

**Supplementary Table SI.** Distribution of missing data

Characteristics	No. of missing values	Percent (%)
Age	0	0
Sex	0	0
Ethnicity	0	0
BMI	0	0
FMPIR	0	0
Marital status	0	0
Education level	0	0
Smoking status	3	0.06
Alcohol consumption	268	5.2
Hypertension	3	0.06
Diabetes	66	1.28
Hypercholesterolemia	22	0.43
Physical activity	0	0
Cardiovascular disease	0	0
Stroke	0	0

Notes: BMI, Body mass index; FMPIR, family poverty income ratio.

**Supplementary Table SII.** Logistic regression analysis results of MQI and stroke

	OR (95% CI) <i>P</i> value		
	Model 1	Model 2	Model 3
<b>Stroke</b>			
<b>Continuous</b>			
MQI	0.52 (0.36, 0.77) < 0.001	0.65 (0.41, 1.04) 0.0729	0.69 (0.43, 1.12) 0.1360
<b>Categories</b>			
Extremely low + low	1	1	1
Normal	0.32 (0.19, 0.55) < 0.0001	0.40 (0.22, 0.73) 0.0027	0.41 (0.22, 0.76) 0.0044
<b>Categories</b>			
Extremely low	1	1	1
Low	0.90 (0.50, 1.63) 0.7351	0.96 (0.52, 1.79) 0.9075	1.06 (0.56, 2.01) 0.8672
Normal	0.31 (0.17, 0.55) < 0.0001	0.39 (0.20, 0.77) 0.0066	0.42 (0.21, 0.85) 0.0153
<b><i>P</i> for trend</b>	<0.001	0.0070	0.0160

OR: odds ratio; 95% CI: 95% confidence interval.

Model 1: no adjusted.

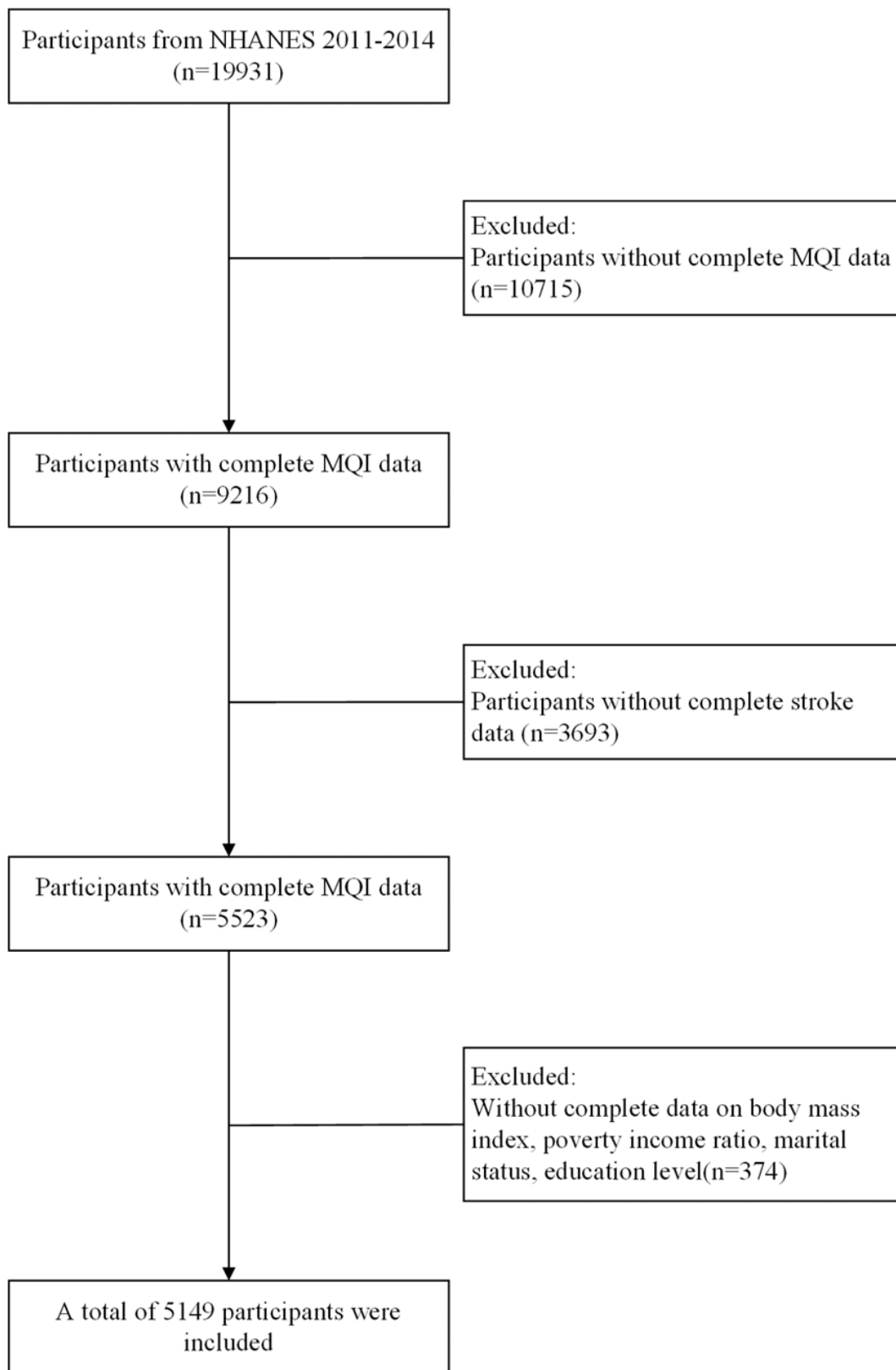
Model 2: adjusted for age, sex, ethnicity, body mass index, poverty income ratio, marital status, education level.

