3.01(0.84,10.83)	0.2418	0.45(0.17,1.18)	0.0630

Abbreviations: CI, confidence interval; OR, odds ratio; PM$_{2.5}$, particulate matter ≤ 2.5 μm in aerodynamic diameter; SO$_2$: sulphur dioxide; CO, carbon monoxide; NO$_2$, nitrogen dioxide; O$_3$, ozone.

[△] Data were shown in OR (95% CI). OR were scaled to the interquartile range (IQR) for each air pollutant. Bold indicates significant values.

[a] adjusted for age, gender, education, commuting time per day, self-reported work stress, physical activity frequency and intensity, sleep duration, smoking status, alcohol consumption status, proportion of meat and vegetable intake, dietary preferences and medical history of hypertension and diabetes, PM$_{2.5}$.

[b] adjusted for age, gender, education, commuting time per day, self-reported work stress, physical activity frequency and intensity, sleep duration, smoking status, alcohol consumption status, proportion of meat and vegetable intake, dietary preferences and medical history of hypertension and diabetes, SO$_2$.

[c] adjusted for age, gender, education, commuting time per day, self-reported work stress, physical activity frequency and intensity, sleep duration, smoking status, alcohol consumption status, proportion of meat and vegetable intake, dietary preferences and medical history of hypertension and diabetes, CO.

[d] adjusted for age, gender, education, commuting time per day, self-reported work stress, physical activity frequency and intensity, sleep duration, smoking status, alcohol consumption status, proportion of meat and vegetable intake, dietary preferences and medical history of hypertension and diabetes, NO$_2$.

[e] adjusted for age, gender, education, commuting time per day, self-reported work stress, physical activity frequency and intensity, sleep duration, smoking status, alcohol consumption status, proportion of meat and vegetable intake, dietary preferences and medical history of hypertension and diabetes, O$_3$.

Table S4. Results of logistic regression models for the association between commuting mode and air pollutants on **abdominal obesity.** [△]

Model	PM$_{2.5}$[a]		SO$_2$[b]		CO[c]		NO$_2$[d]		O$_3$[e]	
	OR (95% CI)	$P_{interaction}$	OR (95% CI)	$P_{interaction}$	OR (95% CI)	$P_{interaction}$	OR (95% CI)	$P_{interaction}$	OR (95% CI)	$P_{interaction}$
Total										
Car or Taxi	Reference	-	Reference	-	Reference	-	Reference	-	Reference	-
Walking	1.10(0.76,1.61)	0.0848	0.91(0.59,1.40)	0.5355	0.95(0.65,1.39)	0.3238	1.15(0.70,1.87)	0.1712	**0.63(0.44,0.92)**	0.1970
Cycling	0.86(0.56,1.32)	0.9089	0.92(0.57,1.47)	0.8700	0.68(0.44,1.05)	0.1962	0.97(0.57,1.65)	0.7267	1.17(0.79,1.72)	0.1100
Bus	0.89(0.64,1.23)	0.5388	1.03(0.72,1.48)	0.1499	0.92(0.65,1.31)	0.3861	0.89(0.59,1.35)	0.9828	0.79(0.57,1.10)	0.9228
Subway	0.99(0.72,1.37)	0.4472	0.93(0.65,1.33)	0.7737	0.84(0.60,1.18)	0.7630	1.06(0.70,1.61)	0.5468	1.00(0.72,1.38)	0.4629
Men										
Car or Taxi	Reference	-	Reference	-	Reference	-	Reference	-	Reference	-
Walking	0.94(0.58,1.52)	0.1851	1.06(0.62,1.84)	0.0890	0.85(0.53,1.37)	0.3064	1.10(0.61,2.00)	0.2730	**0.43(0.27,0.68)**	**0.0331**
Cycling	0.80(0.48,1.34)	0.9544	0.84(0.48,1.47)	0.9172	0.67(0.40,1.13)	0.4509	1.15(0.63,2.12)	0.2675	0.94(0.59,1.50)	0.4699
Bus	0.72(0.47,1.09)	0.7014	0.90(0.58,1.41)	0.4866	0.82(0.53,1.27)	0.7588	0.97(0.59,1.60)	0.5671	0.71(0.47,1.08)	0.6425
Subway	0.90(0.59,1.35)	0.6302	0.77(0.49,1.22)	0.7996	0.86(0.57,1.31)	0.7914	0.83(0.50,1.38)	0.8074	0.84(0.55,1.29)	0.8938
Women										
Car or Taxi	Reference	-	Reference	-	Reference	-	Reference	-	Reference	-
Walking	1.27(0.69,2.31)	0.5478	0.84(0.40,1.77)	0.5526	1.39(0.74,2.64)	0.3373	1.06(0.44,2.51)	0.7372	1.15(0.62,2.15)	0.7354
Cycling	1.01(0.46,2.21)	0.8434	1.32(0.55,3.15)	0.6543	0.82(0.35,1.91)	0.4484	0.49(0.16,1.49)	0.1237	1.65(0.84,3.27)	0.1913
Bus	1.25(0.73,2.15)	0.1851	1.58(0.83,2.97)	0.0590	1.37(0.73,2.56)	0.1475	0.66(0.30,1.43)	0.2202	0.94(0.54,1.62)	0.8333
Subway	1.16(0.68,1.98)	0.5726	1.42(0.77,2.63)	0.2379	0.91(0.51,1.65)	0.7134	1.33(0.64,2.76)	0.5499	1.22(0.71,2.08)	0.4684

