

**Supplementary Table S1.** The weighted prevalence of MAFLD phenotypes at the cutoff value 285 dB/m of CAP and 6.3 kPa of LSM.

Tertiles	Non-MAFLD (64.62%)	MAFLD without fibrosis (22.08%)	MAFLD with fibrosis (13.30%)	<i>p</i> value	<i>p</i> for trend
DII T1	67.94	20.73	11.33	0.470	0.203
T2	62.41	23.32	14.27		
T3	63.19	22.34	14.47		
HEI-2015 T1	61.79	22.03	16.18	0.069	0.027
T2	63.56	23.94	12.50		
T3	68.81	20.13	11.06		
AHEI T1	61.33	22.21	16.46	0.019	0.022
T2	64.35	22.58	13.07		
T3	68.38	21.47	10.15		
DASH T1	60.57	23.50	15.94	0.002	0.468
T2	61.75	25.05	13.20		
T3	69.80	18.88	11.32		
MED T1	62.73	23.24	14.03	0.909	0.004
T2	65.29	21.43	13.29		
T3	65.79	21.65	12.55		

**Supplementary Table S2.** Relationship between five dietary indexes and MAFLD phenotypes at the cutoff value 285 dB/m of CAP and 6.3 kPa of LSM.

Dietary quality indexes		Multivariate logistic regression		Multivariate ordinal logistic regression	
		<i>OR (95%CI)</i>	<i>p</i> value	<i>OR (95%CI)</i>	<i>p</i> value
DII					
	Continuous scales	<b>1.137(1.012-1.276)</b>	<b>0.035</b>	<b>1.142(1.048-1.245)</b>	<b>0.002</b>
	T1(Reference)	1.000		1.000	
	T2	<b>1.446(1.052-1.989)</b>	<b>0.031</b>	<b>1.438(1.120-1.846)</b>	<b>0.004</b>
	T3	1.567(0.937-2.619)	0.075	<b>1.572(1.092-2.260)</b>	<b>0.015</b>
HEI-2015					
	Continuous scales	<b>0.984(0.972-0.996)</b>	<b>0.018</b>	<b>0.982(0.973-0.992)</b>	<b>&lt;0.001</b>
	T1(Reference)	1.000		1.000	
	T2	0.839(0.595-1.184)	0.247	<b>0.798(0.623-1.022)</b>	<b>0.074</b>
	T3	<b>0.608(0.405-0.913)</b>	<b>0.025</b>	<b>0.596(0.448-0.794)</b>	<b>&lt;0.001</b>
AHEI					
	Continuous scales	<b>0.979(0.964-0.994)</b>	<b>0.013</b>	<b>0.978(0.967-0.989)</b>	<b>&lt;0.001</b>
	T1(Reference)	1.000		1.000	
	T2	0.757(0.551-1.042)	0.075	<b>0.740(0.600-0.913)</b>	<b>0.005</b>
	T3	<b>0.619(0.407-0.941)</b>	<b>0.032</b>	<b>0.594(0.437-0.808)</b>	<b>&lt;0.001</b>
DASH					
	Continuous scales	<b>0.933(0.892-0.975)</b>	<b>0.009</b>	<b>0.932(0.898-0.967)</b>	<b>&lt;0.001</b>
	T1(Reference)	1.000		1.000	

	T2	0.900(0.671-1.208)	0.400	0.873(0.697-1.094)	0.238
	T3	<b>0.576(0.383-0.867)</b>	<b>0.018</b>	<b>0.584(0.424-0.804)</b>	<b>0.001</b>
MED	Continuous scales	0.873(0.727-1.048)	0.119	0.873(0.755-1.010)	0.067
	T1(Reference)	1.000		1.000	
	T2	0.809(0.560-1.170)	0.200	0.806(0.591-1.100)	0.174
	T3	0.765(0.464-1.259)	0.226	0.769(0.536-1.103)	0.153

Multivariate logistic regression models and multivariate ordinal regression models (Non-MAFLD *vs.* MAFLD without fibrosis *vs.* MAFLD with fibrosis) were adjusted for covariates, such as age, gender, race, education levels, PIR, physical activity levels, smoking and drink conditions.

