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## **Supplemental Material**

## Cooking Coal Use and All-Cause and Cause-Specific Mortality in a **Prospective Cohort Study of Women in Shanghai, China**

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Table S1. Risk of all-cause and cause-specific mortality by ever usage of coal in Shanghai Women's Health Study, stratified by

family annual income

		≥20,000 yuan Ever used coal		<20,000 yuan Ever used coal		
Cause of death (ICD-9)	Never used coal HR(95% CI) <sup>a</sup>					
		Deaths <sup>b</sup>	HR(95% CI) <sup>a</sup>	Deaths <sup>b</sup>	HR(95% CI) <sup>a</sup>	Interaction P
All cause	1.00 (ref)	727	1.17 (1.04, 1.32)	1772	1.10 (1.01, 1.20)	0.46
Cancer (140-208)	1.00 (ref)	345	1.12 (0.95, 1.32)	699	1.17 (1.01 ,1.34)	0.70
Lung cancer (162)	1.00 (ref)	73	1.18 (0.81, 1.70)	141	1.20 (0.88, 1.63)	0.52
Cardiovascular (390-459)	1.00 (ref)	153	1.40 (1.07, 1.85)	430	1.10 (0.92, 1.32)	0.19
Ischemic heart disease (410-414)	1.00 (ref)	42	2.31 (1.25, 4.29)	91	1.33 (0.88, 2.03)	0.24
Myocardial infarction (410)	1.00 (ref)	31	3.79 (1.67, 8.60)	60	1.25 (0.74, 2.10)	0.08
Stroke (430-438)	1.00 (ref)	88	1.24 (0.87, 1.77)	261	0.94 (0.75, 1.17)	0.19
Ischemic stroke (434)	1.00 (ref)	34	1.05 (0.60, 1.84)	111	1.11 (0.78, 1.57)	0.88
Hemorrhagic stroke (430-432)	1.00 (ref)	46	1.31 (0.81, 2.14)	119	0.77 (0.56, 1.06)	0.12
Gastrointestinal (520-579)	1.00 (ref)	18	1.35 (0.63, 2.88)	37	1.24 (0.64, 2.42)	0.81
Kidney disease (580-593)	1.00 (ref)	13	1.19 (0.49, 2.92)	33	1.07 (0.57, 2.00)	0.66
Diabetes (250)	1.00 (ref)	11	0.98 (0.38, 2.51)	55	1.50 (0.82, 2.73)	0.26

<sup>&</sup>lt;sup>a</sup>Adjusted for age, smoking status, environmental tobacco smoke, occupation, education, shift work, BMI, hormone therapy, family income, parity, alcohol drinking, marital status, caloric intake, physical activity, stove ventilation.

bWomen were excluded from analyses of specific causes of death if they reported a history of corresponding diseases at baseline.

Table S2. Risk of all-cause and cause-specific mortality by ever usage of coal in Shanghai Women's Health Study, stratified by education

		Middle school and above Ever used coal		Elementary school and below Ever used coal		_
	Never used coal					
Cause of death (ICD 9)	HR(95% CI) <sup>a</sup>	Deaths <sup>b</sup>	HR(95% CI) <sup>a</sup>	Deaths <sup>b</sup>	HR(95% CI) <sup>a</sup>	Interaction P
All cause	1.00 (ref)	1014	1.21 (1.09,1.34)	1486	1.06 (0.96, 1.17)	0.10
Lung cancer (162)	1.00 (ref)	102	1.38 (1.00 1.91)	113	1.03 (0.73, 1.46)	0.43
Cancer (140-208)	1.00 (ref)	530	1.25 (1.08, 1.44)	515	1.03 (0.87, 1.21)	0.13
Cardiovascular (390-459)	1.00 (ref)	188	1.42 (1.11, 1.81)	395	1.09 (0.90, 1.32)	0.24
Ischemic heart disease (410-414)	1.00 (ref)	36	1.86 (1.02, 3.40)	97	1.56 (1.02, 2.38)	0.76
Myocardial infarction (410)	1.00 (ref)	27	1.86 (0.93, 3.72)	64	1.88 (1.07, 3.32)	0.84
Stroke (430-438)	1.00 (ref)	118	1.23 (0.90, 1.66)	231	0.92 (0.72, 1.17)	0.15
Ischemic stroke (434)	1.00 (ref)	45	1.31 (0.80, 2.15)	100	0.99 (0.69, 1.43)	0.29
Hemorrhagic stroke (430-432)	1.00 (ref)	65	1.17 (0.78, 1.74)	100	0.77 (0.54, 1.09)	0.15
Gastrointestinal (520-579)	1.00 (ref)	23	1.80 (0.85, 3.83)	32	1.00 (0.52, 1.93)	0.24
Kidney disease (580-593)	1.00 (ref)	18	1.32 (0.62, 2.82	28	0.91 (0.46, 1.81)	0.50
Diabetes (250)	1.00 (ref)	21	1.57 (0.66, 3.72)	45	1.34 (0.73, 2.47)	0.42