Abbreviations: CI, confidence interval; OR, odds ratio; PM$_{2.5}$, particulate matter ≤ 2.5 μm in aerodynamic diameter; SO$_2$: sulphur dioxide; CO, carbon monoxide; NO$_2$, nitrogen dioxide; O$_3$, ozone.

[△] Data were shown in OR (95% CI). OR were scaled to the interquartile range (IQR) for each air pollutant. Bold indicates significant values.

[a] adjusted for age, gender, education, commuting time per day, self-reported work stress, physical activity frequency and intensity, sleep duration, smoking status, alcohol consumption status, proportion of meat and vegetable intake, dietary preferences and medical history of hypertension and diabetes, PM$_{2.5}$.

[b] adjusted for age, gender, education, commuting time per day, self-reported work stress, physical activity frequency and intensity, sleep duration, smoking status, alcohol consumption status, proportion of meat and vegetable intake, dietary preferences and medical history of hypertension and diabetes, SO$_2$.

[c] adjusted for age, gender, education, commuting time per day, self-reported work stress, physical activity frequency and intensity, sleep duration, smoking status,

alcohol consumption status, proportion of meat and vegetable intake, dietary preferences and medical history of hypertension and diabetes, CO.

[d] adjusted for age, gender, education, commuting time per day, self-reported work stress, physical activity frequency and intensity, sleep duration, smoking status, alcohol consumption status, proportion of meat and vegetable intake, dietary preferences and medical history of hypertension and diabetes, NO_2.

[e] adjusted for age, gender, education, commuting time per day, self-reported work stress, physical activity frequency and intensity, sleep duration, smoking status, alcohol consumption status, proportion of meat and vegetable intake, dietary preferences and medical history of hypertension and diabetes, O_3.

Table S5. Results of logistic regression models for the association between commuting mode and **overall obesity** in subgroups of physical activity frequency. [Δ]

