

VARIABLE	HYPERTENSION		P
	YES	NO	
Sex(%)			0.378
male	4,533(44.2)	4,265(43.6)	
female	5,728(55.8)	5,527(56.4)	
Age	71 ± 8	66 ± 11	<0.01
BMI	25 ± 3	24 ± 3	<0.01
HR	74 ± 11	73 ± 11	<0.01
Blood glucose	6.0 ± 2.0	5.9 ± 1.8	0.002
Educational status(%)			<0.01
primary	7,611(74.2)	6,713(68.6)	
middle	1,817(17.7)	1,915(19.6)	
high	650(6.3)	733(7.5)	
college	182(1.8)	429(4.4)	
master	1(0.0)	2(0.0)	
Smoking(%)			0.007
never	8,020(78.2)	7,531(76.9)	
current	1,425(13.9)	1,464(15.0)	
past	198(1.9)	150(1.5)	
long history of second-hand smoke inhalation	618(6.0)	647(6.6)	
Drinking(%)			0.428
never	8,504(82.9)	8,047(82.2)	
current	1,630(15.9)	1,617(16.5)	
past	127(1.2)	128(1.3)	
Outdoor activities(%)			<0.01
≥20	4,681(45.6)	3,854(39.4)	
5–20	4,379(42.7)	4,560(46.6)	
≤5	1,201(11.7)	1,378(14.1)	
Vegetable consumption(%)			<0.01
≥5	7,433(72.4)	6,681(68.2)	
3–5	2,226(21.7)	2,545(26.0)	
≤3	602(5.9)	566(5.8)	
Fruit consumption(%)			0.017
≥3	4,005(39.0)	3,985(40.7)	
<3	6,256(61.0)	5,807(59.3)	
Sleep duration(%)			<0.01
6–8	7,593(74.0)	7,567(77.3)	
<6	1,982(19.3)	1,534(15.7)	
>8	686(6.7)	691(7.1)	
Diabetes(%)			<0.01
yes	1,894(18.5)	1,230(12.6)	
no	8,367(81.5)	8,562(87.4)	

Table 2 Baseline characteristics of all participants by hypertension status.

A $P < 0.05$ was considered significant. BMI: body mass index. HR: heart rate. CVD: coronary vessel disease. CHF: chronic hepatic failure. CRF: chronic renal failure. AF: atrial fibrillation.

(Contd.)

VARIABLE	HYPERTENSION		P
	YES	NO	
Hyperlipidemia(%)			<0.01
yes	2,065(20.1)	1,426(14.6)	
no	8,196(79.9)	8,366(85.4)	
Hyperhomocysteinemia(%)			<0.01
yes	52(0.5)	5(0.1)	
no	10,209(99.5)	9,787(99.9)	
CVD(%)			<0.01
yes	604(5.9)	224(2.3)	
no	9,657(94.1)	9,568(97.7)	
CHF(%)			0.093
yes	120(1.2)	141(1.4)	
no	10,141(98.8)	9,651(98.6)	
CRF(%)			0.001
yes	36(0.4)	12(0.1)	
no	10,225(99.6)	9,780(99.9)	
AF(%)			0.008
yes	51(0.5)	26(0.3)	
no	10,210(99.5)	9,766(99.7)	
Cerebral infarction(%)			0.001
yes	173(1.7)	110(1.1)	
no	10,088(98.3)	9,682(98.9)	
Cerebral hemorrhage(%)			<0.01
yes	50(0.5)	11(0.1)	
no	10,211(99.5)	9,781(99.9)	
Use of antihypertensives(%)			<0.01
yes	7,578(73.9)	0(0.0)	
no	2,683(26.1)	9,792(100.0)	
Use of lipid-lowering agents(%)			<0.01
Yes	434(4.2)	182(1.9)	
no	9,827(95.8)	9,610(98.1)	

UNADJUSTED AND ADJUSTED ANALYSIS OF THE ASSOCIATION BETWEEN SLEEP DURATION AND HYPERTENSION

There were significant differences among the three sleep-duration groups in terms of hypertension ($\chi^2 = 46.2$, $P < 0.01$) (Table 3). Unadjusted analysis showed that participants with short (<6 h/day) and long (>8 h/day) sleep durations had greater risks of hypertension than those with a normal (6–8 h/day) sleep duration. The risk of hypertension was significantly increased by 30.1% in participants with a long (>8 h/day) sleep duration compared with those with a normal (6–8 h/day) sleep duration (OR = 1.301, $P < 0.01$, 95% CI = 1.149–1.475), while the risk of hypertension was increased by 1.1% higher in participants with a short (<6 h/day) sleep duration compared with those with a normal (6–8 h/day) sleep duration, but the difference was not significant (OR = 1.011, $P = 0.849$, 95% CI = 0.905–1.129).