Model 3: adjusted for age, sex, ethnicity, body mass index, poverty income ratio, marital status, education level, smoking status, alcohol consumption, hypertension, diabetes, hypercholesterolemia and physical activity.

**Supplementary Table SIII.** Subgroup analysis between muscle quality index and stroke

Subgroups	N	OR (95%CI) P value	P interaction
Age			
≤40	2800	0.75 (0.19, 2.97) 0.680	
>40	2349	0.69 (0.42, 1.13) 0.140	0.908
Sex			
male	2629	0.64 (0.34, 1.21) 0.174	
female	2520	0.77 (0.41, 1.43) 0.406	0.665
Ethnicity			
Mexican American	615	1.85 (0.62, 5.54) 0.270	
Non-Hispanic White	2069	0.59 (0.30, 1.16) 0.125	
Non-Hispanic Black	1121	0.58 (0.27, 1.24) 0.162	
Other	1344	0.65 (0.24, 1.79) 0.408	0.294
BMI			
≤25	1743	1.13 (0.43, 2.99) 0.803	
25-30	1619	0.59 (0.26, 1.32) 0.199	
>30	1787	0.62 (0.29, 1.30) 0.202	0.527
FMPIR			
0-1	1253	0.71 (0.35, 1.42) 0.331	
1-3	1902	0.59 (0.31, 1.10) 0.0964	
>3	1994	1.17 (0.40, 3.43) 0.778	0.514
Marital status			
Married/living with partner	2980	0.71 (0.39, 1.29) 0.257	
Other	2169	0.68 (0.36, 1.29) 0.237	0.914
Education level			
High school and below	1953	0.67 (0.38, 1.18) 0.168	
Above high school	3196	0.73 (0.37, 1.47) 0.384	0.828
Smoking status			
Never	3052	0.61 (0.30, 1.25) 0.177	
Former	859	0.84 (0.33, 2.14) 0.720	
Current	1238	0.71 (0.37, 1.35) 0.292	0.846
Alcohol consumption			
Never	599	1.06 (0.27, 4.18) 0.932	
Former	493	0.63 (0.22, 1.77) 0.377	
Current	3789	0.64 (0.37, 1.10) 0.107	
Missing	268	1.34 (0.25, 7.23) 0.732	0.759
Hypertension			
Yes	1432	0.79 (0.47, 1.34) 0.382	
No	3717	0.46 (0.20, 1.08) 0.0744	0.254
Diabetes			
Yes	535	0.99 (0.42, 2.32) 0.977	
No	4614	0.62 (0.36, 1.05) 0.0763	0.323
hypercholesterolemia			
Yes	1565	0.78 (0.41, 1.46) 0.435	
No	3584	0.63 (0.34, 1.15) 0.129	0.581
Physical activity			
Active	3840	0.62 (0.34, 1.15) 0.128	
Inactive	1309	0.78 (0.41, 1.47) 0.442	0.577

Notes: Age, sex, ethnicity, body mass index, poverty income ratio, marital status, education level, smoking status, alcohol drinking status, hypertension, diabetes, hypercholesterolemia and physical activity were adjusted in the subgroup analysis



Supplementary Figure S1. Flow chart