Main commuting mode	less than once every week (n=3920)		more than once every week (n=5176)		more than once every day (n=1428)	
	OR (95% CI)	$P_{interaction}$	OR (95% CI)	$P_{interaction}$	OR (95% CI)	$P_{interaction}$
PM_{10} [a]						
Car or Taxi	Reference	-	Reference	-	Reference	-
Walking	**0.26(0.09,0.75)**	0.1413	0.81(0.41,1.60)	0.8313	1.98(0.67,5.92)	0.1879
Cycling	**0.28(0.11,0.71)**	**0.0268**	0.73(0.33,1.63)	0.6065	0.50(0.14,1.79)	0.1413
Bus	**0.33(0.16,0.65)**	**0.0203**	1.07(0.59,1.94)	0.9888	1.52(0.46,5.00)	0.1872
Subway	0.61(0.32,1.18)	0.5748	0.72(0.39,1.34)	0.3272	1.00(0.27,3.70)	0.7471
$PM_{2.5}$ [b]						
Car or Taxi	Reference	-	Reference	-	Reference	-
Walking	0.35(0.12,1.04)	0.4316	1.01(0.49,2.10)	0.7241	1.20(0.37,3.86)	0.7240
Cycling	**0.27(0.1,0.76)**	**0.0399**	1.11(0.47,2.60)	0.5722	0.77(0.20,2.92)	0.4810
Bus	0.97(0.49,1.9)	0.2760	**2.06(1.10,3.83)**	**0.0233**	0.44(0.12,1.57)	0.3940
Subway	0.62(0.32,1.22)	0.6605	1.57(0.83,2.94)	0.0976	0.38(0.09,1.57)	0.2432
SO_2 [c]						
Car or Taxi	Reference	-	Reference	-	Reference	-

Walking	0.72(0.25,2.11)	0.4916	1.56(0.70,3.48)	0.1166	3.13(0.87,11.26)	0.0653
Cycling	0.37(0.11,1.25)	0.2434	1.76(0.75,4.12)	0.0898	0.92(0.21,4.05)	0.6986
Bus	0.67(0.30,1.47)	0.9127	1.83(0.96,3.49)	0.0728	0.74(0.18,2.95)	0.9984
Subway	0.58(0.27,1.26)	0.5849	0.91(0.46,1.80)	0.861	0.75(0.16,3.54)	0.8914
CO [d]						
Car or Taxi	Reference	-	Reference	-	Reference	-
Walking	0.37(0.12,1.14)	0.5243	1.30(0.65,2.60)	0.1218	1.64(0.52,5.18)	0.3552
Cycling	0.35(0.12,1.02)	0.1428	1.21(0.54,2.72)	0.2045	0.59(0.15,2.31)	0.2575
Bus	0.73(0.33,1.58)	0.9145	1.68(0.91,3.10)	0.3946	0.74(0.19,2.81)	0.9902
Subway	0.75(0.37,1.54)	0.8597	1.40(0.76,2.56)	0.1065	0.54(0.13,2.28)	0.5230
NO_2 [e]						
Car or Taxi	Reference	-	Reference	-	Reference	-
Walking	1.26(0.40,4.02)	0.2799	1.41(0.55,3.62)	0.5375	0.39(0.09,1.66)	0.2198
Cycling	0.66(0.20,2.25)	0.6882	1.46(0.55,3.89)	0.5417	0.50(0.10,2.42)	0.3451
Bus	1.37(0.59,3.19)	0.2252	1.62(0.75,3.48)	0.5236	**0.11(0.02,0.57)**	**0.0194**
Subway	0.96(0.40,2.28)	0.7689	1.86(0.85,4.07)	0.1119	0.21(0.04,1.06)	0.1281
O_3 [f]						
Car or Taxi	Reference	-	Reference	-	Reference	-
Walking	**0.29(0.10,0.84)**	0.2358	0.65(0.32,1.32)	0.3991	1.21(0.37,3.88)	0.7340
Cycling	1.21(0.58,2.52)	0.1603	0.62(0.29,1.33)	0.3284	2.49(0.78,7.90)	0.1813
Bus	**0.45(0.23,0.86)**	0.1453	0.66(0.36,1.21)	0.0949	2.55(0.78,8.34)	**0.0245**
Subway	0.80(0.41,1.57)	0.7038	0.55(0.30,1.03)	0.0576	1.32(0.33,5.31)	0.4110

Abbreviations: CI, confidence interval; OR, odds ratio; PM_{10}, particulate matter ≤ 10 μm in aerodynamic diameter; $PM_{2.5}$, particulate matter ≤ 2.5 μm in aerodynamic diameter; SO_2: sulphur dioxide; CO, carbon monoxide; NO_2, nitrogen dioxide; O_3, ozone.