**Supplementary Table S3.** Relationship between five dietary indexes and MAFLD phenotypes at the cutoff value 248 dB/m of CAP and 6.3 kPa of LSM without heavy drinkers

Dietary quality indexes		Multivariate logistic regression		Multivariate ordinal logistic regression	
		<i>OR (95%CI)</i>	<i>p value</i>	<i>OR (95%CI)</i>	<i>p value</i>
DII	Continuous scales	<b>1.152(1.049-1.265)</b>	<b>0.010</b>	<b>1.150(1.076-1.230)</b>	<b>&lt;0.001</b>
	T1(Reference)	1.000		1.000	
	T2	1.328(0.978-1.802)	0.063	<b>1.306(1.055-1.617)</b>	<b>0.014</b>
	T3	<b>1.610(1.026-2.526)</b>	<b>0.042</b>	<b>1.607(1.162-2.223)</b>	<b>0.004</b>
HEI-2015	Continuous scales	<b>0.978(0.968-0.989)</b>	<b>0.003</b>	<b>0.978(0.970-0.987)</b>	<b>&lt;0.001</b>
	T1(Reference)	1.000		1.000	
	T2	<b>0.710(0.508-0.993)</b>	<b>0.047</b>	<b>0.698(0.554-0.879)</b>	<b>0.002</b>

	T3	<b>0.484(0.323-0.726)</b>	<b>0.006</b>	<b>0.497(0.377-0.655)</b>	<b>&lt;0.001</b>
AHEI					
	Continuous scales	<b>0.974(0.962-0.986)</b>	<b>0.002</b>	<b>0.973(0.965-0.981)</b>	<b>&lt;0.001</b>
	T1(Reference)	1.000		1.000	
	T2	<b>0.723(0.533-0.980)</b>	<b>0.041</b>	<b>0.693(0.575-0.835)</b>	<b>&lt;0.001</b>
	T3	<b>0.529(0.370-0.758)</b>	<b>0.006</b>	<b>0.510(0.393-0.661)</b>	<b>&lt;0.001</b>
DASH					
	Continuous scales	<b>0.919(0.894-0.945)</b>	<b>&lt;0.001</b>	<b>0.920(0.899-0.943)</b>	<b>&lt;0.001</b>
	T1(Reference)	1.000		1.000	
	T2	<b>0.741(0.570-0.962)</b>	<b>0.032</b>	<b>0.760(0.605-0.956)</b>	<b>0.019</b>
	T3	<b>0.532(0.406-0.698)</b>	<b>0.002</b>	<b>0.550(0.445-0.681)</b>	<b>&lt;0.001</b>
MED					
	Continuous scales	<b>0.824(0.712-0.953)</b>	<b>0.017</b>	<b>0.841(0.750-0.944)</b>	<b>0.003</b>
	T1(Reference)	1.000		1.000	
	T2	<b>0.758(0.591-0.974)</b>	<b>0.036</b>	<b>0.780(0.637-0.954)</b>	<b>0.016</b>
	T3	<b>0.618(0.417-0.916)</b>	<b>0.025</b>	<b>0.662(0.500-0.876)</b>	<b>0.004</b>

Multivariate logistic regression models and multivariate ordinal regression models (Non-MAFLD vs. MAFLD without fibrosis vs. MAFLD with fibrosis) were adjusted for covariates, such as age, gender, race, education levels, PIR, physical activity levels, smoking and drink conditions. Heavy drinkers (n=112).

### Figure legends

Supplementary Figure S1. Summaries of the relationships between five dietary indexes and MAFLD phenotypes. Model 1: Multivariate logistic regression analysis (MAFLD vs. Non-MAFLD), Model 2: Multivariate ordinal logistic regression analysis (MAFLD with fibrosis vs. MAFLD without fibrosis vs. non-MAFLD).