

Supplementary Table 1. Questionnaire items

Characteristics	Mean ± SD
How much sleep do you usually get at night on weekdays or workdays?	6.88 ± 1.41
How much time do you usually spend sitting on a typical day (min) ?	410.82 ± 190.59
	n (%)
Have you smoked at least 100 cigarettes in your entire life?	
<i>Yes</i>	1379 (46.03)
<i>No</i>	1615 (53.91)
<i>Refused / Don't know / Missing</i>	2 (0.07)
In any one year, have you had at least 12 drinks of any type of alcoholic beverage?	
<i>Yes</i>	2018 (67.36)
<i>No</i>	803 (26.80)
<i>Refused / Don't know / Missing</i>	175 (5.84)
Have you ever been told by a doctor or other health professional that you had hypertension, also called high blood pressure?	
<i>Yes</i>	1412 (47.13)
<i>No</i>	1581 (52.77)
<i>Refused / Don't know / Missing</i>	3 (0.10)
Other than during pregnancy, have you ever been told by a doctor or health professional that you have diabetes or sugar diabetes?	
<i>Yes</i>	487 (16.26)
<i>No / Borderline</i>	2508 (83.71)
<i>Refused / Don't know / Missing</i>	1 (0.03)
Has a doctor or other health professional ever told you that you had congestive heart failure / coronary heart disease / angina/angina pectoris / heart attack / stroke?	
<i>Yes</i>	380 (12.68)
<i>No</i>	2605 (86.95)
<i>Refused / Don't know / Missing</i>	11 (0.37)

Supplementary Table 2. eGFR category in CKD participants

eGFR Category	n (%)		
	Total (n = 630)	Male (n = 303)	Female (n = 327)
eGFR <30 (ml/min/1.73m ²)	31 (4.9)	13 (4.3)	18 (5.5)
30≤eGFR<45 (ml/min/1.73m ²)	95 (15.1)	49 (16.2)	46 (14.1)
45≤eGFR<60 (ml/min/1.73m ²)	208 (33.0)	109 (36)	99 (30.3)
60≤eGFR<90 (ml/min/1.73m ²)	160 (25.4)	77 (25.4)	83 (25.4)
eGFR ≥90 (ml/min/1.73m ²)	136 (21.6)	55 (18.2)	81 (24.8)

Abbreviations: eGFR, estimated glomerular filtration rate; CKD, chronic kidney disease.

Supplementary Table 3. The association between sleep duration and AAC-score in CKD participants in different eGFR subgroups

Subgroups	Total β (95%CI)	P-value	P for interaction	Male β (95%CI)	P-value	P for interaction	Female β (95%CI)	P-value	P for interaction
			0.255			0.916			0.203
eGFR <30 (ml/min/1.73m²)									
2-5 h	-0.28 (-8.75, 8.19)	0.95		8.21 (NaN, NaN)	NaN		-2.05 (NaN, NaN)	NaN	
6-8 h	Reference			Reference			Reference		
≥9 h	1.07 (-5.09, 7.22)	0.745		-3.44 (NaN, NaN)	NaN		-18.31 (NaN, NaN)	NaN	
30≤eGFR<45 (ml/min/1.73m²)									
2-5 h	1.47 (-2.62, 5.57)	0.482		-3.03 (-10.77, 4.7)	0.45		7.35 (-0.33, 15.03)	0.074	
6-8 h	Reference			Reference			Reference		
≥9 h	1.14 (-1.86~4.14)	0.459		1.26 (-4.54, 7.06)	0.674		1.27 (-4.25, 6.79)	0.656	
45≤eGFR<60 (ml/min/1.73m²)									
2-5 h	-0.23 (-2.38, 1.91)	0.831		-0.44 (-3.48, 2.61)	0.778		0.97 (-2.47, 4.41)	0.581	
6-8 h	Reference			Reference			Reference		
≥9 h	1.08 (-1.02, 3.19)	0.316		1.75 (-0.75, 4.25)	0.173		0.10 (-3.93, 4.13)	0.961	
60≤eGFR<90 (ml/min/1.73m²)									
2-5 h	-0.60 (-2.34, 1.14)	0.5		-2.54 (-5.23, 0.15)	0.07		0.75 (-1.84, 3.34)	0.574	
6-8 h	Reference			Reference			Reference		
≥9 h	0.30 (-1.92, 2.52)	0.789		1.17 (-2.66, 5.01)	0.552		-0.60 (-3.97, 2.77)	0.729	
eGFR ≥90 (ml/min/1.73m²)									
2-5 h	0.17 (-1.43, 1.77)	0.836		1.38 (-1.66, 4.41)	0.381		0.36 (-1.88, 2.59)	0.756	
6-8 h	Reference			Reference			Reference		
≥9 h	-1.19 (-3.59, 1.21)	0.334		0.60 (-3.21, 4.41)	0.76		-2.97 (-6.62, 0.68)	0.116	