[△] Data were shown in OR (95% CI). OR were scaled to the interquartile range (IQR) for each air pollutant. Bold indicates significant values.

Table S6. Results of logistic regression models for the association between commuting mode and **abdominal obesity** in subgroups of physical activity frequency. [Δ]

Main commuting mode	less than once every week (n=3920)		more than once every week (n=5176)		more than once every day (n=1428)	
	OR (95% CI)	$P_{\text{interaction}}$	OR (95% CI)	$P_{\text{interaction}}$	OR (95% CI)	$P_{\text{interaction}}$
PM_{10} [a]						
Car or Taxi	Reference	-	Reference	-	Reference	-
Walking	**0.28(0.13,0.61)**	0.0733	0.75(0.45,1.25)	0.3925	0.99(0.43,2.27)	0.9586
Cycling	**0.24(0.11,0.52)**	**0.0012**	0.88(0.48,1.58)	0.9727	1.01(0.37,2.72)	0.7253
Bus	**0.44(0.25,0.76)**	0.0783	1.01(0.64,1.61)	0.7606	1.15(0.48,2.76)	0.1917
Subway	**0.37(0.22,0.63)**	**0.0059**	0.92(0.59,1.46)	0.7619	0.73(0.28,1.89)	0.5052
$PM_{2.5}$ [a]						
Car or Taxi	Reference	-	Reference	-	Reference	-

Walking	0.49(0.22,1.07)	0.7731	1.52(0.91,2.53)	**0.0399**	1.07(0.44,2.63)	0.8557
Cycling	0.88(0.41,1.9)	0.7392	0.82(0.45,1.51)	0.8744	0.85(0.3,2.39)	0.4754
Bus	0.66(0.38,1.14)	0.8733	1.18(0.74,1.88)	0.3089	0.68(0.27,1.67)	0.9825
Subway	0.84(0.5,1.42)	0.6051	1.02(0.65,1.61)	0.8405	1.71(0.66,4.45)	0.2289
SO_2 [a]						
Car or Taxi	Reference	-	Reference	-	Reference	-
Walking	**0.39(0.16,0.92)**	0.4318	1.23(0.68,2.22)	0.2917	1.13(0.4,3.18)	0.7706
Cycling	0.8(0.31,2.09)	0.9526	1.16(0.62,2.17)	0.3374	0.78(0.24,2.5)	0.4437
Bus	0.68(0.35,1.32)	0.9855	1.35(0.83,2.2)	0.1285	0.84(0.31,2.3)	0.6573
Subway	0.57(0.3,1.08)	0.4178	1.09(0.67,1.77)	0.6729	1.92(0.64,5.82)	0.2153
CO [a]						
Car or Taxi	Reference	-	Reference	-	Reference	-
Walking	0.43(0.18,1.00)	0.5882	1.27(0.77,2.10)	0.1584	1.01(0.42,2.45)	0.9699
Cycling	**0.36(0.15,0.86)**	0.0666	0.94(0.52,1.69)	0.7585	0.73(0.26,2.03)	0.2764
Bus	0.62(0.32,1.18)	0.7532	1.17(0.74,1.87)	0.3216	0.86(0.32,2.30)	0.6088
Subway	0.81(0.44,1.46)	0.7290	0.8(0.51,1.26)	0.3294	1.11(0.40,3.07)	0.8318
NO_2 [a]						
Car or Taxi	Reference	-	Reference	-	Reference	-
Walking	0.54(0.21,1.42)	0.8135	1.98(1.00,3.93)	0.0656	0.63(0.19,2.05)	0.5087
Cycling	1.04(0.38,2.83)	0.494	0.88(0.42,1.84)	0.9616	0.85(0.22,3.25)	0.5826
Bus	0.68(0.33,1.41)	0.8539	1.59(0.89,2.82)	0.1389	**0.17(0.05,0.58)**	**0.0047**
Subway	0.92(0.45,1.88)	0.4887	1.21(0.68,2.13)	0.6735	1.02(0.29,3.53)	0.7110
O_3 [a]						
Car or Taxi	Reference	-	Reference	-	Reference	-
Walking	**0.44(0.21,0.91)**	0.5779	0.71(0.41,1.23)	0.3244	0.98(0.43,2.23)	0.9830
Cycling	0.78(0.41,1.49)	0.9737	1.30(0.73,2.32)	0.1207	1.92(0.77,4.81)	0.2789

