Supplementary Figure 1 Receiver operating characteristic curves between muscle strength and the prevalence of metabolic dysfunction-associated fatty liver disease in the total participants and both sexes. Muscle strength treated as a continuous variable; All *P* values < 0.001; AUC: Area under the curve.

Supplementary Table 1 Preliminary logistic analysis between variables and metabolic dysfunction-associated fatty liver disease

Continuous variable	Beta (95%CI)	*P* value
Age (yr)	0.024 (0.021, 0.027)	< 0.001
Body mass index (kg/m^2)	0.487 (0.467, 0.507)	< 0.001
Waist circumference (cm)	0.104 (0.099, 0.109)	< 0.001
Handgrip strength (kg)	-0.047 (-0.052, -0.043)	< 0.001
Muscle strength (handgrip strength/body mass index)	-2.677 (-2.813, -2.540)	< 0.001
Systolic BP (mmHg)	0.023 (0.021, 0.025)	< 0.001
Diastolic BP (mmHg)	0.011 (0.007, 0.015)	< 0.001
AST (IU/L)	0.009 (0.005, 0.013)	< 0.001
ALT (IU/L)	-0.011 (-0.015, -0.006)	< 0.001
Total cholesterol (mg/dL)	0.001 (0.000, 0.002)	0.085
HDL-C (mg/dL)	-0.011 (-0.014, -0.007)	< 0.001
LDL-C (mg/dL)	0.001 (0.000, 0.002)	0.040

Triglycerides (mg/dL)	0.001 (0.000, 0.001)	0.001
Fasting glucose (mg/dL)	0.013 (0.011, 0.015)	< 0.001
HbA1c (%)	0.447 (0.383, 0.511)	< 0.001
hs-CRP (mg/L)	0.104 (0.082, 0.125)	< 0.001
Categorized variable	OR (95%CI)	*P* value
Sex (men *vs* women)	0.30 (0.27-0.32)	< 0.001
Current smoker (*vs* nonsmoker)	0.57 (0.51-0.65)	< 0.001
Physical activity (non regular *vs* regular)	0.84 (0.77-0.91)	< 0.001
Income (Q1 *vs* Q2-Q4)	1.91 (1.72-2.13)	< 0.001
Education (≤12 *vs* >12 yr)	2.73 (2.50-2.99)	< 0.001
Obesity (yes *vs* no)	8.39 (7.64-9.21)	< 0.001
Hypertension (yes *vs* no)	2.58 (2.37-2.80)	< 0.001
Diabetes mellitus (yes *vs* no)	3.33 (2.93-3.77)	< 0.001
Dyslipidemia (yes *vs* no)	1.96 (1.77-2.16)	< 0.001

MAFLD: Metabolic dysfunction-associated fatty liver disease; 95%CI: 95% Confidence interval; BP: Blood pressure; AST: Aspartate aminotransferase; ALT: Alanine aminotransferase; HDL-C: High-density lipoprotein cholesterol; LDL-C: Low-density lipoprotein cholesterol; HbA1c: Glycated hemoglobin; hs-CRP: High-sensitivity C-reactive protein; OR: Odds ratio; Q: Quartile.