

Table S1: Correlations between plasma choline, betaine, PC, L-carnitine, TMAO, sphingomyelins, ceramides, and LPCs with body composition, cardiometabolic, and inflammatory markers

Anthropometric, muscle, cardiometabolic, and inflammatory markers															
Variable	BW	BMI	SMM	% BF	Grip strength	Myostatin	TC	LDL-C	Glucose	TG	Insulin	HOMA-IR	CRP	IL-8	
Choline				-0.44											
Betaine				-0.49											
PC			-0.42												
L-Carnitine									-0.49					0.47	
TMAO											0.51	0.50			
Sphingomyelins															
24:0							-0.42	-0.49	-0.63					0.74	
24:1	-0.61	-0.61	-0.47		0.51										
Ceramides															
C22:0							0.44								
LPCs															
14:0														0.44	
15:0														-0.56	
16:0						0.48									
16:1													-0.43		
16:1e									0.52						
18:0									0.42				-0.45		
18:1										0.42			-0.54	0.41	
18:1e													-0.44	0.53	
18:2				0.41									-0.39		
18:3													-0.55	0.40	
20:0													-0.57	0.55	
20:1										0.55			-0.39	0.47	
20:3													-0.44	0.37	
20:4	0.39	-0.39				-0.55	-0.43	-0.40						0.55	
22:5													-0.52		
26:0														0.53	

Relations were performed by Pearson's correlation coefficient. PC, phosphatidylcholine; TMAO, trimethylamine N-oxide. DMG, dimethylglycine; LPC, lysophosphatidylcholine; BW, body weight; BMI, body mass index; SMM, skeletal muscle mass; %BF, percent body fat; TC, total cholesterol; LDL-C, low-density lipoprotein cholesterol; TG, triglyceride; HOMA-IR, homeostatic model assessment for insulin resistance; CRP, C-Reactive Protein; IL-8, Interleukin-8.