	0.72(0.43,1.21)	0.8488	0.79(0.48,1.27)	0.4161	1.29(0.53,3.12)	0.1422
Bus	0.72(0.43,1.21)	0.8488	0.79(0.48,1.27)	0.4161	1.29(0.53,3.12)	0.1422
Subway	0.77(0.45,1.32)	0.8521	1.31(0.82,2.11)	0.1950	0.60(0.23,1.57)	0.2805

Abbreviations: CI, confidence interval; OR, odds ratio; PM_{10}, particulate matter ≤ 10 μm in aerodynamic diameter; $PM_{2.5}$, particulate matter ≤ 2.5 μm in aerodynamic diameter; SO_2: sulphur dioxide; CO, carbon monoxide; NO_2, nitrogen dioxide; O_3, ozone.

$\triangle$ Data were shown in OR (95% CI). OR were scaled to the interquartile range (IQR) for each air pollutant. Bold indicates significant values.

[a] adjusted for age, gender, education, commuting time per day, self-reported work stress, physical activity intensity, sleep duration, smoking status, alcohol consumption status, proportion of meat and vegetable intake, dietary preferences and medical history of hypertension and diabetes, PM_{10}.

[b] adjusted for age, gender, education, commuting time per day, self-reported work stress, physical activity intensity, sleep duration, smoking status, alcohol consumption status, proportion of meat and vegetable intake, dietary preferences and medical history of hypertension and diabetes, $PM_{2.5}$.

[c] adjusted for age, gender, education, commuting time per day, self-reported work stress, physical activity intensity, sleep duration, smoking status, alcohol consumption status, proportion of meat and vegetable intake, dietary preferences and medical history of hypertension and diabetes, SO_2.

[d] adjusted for age, gender, education, commuting time per day, self-reported work stress, physical activity intensity, sleep duration, smoking status, alcohol consumption status, proportion of meat and vegetable intake, dietary preferences and medical history of hypertension and diabetes, CO.

[e] adjusted for age, gender, education, commuting time per day, self-reported work stress, physical activity intensity, sleep duration, smoking status, alcohol consumption status, proportion of meat and vegetable intake, dietary preferences and medical history of hypertension and diabetes, NO_2.

[f] adjusted for age, gender, education, commuting time per day, self-reported work stress, physical activity intensity, sleep duration, smoking status, alcohol consumption status, proportion of meat and vegetable intake, dietary preferences and medical history of hypertension and diabetes, O_3.

Table S7. Results of logistic regression models for the association between commuting mode and **overall obesity** in subgroups of physical activity intensity. $\triangle$

Main commuting mode	Mild (n=5307)		Moderate (n=4541)		Vigorous (n=676)	
	OR (95% CI)	$P_{interaction}$	OR (95% CI)	$P_{interaction}$	OR (95% CI)	$P_{interaction}$
PM_{10} [a]						
Car or Taxi	Reference	-	Reference	-	Reference	-
Walking	**0.43(0.2,0.93)**	0.0691	0.78(0.39,1.57)	0.7333	2.31(0.34,15.44)	0.1622
Cycling	0.73(0.32,1.63)	0.8713	**0.36(0.16,0.8)**	**0.0107**	0.19(0.02,2.1)	0.1305

