

Supplemental Material

Appendix

Members of the China Kadoorie Biobank collaborative group:

International Steering Committee: Junshi Chen, Zhengming Chen (PI), Robert Clarke, Rory Collins, Yu Guo, Liming Li (PI), Jun Lv, Richard Peto, Robin Walters. **International Co-ordinating Centre, Oxford:** Daniel Avery, Ruth Boxall, Derrick Bennett, Yumei Chang, Yiping Chen, Zhengming Chen, Robert Clarke, Huaidong Du, Simon Gilbert, Alex Hacker, Mike Hill, Michael Holmes, Andri Iona, Christiana Kartsonaki, Rene Kerosi, Ling Kong, Om Kurmi, Garry Lancaster, Sarah Lewington, Kuang Lin, John McDonnell, Iona Millwood, Qunhua Nie, Jayakrishnan Radhakrishnan, Paul Ryder, Sam Sansome, Dan Schmidt, Paul Sherliker, Rajani Sohoni, Becky Stevens, Iain Turnbull, Robin Walters, Jenny Wang, Lin Wang, Neil Wright, Ling Yang, Xiaoming Yang. **National Co-ordinating Centre, Beijing:** Zheng Bian, Yu Guo, Xiao Han, Can Hou, Jun Lv, Pei Pei, Chao Liu, Yunlong Tan, Canqing Yu. **10 Regional Co-ordinating Centres:** **Qingdao CDC:** Zengchang Pang, Ruqin Gao, Shanpeng Li, Shaojie Wang, Yongmei Liu, Ranran Du, Yajing Zang, Liang Cheng, Xiaocao Tian, Hua Zhang, Yaoming Zhai, Feng Ning, Xiaohui Sun, Feifei Li. **Licang CDC:** Silu Lv, Junzheng Wang, Wei Hou. **Heilongjiang Provincial CDC:** Mingyuan Zeng, Ge Jiang, Xue Zhou. **Nangang CDC:** Liqiu Yang, Hui He, Bo Yu, Yanjie Li, Qinai Xu, Quan Kang, Ziyang Guo. **Hainan Provincial CDC:** Dan Wang, Ximin Hu, Jinyan Chen, Yan Fu, Zhenwang Fu, Xiaohuan Wang. **Meilan CDC:** Min Weng, Zhendong Guo, Shukuan Wu, Yilei Li, Huimei Li, Zhifang Fu. **Jiangsu Provincial CDC:** Ming Wu, Yonglin Zhou, Jinyi Zhou, Ran Tao, Jie Yang, Jian Su. **Suzhou CDC:** Fang liu, Jun Zhang, Yihe Hu, Yan Lu, , Liangcai Ma, Aiyu Tang, Shuo Zhang, Jianrong Jin, Jingchao Liu. **Guangxi Provincial CDC:** Zhenzhu Tang, Naying Chen, Ying Huang. **Liuzhou CDC:** Mingqiang Li, Jinhuai Meng, Rong Pan, Qilian Jiang, Jian Lan, Yun Liu, Liuping Wei, Liyuan Zhou, Ningyu Chen Ping Wang, Fanwen Meng, Yulu Qin,, Sisi Wang. **Sichuan Provincial CDC:** Xianping Wu, Ningmei Zhang, Xiaofang Chen, Weiwei Zhou. **Pengzhou CDC:** Guojin Luo, Jianguo Li, Xiaofang Chen, Xunfu Zhong, Jiaqiu Liu, Qiang Sun. **Gansu Provincial CDC:** Pengfei Ge, Xiaolan Ren, Caixia Dong. **Maiji CDC:** Hui Zhang, Enke Mao, Xiaoping Wang, Tao Wang, Xi zhang. **Henan Provincial CDC:** Ding Zhang, Gang Zhou, Shixian Feng, Liang Chang, Lei Fan. **Huixian CDC:** Yulian Gao, Tianyou He, Huarong Sun, Pan He, Chen Hu, Xukui Zhang, Huifang Wu, Pan He. **Zhejiang Provincial CDC:** Min Yu, Ruying Hu, Hao Wang. **Tongxiang CDC:** Yijian Qian, Chunmei Wang, Kaixu Xie, Lingli Chen, Yidan Zhang, Dongxia Pan, Qijun Gu. **Hunan Provincial CDC:** Yuelong Huang, Biyun Chen, Li Yin, Huilin Liu, Zhongxi Fu, Qiaohua Xu. **Liuyang CDC:** Xin Xu, Hao Zhang, Huajun Long, Xianzhi Li, Libo Zhang, Zhe Qiu.

