SUPPLEMENTAL MATERIAL

Table S1. Association between annual mean level of NO_2 at cohort baseline, physical activities (yes/no), and myocardial infarction, in a mutually adjusted model.

	Crude[*] model	Fully adjusted[†] model
	HR (95% CI)	HR (95% CI)
Incident MI (n =2,936) in 50,635 participants without a history of MI before baseline		
NO_2	1.09 (1.04-1.15)	1.08 (1.03-1.14)
Sports	0.68 (0.63-0.73)	0.86 (0.79-0.93)
Cycling	0.83 (0.77-0.90)	0.90 (0.84-0.98)
Walking	0.83 (0.73-0.95)	0.94 (0.82-1.07)
Gardening	0.97 (0.90-1.06)	0.89 (0.82-0.98)
Outdoor PAs[‡]	0.66 (0.50-0.88)	0.77 (0.58-1.03)
Recurrent MI (n =324) in 1,233 participants with a history of MI before baseline		
NO_2	1.14 (0.97-1.34)	1.18 (1.00-1.39)
Sports	0.98 (0.78-1.23)	1.06 (0.84-1.35)
Cycling	0.78 (0.62-0.98)	0.79 (0.62-1.00)
Walking	0.77 (0.55-1.09)	0.80 (0.56-1.14)
Gardening	1.03 (0.81-1.32)	0.96 (0.75-1.25)
Outdoor PAs[‡]	0.50 (0.29-0.88)	0.52 (0.30-0.91)

NO_2 – Nitrogen Dioxide; MI – Myocardial infarction; HR - hazard ratio; CI - Confidence Interval

[*] Adjusted mutually for other three physical activities and residential annual mean NO_2 exposure.

[†] Assessed in a separate model; Adjusted for sex, smoking (status, intensity, years smoked) , environmental tobacco smoke, education, physical activities at work, diet (fruit, vegetable, fat, and fish intake), alcohol consumption, marital status, and mutually for other three physical activities, and residential annual mean NO_2 exposure.

[‡] Combined time spent cycling, walking, and gardening; adjusted for sex, smoking (status, intensity, years smoked) , environmental tobacco smoke, occupational smoke, education, physical activities at work, diet (fruit, vegetable, fat, and fish intake), alcohol consumption, marital status.

Table S2. Association between participation (yes/no) in physical activities and myocardial infarction.

	Crude[*] model	Fully Adjusted[†] model	Fully Adjusted[†] model Additional adjustment for BMI[‡]	Fully Adjusted[†] model Additional adjustment for BMI & Co-morbidities[§]	Fully Adjusted[†] model Without adjustment for Education	Fully Adjusted[†] model Females	Fully Adjusted[†] model Males
	HR (95% CI)	HR (95% CI)	HR (95% CI)	HR (95% CI)	HR (95% CI)	HR (95% CI)	HR (95% CI)
Incident MI (n =2,936) in 50,635 participants without a history of MI before baseline							
Sports	0.67 (0.63-0.73)	0.85 (0.79-0.92)	0.89 (0.82-0.96)	0.92 (0.85-0.99)	0.84 (0.78-0.91)	0.83 (0.72-0.95)	0.87 (0.79-0.96)
Cycling	0.84 (0.78-0.91)	0.91 (0.84-0.98)	0.93 (0.86-1.00)	0.94 (0.87-1.02)	0.91 (0.84-0.98)	0.88 (0.76-1.01)	0.92 (0.84-1.01)
Walking	0.84 (0.74-0.96)	0.95 (0.83-1.08)	0.96 (0.84-1.09)	0.95 (0.83-1.08)	0.94 (0.82-1.07)	0.87 (0.68-1.12)	0.97 (0.83-1.13)
Gardening	0.94 (0.87-1.02)	0.87 (0.80-0.95)	0.89 (0.82-0.97)	0.91 (0.83-0.99)	0.86 (0.79-0.94)	0.98 (0.85-1.12)	0.83 (0.75-0.93)
Recurrent MI (n =324) in 1,233 participants with a history of MI before baseline							
Sports	0.97 (0.77-1.22)	1.06 (0.83-1.35)	1.07 (0.84-1.36)	1.06 (0.84-1.35)	1.05 (0.83-1.33)	1.68 (0.96-2.91)	1.00 (0.76-1.31)
Cycling	0.79 (0.63-0.99)	0.80 (0.63-1.01)	0.79 (0.63-1.00)	0.80 (0.63-1.01)	0.80 (0.63-1.01)	0.47 (0.27-0.82)	0.92 (0.71-1.21)
Walking	0.78 (0.55-1.10)	0.82 (0.57-1.16)	0.85 (0.60-1.20)	0.85 (0.60-1.21)	0.81 (0.57-1.15)	0.55 (0.25-1.22)	0.84 (0.56-1.26)
Gardening	0.98 (0.78-1.25)	0.91(0.71-1.18)	0.91 (0.71-1.17)	0.92 (0.71-1.19)	0.90 (0.70-1.16)	0.90 (0.51-1.59)	0.91 (0.68-1.22)

MI – Myocardial infarction; HR - hazard ratio; CI - confidence interval;

[*] Adjusted mutually for the other physical activities;

[†] Adjusted for sex, smoking (status, intensity, years smoked) , environmental tobacco smoke, education, physical activities at work, diet (fruit, vegetable, fat, and fish intake), alcohol consumption, marital status, and mutually for other three physical activities.

[‡] Additional adjustment for BMI ("Underweight = <18.5 //Normal weight = 18.5–24.9 //Overweight = 25–29.9 //Obesity = BMI of 30 or greater")

[§] Additional adjustment for BMI and self-reported co-morbidities (stroke, hypertension, high cholesterol, and diabetes mellitus type II)

Table S3. Association of annual mean level of NO_2 at cohort baseline and myocardial infarction.

	Crude model	Fully adjusted[†] model
	HR (95% CI)	HR (95% CI)
Incident MI (n =2,851) in 50,635 participants without a history of MI before baseline		
Low NO_2 (< 14.3 µg/m^3)	1.0	1.0
Medium NO_2 (14.3-20.9 µg/m^3)	1.06 (0.97-1.16)	1.06 (0.97-1.17)
High NO_2 (> 20.9 µg/m^3)	1.19 (1.07-1.32)	1.17 (1.05-1.30)
Recurrent MI (n =324) in 1,233 participants with a history of MI before baseline		
Low NO_2 (< 14.3 µg/m^3)	1.0	1.0
Medium NO_2 (14.3-20.9 µg/m^3)	1.11 (0.84-1.47)	1.16 (0.88-1.54)
High NO_2 (> 21.0 µg/m^3)	1.29 (0.94-1.78)	1.39 (1.01-1.93)

MI – Myocardial infarction; HR hazard ratio; CI confidence interval;

*Adjusted for sex, smoking (status, intensity, years smoked), environmental tobacco smoke, occupational smoke, education, physical activities at work, diet (fruit, vegetable, fat, and fish intake), alcohol consumption, marital status, and for commute and leisure time physical activities.