Bus	0.65(0.37,1.17)	0.3325	0.69(0.37,1.31)	0.4655	0.84(0.11,6.68)	0.9152
Subway	0.76(0.42,1.35)	0.8055	0.61(0.32,1.17)	0.2281	0.66(0.1,4.47)	0.9067
$PM_{2.5}$ [a]						
Car or Taxi	Reference	-	Reference	-	Reference	-
Walking	0.7(0.32,1.52)	0.6328	0.72(0.34,1.52)	0.9965	3.3(0.34,32.24)	0.1575
Cycling	0.48(0.2,1.16)	0.2416	0.8(0.35,1.83)	0.7027	0.63(0.05,8.39)	0.6734
Bus	1.32(0.73,2.4)	0.1088	1.19(0.61,2.29)	0.2982	1.9(0.3,11.93)	0.4286
Subway	0.85(0.46,1.56)	0.8593	1.14(0.59,2.2)	0.3891	0.16(0.02,1.31)	0.1185
SO_2 [a]						
Car or Taxi	Reference	-	Reference	-	Reference	-
Walking	0.89(0.4,1.99)	0.8170	1.58(0.70,3.58)	**0.0416**	3.22(0.21,48.42)	0.2336
Cycling	0.76(0.29,2.01)	0.9773	1.03(0.44,2.40)	0.7869	0.32(0.01,10.72)	0.5080
Bus	0.97(0.5,1.88)	0.6893	1.47(0.74,2.91)	0.0963	1.39(0.10,18.86)	0.7696
Subway	0.83(0.42,1.64)	0.9071	0.65(0.32,1.34)	0.3799	0.89(0.07,10.55)	0.8862
CO [a]						
Car or Taxi	Reference	-	Reference	-	Reference	-
Walking	0.64(0.29,1.43)	0.5262	1.22(0.60,2.48)	0.0984	1.17(0.21,6.48)	0.4054
Cycling	0.70(0.28,1.71)	0.7983	0.89(0.41,1.94)	0.9156	**0.03(0.00,0.81)**	**0.0211**
Bus	1.08(0.55,2.11)	0.4667	1.41(0.75,2.65)	0.0973	0.34(0.04,3.18)	0.3272
Subway	0.98(0.51,1.88)	0.5185	1.19(0.64,2.22)	0.3013	0.25(0.04,1.76)	0.2375
NO_2 [a]						
Car or Taxi	Reference	-	Reference	-	Reference	-
Walking	1.21(0.49,3.00)	0.4859	0.88(0.33,2.32)	0.9728	1.50(0.11,20.01)	0.7024
Cycling	0.85(0.30,2.39)	0.5924	1.20(0.46,3.11)	0.7393	1.30(0.05,37.15)	0.8739
Bus	1.18(0.55,2.51)	0.5045	1.32(0.60,2.89)	0.5458	0.24(0.02,2.88)	0.0972
Subway	0.93(0.42,2.04)	0.8379	1.86(0.83,4.14)	0.0638	**0.04(0.00,0.80)**	**0.0294**

O$_3$ [a]

Car or Taxi	Reference	-	Reference	-	Reference	-
Walking	0.72(0.34,1.53)	0.7673	0.49(0.23,1.05)	0.3223	0.26(0.04,1.66)	0.2362
Cycling	1.21(0.62,2.36)	0.1675	0.70(0.33,1.46)	0.4161	1.23(0.21,7.21)	0.8225
Bus	0.92(0.53,1.63)	0.7420	**0.39(0.20,0.77)**	**0.0129**	0.70(0.13,3.91)	0.6894
Subway	0.97(0.53,1.78)	0.4673	**0.48(0.24,0.93)**	0.0506	0.81(0.14,4.54)	0.9049

Abbreviations: CI, confidence interval; OR, odds ratio; PM$_{10}$, particulate matter $\leq$ 10 μm in aerodynamic diameter; PM$_{2.5}$, particulate matter $\leq$ 2.5 μm in aerodynamic diameter; SO$_2$: sulphur dioxide; CO, carbon monoxide; NO$_2$, nitrogen dioxide; O$_3$, ozone.

$\triangle$ Data were shown in OR (95% CI). OR were scaled to the interquartile range (IQR) for each air pollutant. Bold indicates significant values.