<sup>&</sup>lt;sup>a</sup>Adjusted for age, smoking status, environmental tobacco smoke, occupation, shift work, BMI, hormone therapy, family income, parity, alcohol drinking, marital status, caloric intake, physical activity, stove ventilation.

<sup>&</sup>lt;sup>b</sup>Women were excluded from analyses of specific causes of death if they reported a history of corresponding diseases at baseline.

Table S3. Risk of all-cause and cause-specific mortality by ever usage of coal in Shanghai Women's Health Study, stratified by kitchen ventilation

		Always good ventilation  Ever used coal		Always fair/poor ventilation Ever used coal		_
Coal Use	Never used coal					Interaction P
Cause of death (ICD 9)	HR(95% CI) <sup>a</sup>	Deaths <sup>b</sup>	HR(95% CI) <sup>a</sup>	Deaths <sup>b</sup>	HR(95% CI) <sup>a</sup>	
All cause	1.00 (ref)	355	1.03 (0.90, 1.19)	505	1.16 (1.01, 1.33)	0.92
Cancer (140-208)	1.00 (ref)	169	1.20 (0.98, 1.47)	199	1.01 (0.82, 1.25)	0.75
Lung cancer (162)	1.00 (ref)	34	1.08 (0.70, 1.67)	35	1.13 (0.67, 1.91)	0.16
Cardiovascular (390-459)	1.00 (ref)	81	1.00 (0.75, 1.33)	120	1.15 (0.86, 1.54)	0.71
Ischemic heart disease (410-414)	1.00 (ref)	23	1.79 (0.97, 3.30)	30	2.04 (1.01, 4.12)	0.29
Myocardial infarction (410)	1.00 (ref)	16	2.39 (1.09, 5.26)	21	2.71 (1.06, 6.89)	0.60
Stroke (430-438)	1.00 (ref)	35	0.70 (0.46, 1.04)	68	0.90 (0.63, 1.30)	0.59
Ischemic stroke (434)	1.00 (ref)	11	0.47 (0.24, 0.93)	32	1.09 (0.63, 1.91)	0.53
Hemorrhagic stroke (430-432)	1.00 (ref)	21	0.89 (0.52, 1.53)	30	0.72 (0.43, 1.19)	0.53
Gastrointestinal (520-579)	1.00 (ref)	6	0.86 (0.31, 2.35)	9	1.71 (0.49, 6.00)	0.32
Kidney disease (580-593)	1.00 (ref)	8	0.84 (0.34, 2.07)	6	0.95 (0.25, 3.60)	0.99
Diabetes (250)	1.00 (ref)	7	1.74 (0.56, 5.37)	16	2.17 (0.84, 5.62)	0.066

<sup>&</sup>lt;sup>a</sup>Adjusted for age, smoking status, environmental tobacco smoke, occupation, education, shift work, BMI, hormone therapy, family income, parity, alcohol drinking, marital status, caloric intake, physical activity, stove ventilation.

<sup>&</sup>lt;sup>b</sup>Women were excluded from analyses of specific causes of death if they reported a history of corresponding diseases at baseline.