

Table S1 The sensitivity analysis results of the logistics regression model from 2007-2014

Characteristics	OR (95% CI)			
	Crude Model	Model I	Model II	Model III
HEI Category (reference, Inadequate)				
Average	0.947(0.946-0.948)	0.917(0.916,0.918)	0.964(0.962,0.965)	1.013(1.012,1.015)
Optimal	0.809(0.808-0.810)	0.764(0.763,0.766)	0.861(0.860,0.862)	0.995(0.994,0.997)
Age Group (reference, 20-39)				
40-59		2.203(2.200,2.206)	2.014(2.012,2.017)	1.594(1.592,1.597)
60+		2.319(2.316,2.322)	1.841(1.838,1.844)	1.317(1.315,1.320)
Sex (reference, Female)				
Male		1.162(1.161,1.164)	1.269(1.267,1.27)	1.362(1.361,1.364)
Race (reference, Non-Hispanic White)				
Mexican American		0.495(0.493,0.496)	0.501(0.499,0.502)	0.499(0.498,0.500)
Non-Hispanic Black		0.936(0.934,0.937)	0.881(0.880,0.883)	0.740(0.739,0.741)
Other		0.797(0.795,0.798)	0.748(0.747,0.750)	0.769(0.768,0.771)
Education Level (reference, < High School)				
High school /GED equivalent		1.235(1.233,1.238)	1.369(1.366,1.371)	1.466(1.463,1.469)
College/AA degree		1.318(1.316,1.320)	1.516(1.513,1.518)	1.586(1.583,1.589)
College or above		1.064(1.062,1.066)	1.351(1.348,1.354)	1.643(1.640,1.646)
Family Income (reference, 0~130% FPL)				
130%~350% FPL		0.748(0.747,0.749)	0.799(0.798,0.801)	0.879(0.877,0.88)
350% FPL		0.677(0.676,0.678)	0.768(0.767,0.769)	0.911(0.909,0.912)
Smoke Status (reference, Never Smoker)				
Former Smoker			1.531(1.529,1.533)	1.432(1.430,1.433)
Current Smoker			1.517(1.515,1.520)	1.557(1.555,1.559)
Drink Level (reference, None)				
Light			0.96(0.959,0.9610)	1.004(1.003,1.006)
Moderate			0.633(0.632,0.634)	0.760(0.759,0.761)
Heavy			0.741(0.739,0.743)	0.435(0.434,0.436)
Caffeine Category (reference, <Q1)				
Q1~Q3			0.893(0.892,0.894)	0.896(0.895,0.897)
>Q3			0.836(0.834,0.837)	0.795(0.794,0.797)
Total physical activity (reference, 0)				
1-149			0.765(0.764,0.767)	0.876(0.874,0.878)
150-299			0.740(0.739,0.742)	0.884(0.882,0.885)
≥300			0.614(0.613,0.615)	0.767(0.766,0.768)
BMI Category (reference, Normal Weight)				
Underweight				1.218(1.212,1.224)
Overweight				1.207(1.205,1.209)
Obese				2.544(2.540,2.548)
Hypertension (reference, No)				
Yes				1.642(1.640,1.644)
Diabetes (reference, No)				
Yes				1.509(1.507,1.511)
Depression (reference, No)				
Yes				3.021(3.016,3.025)

Sample size = 18419; OR = Odds Ratio; 95% CI = 95% Confidence Interval; HEI = Healthy Eating Index; BMI = Body Mass Index. Model I: Adjust for sociodemographic characteristics. Model II: Adjust for sociodemographic characteristics and behavioral characteristics. Model III: Adjust for sociodemographic characteristics, behavioral characteristics, and health characteristics.

Table S2. The sensitivity analysis results of the Weighted Quantile Sum regression model

Model	OR	95% CI	P-Value
Model I	0.975	(0.963,0.987)	<0.001
Model II	0.984	(0.972,0.996)	0.008
Model III	0.987	(0.975,0.999)	0.034

OR = Odds Ratio; 95% CI = 95% Confidence Interval. Model I: Adjust for sociodemographic characteristics. Model II: Adjust for sociodemographic characteristics and behavioral characteristics. Model III: Adjust for sociodemographic characteristics, behavioral characteristics, and health characteristics.

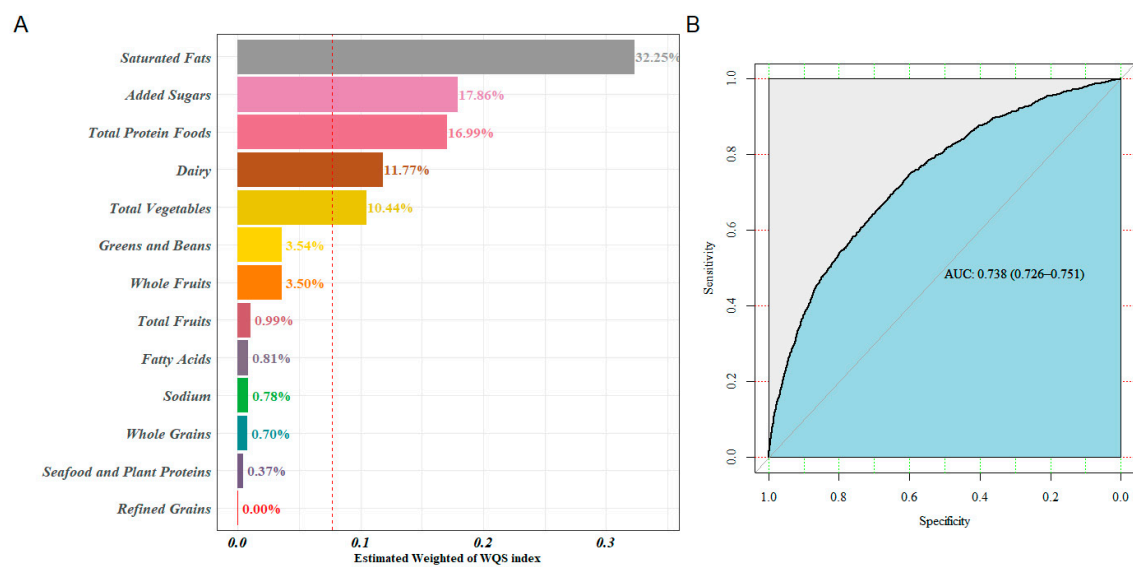


Figure S1 The sensitivity analysis results of (A) WQS regression index weights for sleep disorders; (B) The ROC curve of the WQS model.