[a] adjusted for age, gender, education, commuting time per day, self-reported work stress, physical activity frequency, sleep duration, smoking status, alcohol consumption status, proportion of meat and vegetable intake, dietary preferences and medical history of hypertension and diabetes, PM$_{10.}$

[b] adjusted for age, gender, education, commuting time per day, self-reported work stress, physical activity frequency, sleep duration, smoking status, alcohol consumption status, proportion of meat and vegetable intake, dietary preferences and medical history of hypertension and diabetes, PM$_{2.5.}$

[c] adjusted for age, gender, education, commuting time per day, self-reported work stress, physical activity frequency, sleep duration, smoking status, alcohol consumption status, proportion of meat and vegetable intake, dietary preferences and medical history of hypertension and diabetes, SO$_2$.

[d] adjusted for age, gender, education, commuting time per day, self-reported work stress, physical activity frequency, sleep duration, smoking status, alcohol consumption status, proportion of meat and vegetable intake, dietary preferences and medical history of hypertension and diabetes, CO.

[e] adjusted for age, gender, education, commuting time per day, self-reported work stress, physical activity frequency, sleep duration, smoking status, alcohol consumption status, proportion of meat and vegetable intake, dietary preferences and medical history of hypertension and diabetes, NO$_2$.

[f] adjusted for age, gender, education, commuting time per day, self-reported work stress, physical activity frequency, sleep duration, smoking status, alcohol consumption status, proportion of meat and vegetable intake, dietary preferences and medical history of hypertension and diabetes, O$_3$.

Table S8. Results of logistic regression models for the association between commuting mode and **abdominal obesity** in subgroups of physical activity intensity. [Δ]

Main commuting mode	Mild (n=5307)		Moderate (n=4541)		Vigorous (n=676)	
	OR (95% CI)	$P_{interaction}$	OR (95% CI)	$P_{interaction}$	OR (95% CI)	$P_{interaction}$
PM_{10} [a]						
Car or Taxi	Reference	-	Reference	-	Reference	-
Walking	**0.29(0.16,0.53)**	**0.001**	0.86(0.50,1.47)	0.8401	1.49(0.43,5.19)	0.1378
Cycling	**0.46(0.24,0.88)**	**0.0352**	0.84(0.46,1.54)	0.7779	0.26(0.05,1.49)	0.1521
Bus	**0.54(0.34,0.86)**	0.1708	1.00(0.61,1.64)	0.9436	0.92(0.19,4.47)	0.3255
Subway	**0.43(0.27,0.69)**	**0.0026**	0.93(0.57,1.51)	0.8273	0.82(0.22,3.13)	0.9947
$PM_{2.5}$ [a]						
Car or Taxi	Reference	-	Reference	-	Reference	-
Walking	0.70(0.39,1.27)	0.7837	1.38(0.81,2.38)	0.0889	1.17(0.24,5.76)	0.4535
Cycling	0.82(0.43,1.57)	0.8325	0.83(0.44,1.54)	0.7604	1.05(0.20,5.63)	0.8969
Bus	0.74(0.47,1.18)	0.9608	1.14(0.69,1.89)	0.5092	0.64(0.16,2.62)	0.6579
Subway	1.07(0.68,1.68)	0.2438	1.00(0.61,1.63)	0.8962	0.29(0.07,1.18)	0.1051
SO_2 [a]						
Car or Taxi	Reference	-	Reference	-	Reference	-
Walking	**0.45(0.23,0.88)**	0.1171	1.23(0.66,2.28)	0.2760	2.15(0.27,17.13)	0.2466
Cycling	0.75(0.34,1.63)	0.6699	1.10(0.57,2.10)	0.5334	2.52(0.31,20.25)	0.3495
Bus	0.65(0.38,1.12)	0.6504	1.52(0.90,2.58)	0.0765	0.97(0.15,6.30)	0.4299
Subway	0.62(0.36,1.06)	0.2594	1.46(0.86,2.47)	0.1054	0.50(0.10,2.58)	0.5047
CO [a]						
Car or Taxi	Reference	-	Reference	-	Reference	-
Walking	**0.49(0.26,0.93)**	0.1865	1.55(0.92,2.64)	**0.0243**	0.67(0.19,2.43)	0.9711