Abbreviations: AAC, abdominal aortic calcification; eGFR, estimated glomerular filtration rate; CKD, chronic kidney disease; OR, odds ratio; 95% CI, 95% confidence interval.

All subgroups were adjusted for age, gender, race, body mass index, poverty-income ratio, education level, smoking history, alcohol drinking, hypertension, diabetes, cardiovascular diseases, sedentary time, total cholesterol, high-density lipoprotein cholesterol, serum total calcium, serum phosphorus, serum total 25-hydroxyvitamin D, and neutrophil-to-lymphocyte ratio, except the stratification factor itself.

Supplementary Table 4. The association between sleep duration and SAAC in CKD participants in different eGFR subgroups

Subgroups	Total OR (95% CI)	P-value	P for interaction	Male OR (95% CI)	P-value	P for interaction	Female OR (95% CI)	P-value	P for interaction
			0.69			0.872			0.366
eGFR <30 (ml/min/1.73m ²)									
2-5 h	601646819059.05 (0, Inf)	1		2.17678993024525e+21 (0, Inf)	1		0 (0, Inf)	1	
6-8 h	Reference			Reference			Reference		
≥9 h	0 (0, Inf)	1		1 (0, Inf)	1		0 (0, Inf)	1	
30≤eGFR<45 (ml/min/1.73m ²)									
2-5 h	1.19 (0.16~8.84)	0.867		0 (0, Inf)	0.999		23133.82 (0, 1099880327507.19)	0.265	
6-8 h	Reference			Reference			Reference		
≥9 h	1.28 (0.28~5.92)	0.755		2.91854489052421e+55 (0, Inf)	0.999		0.16 (0, 68824.82)	0.783	
45≤eGFR<60 (ml/min/1.73m ²)									
2-5 h	0.78 (0.16, 3.9)	0.761		4.12 (0.2, 86.49)	0.362		1.91 (0.15, 24.37)	0.619	
6-8 h	Reference			Reference			Reference		
≥9 h	1.44 (0.47, 4.43)	0.522		2.46 (0.4, 14.96)	0.329		2.01 (0.23, 17.69)	0.531	
60≤eGFR<90 (ml/min/1.73m ²)									
2-5 h	1.56 (0.15, 16.04)	0.707		0 (0, Inf)	0.999		5.62 (0.13, 234.4)	0.365	
6-8 h	Reference			Reference			Reference		
≥9 h	0.97 (0.1, 9.2)	0.981		2.79547164495911e+25 (0, Inf)	0.999		0.87 (0.01, 72.27)	0.951	
eGFR ≥90 (ml/min/1.73m ²)									
2-5 h	1.71 (0.27, 10.89)	0.571		336600132.33 (0, Inf)	1		2869272057648.02 (0, Inf)	1	
6-8 h	Reference			Reference			Reference		
≥9 h	0.63 (0.05, 7.51)	0.712		1.81659892794047e+21 (0, Inf)	1		0 (0, Inf)	1	

Abbreviations: SAAC, severe abdominal aortic calcification; eGFR, estimated glomerular filtration rate; CKD, chronic kidney disease; OR, odds ratio; 95% CI, 95% confidence interval.

All subgroups were adjusted for age, gender, race, body mass index, poverty-income ratio, education level, smoking history, alcohol drinking, hypertension, diabetes, cardiovascular diseases, sedentary time, total cholesterol, high-density lipoprotein cholesterol, serum total calcium, serum phosphorus, serum total 25-hydroxyvitamin D, and NLR, except the stratification factor itself.