Figure S1. Sphingolipid metabolites in healthy controls stratified by age. No significant differences were observed in serum sphingolipids between different age groups in the healthy controls.

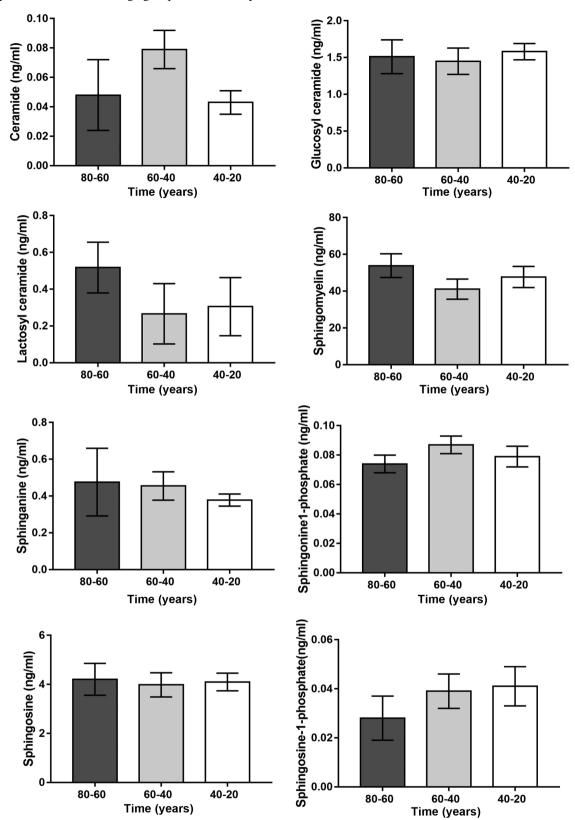


Figure S2. Sphingolipid metabolites in controls stratified by BMI. No significant differences were observed in serum sphingolipids between different BMI groups in the controls. BMI, body mass index. Overweight was defined as BMI=24.0-27.9 kg/m², and obesity was defined as BMI>28.0 kg/m² and normal was defined as BMI=18.0-23.9 kg/m².

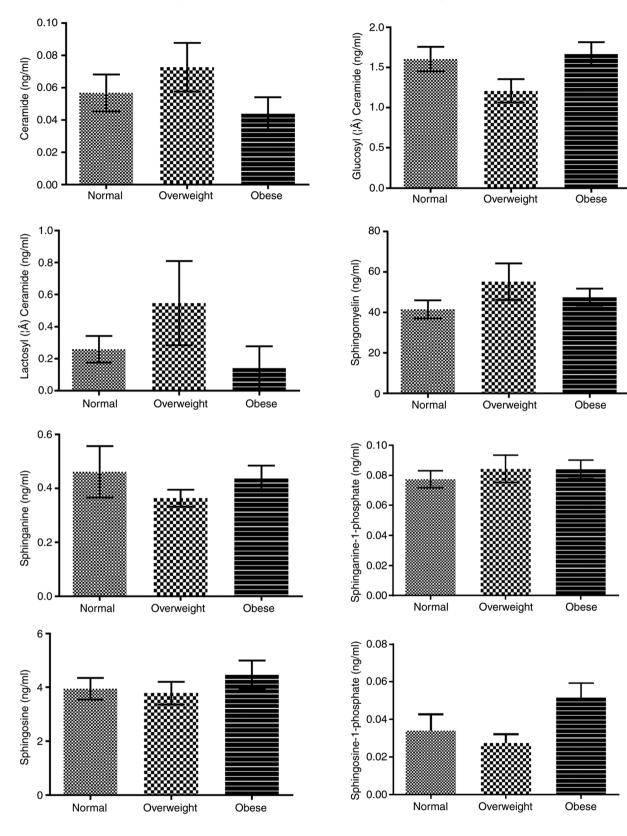


Figure S3. Comparison of serum sphingosine-1-phosphate and sphinganine among three groups of diabetic patients as stratified by HbA1c. HbA1c, glycated hemoglobin.

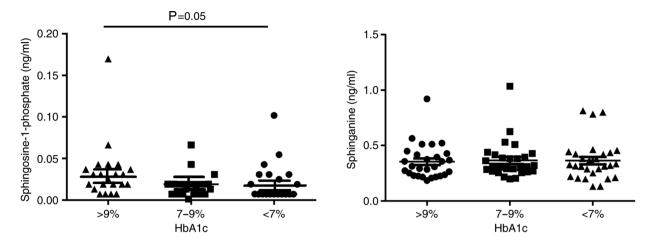


 Table SI. Clinical characteristics and laboratory data of healthy controls (n=112).

Item	Value
Females/males	58/54
Age (years)	45.71±12.94
BMI (kg/m^2)	24.19±4.09
WC (cm)	86.45±10.79
HC (cm)	98.74±8.14
BF (%)	30.64±8.11
LMI (kg/m^2)	17.27±2.13
FPG (mmol/l)	4.76±1.40
SBP (mmHg)	118.87±14.67
DBP (mmHg)	79.81±8.85
UA (μ mol/l)	319.89±71.99
HDL (mmol/l)	1.29±0.31
LDL (mmol/l)	2.65±0.77
TG (mmol/l)	1.38±0.73
TC (mmol/l)	4.51±0.90

Values are expressed as the mean ± standard deviation or n. BMI, body mass index; LMI, lean mass index; WC, waist circumference; HC, hip circumference; FPG, fasting plasma glucose; SBP, systolic blood pressure; DBP, diastolic blood pressure; UA, uric acid; HDL, high-density lipoprotein; LDL, low-density lipoprotein; TG, triglycerides; TC, total cholesterol; BF, body fat.