Cycling	**0.44(0.22,0.90)**	**0.0444**	0.97(0.54,1.76)	0.7902	0.66(0.11,3.81)	0.6669
Bus	0.57(0.33,1.00)	0.3705	1.35(0.83,2.20)	0.1568	0.9(0.20,4.06)	0.3687
Subway	0.71(0.42,1.19)	0.5218	1.05(0.66,1.68)	0.7317	0.43(0.11,1.67)	0.2880
NO_2 [a]						
Car or Taxi	Reference	-	Reference	-	Reference	-
Walking	0.59(0.27,1.27)	0.6584	1.81(0.89,3.67)	0.0773	0.67(0.11,4.11)	0.9317
Cycling	0.72(0.31,1.68)	0.5662	1.15(0.55,2.40)	0.5142	2.44(0.22,27.63)	0.3822
Bus	**0.47(0.25,0.89)**	0.0927	1.63(0.89,2.98)	0.1472	0.64(0.11,3.75)	0.8334
Subway	1.07(0.57,2.01)	0.4243	1.27(0.70,2.31)	0.5548	**0.17(0.03,0.98)**	0.0739
O_3 [a]						
Car or Taxi	Reference	-	Reference	-	Reference	-
Walking	0.77(0.43,1.36)	0.8658	0.63(0.36,1.11)	0.1849	0.55(0.16,1.95)	0.7902
Cycling	1.28(0.73,2.24)	0.1308	1.10(0.61,2.00)	0.4846	0.62(0.15,2.58)	0.5056
Bus	1.06(0.68,1.67)	0.0781	0.65(0.39,1.09)	0.0929	0.49(0.12,2.03)	0.9535
Subway	1.01(0.63,1.61)	0.3729	0.97(0.58,1.61)	0.9769	1.22(0.36,4.21)	0.5281

Abbreviations: CI, confidence interval; OR, odds ratio; PM_{10}, particulate matter ≤ 10 μm in aerodynamic diameter; $PM_{2.5}$, particulate matter ≤ 2.5 μm in aerodynamic diameter; SO_2: sulphur dioxide; CO, carbon monoxide; NO_2, nitrogen dioxide; O_3, ozone.

[Δ] Data were shown in OR (95% CI). OR were scaled to the interquartile range (IQR) for each air pollutant. Bold indicates significant values.

[a] adjusted for age, gender, education, commuting time per day, self-reported work stress, physical activity frequency, sleep duration, smoking status, alcohol consumption status, proportion of meat and vegetable intake, dietary preferences and medical history of hypertension and diabetes, PM_{10}.

[b] adjusted for age, gender, education, commuting time per day, self-reported work stress, physical activity frequency, sleep duration, smoking status, alcohol consumption status, proportion of meat and vegetable intake, dietary preferences and medical history of hypertension and diabetes, $PM_{2.5}$.

[c] adjusted for age, gender, education, commuting time per day, self-reported work stress, physical activity frequency, sleep duration, smoking status, alcohol consumption status, proportion of meat and vegetable intake, dietary preferences and medical history of hypertension and diabetes, SO_2.

[d] adjusted for age, gender, education, commuting time per day, self-reported work stress, physical activity frequency, sleep duration, smoking status, alcohol consumption status, proportion of meat and vegetable intake, dietary preferences and medical history of hypertension and diabetes, CO.

[e] adjusted for age, gender, education, commuting time per day, self-reported work stress, physical activity frequency, sleep duration, smoking status, alcohol

consumption status, proportion of meat and vegetable intake, dietary preferences and medical history of hypertension and diabetes, NO_2.

[f] adjusted for age, gender, education, commuting time per day, self-reported work stress, physical activity frequency, sleep duration, smoking status, alcohol consumption status, proportion of meat and vegetable intake, dietary preferences and medical history of hypertension and diabetes, O_3.