Table S1. Adjusted Hazard ratios for cardiovascular diseases by baseline commuting mode.

	N	Ischemic heart disease	Ischemic stroke	Hemorrhagic stroke
Car or public transport	28,242	[Reference]	[Reference]	[Reference]
Motorcycle or moped	20,903	1.04 (0.92,1.17)	1.08 (0.95,1.22)	1.24 (0.93,1.66)
Work at home or work near home	13,936	0.91 (0.83,1.00)	1.06 (0.96,1.16)	1.28 (0.98,1.68)
Walking	20,912	0.90 (0.84,0.97)	1.06 (0.98,1.15)	0.96 (0.75,1.23)
Cycling	20,177	0.82 (0.75,0.89)	0.94 (0.85,1.03)	1.12 (0.87,1.44)

Stratified Cox proportional models were used with stratification on age and study area. Multivariable model was adjusted for sex; education; marital status; household income; occupation; alcohol consumption; smoking status; intake frequencies of red meat, fresh fruits, and vegetables; leisure sedentary time; family history of heart attack or stroke (only in the corresponding analysis); body mass index; prevalent hypertension; prevalent diabetes; cooking pollution; heating pollution; passive smoking; occupational, housework, and leisure-time physical activity level.

	Work at home/near home		Walking		Cycling		<i>P</i> _{interaction} *
	HR (95% CI)	P[†]	HR (95% CI)	P[†]	HR (95% CI)	P[†]	
No	0.88 (0.78,0.99)		0.92 (0.85,1.00)		0.77 (0.69,0.86)		
Yes	0.95 (0.82,1.09)	0.653	0.86 (0.77,0.97)	0.075	0.87 (0.76,0.99)	0.274	
Diabetes							0.299
No	0.90 (0.82,0.99)		0.91 (0.85,0.98)		0.81 (0.74,0.89)		
Yes	0.89 (0.68,1.18)	0.684	0.79 (0.63,0.99)	0.061	0.80 (0.60,1.06)	0.811	

The reference category for all analyses was non-active commuting. Stratified Cox models were used and analyses were done separately for each baseline characteristic. Models were adjusted for sex; education; marital status; household income; occupation; alcohol consumption; smoking status; intake frequencies of red meat, fresh fruits, and vegetables; leisure sedentary time; family history of heart attack; body mass index; prevalent hypertension; prevalent diabetes; cooking pollution; heating pollution; passive smoking; occupational, housework, and leisure-time physical activity level, except for the stratified variable in the corresponding subgroup analysis.

* P interaction: the tests for interaction were performed by means of likelihood ratio tests, which involved comparing models with and without cross product terms between the baseline characteristic and commuting mode (4 categories).

[†] P value of the Wald test.

	Work at home/near home		Walking		Cycling		<i>P_{interaction}</i> *
	HR (95% CI)	P[†]	HR (95% CI)	P[†]	HR (95% CI)	P[†]	
No	1.04 (0.92,1.17)		1.00 (0.91,1.11)		0.89 (0.79,1.00)		
Yes	1.06 (0.93,1.20)	0.252	1.12 (1.00,1.25)	0.466	0.96 (0.85,1.09)	0.323	
Diabetes							0.374
No	1.01 (0.92,1.11)		1.04 (0.96,1.13)		0.91 (0.83,1.00)		
Yes	1.32 (1.02,1.71)	0.168	1.13 (0.90,1.41)	0.832	1.01 (0.78,1.30)	0.319	

The same as in Table S2.

	Work at home/near home		Walking		Cycling		<i>P_{interaction}</i> *
	HR (95% CI)	P[†]	HR (95% CI)	P[†]	HR (95% CI)	P[†]	
No	1.25 (0.83,1.90)		0.65 (0.43,1.01)		0.84 (0.57,1.24)		
Yes	1.11 (0.83,1.49)	0.162	0.99 (0.76,1.28)	0.092	1.07 (0.83,1.38)	0.889	
Diabetes							0.994
No	1.18 (0.91,1.52)		0.90 (0.71,1.14)		1.03 (0.82,1.29)		
Yes	1.07 (0.53,2.16)	0.903	0.87 (0.45,1.66)	0.841	0.90 (0.47,1.73)	0.994	

The same as in Table S2.