

## Supplemental Tables

**Supplemental Table 1** Spearman correlation between serum percentage of specific fatty acids in the experimental groups with IR-related parameters.

	BWG	WAT	FBG	FINS	HOMA -IR	IL-1β	IL-6	TNF-α	FFA
<b>Phylum</b>									
C16:0	0.364*	-0.097	0.115	0.450*	0.489*	0.377*	0.481*	0.337*	0.377*
C18:0	0.417**	0.471**	0.466*	0.146	0.474**	0.680**	0.670**	0.642**	0.631**
C18:1n-9	0.026	-0.120	-0.034	-0.060	-0.072	0.217	0.240	0.157	0.007
C18:2n-6	0.543**	0.501*	0.509*	0.359*	0.585**	0.620**	0.565**	0.470**	0.525**
C18:3n-3	-0.510**	-0.203	-0.248*	-0.485*	-0.543**	-	-	-	-0.404**
C20:5n-3	-0.330	-0.428**	-0.466**	-0.027	-0.368**	-0.467*	-0.343*	-	-0.377*
C22:6n-3	-0.513**	-0.567**	-0.531**	-	-0.459**	-0.545*	-	-	-0.642**
XMYA	-	-	-	-	-	-	-	-	-

Note: The data shows the Spearman correlation coefficient between the levels of gut microbiota with IR-related parameters. \*  $p < 0.05$ , \*\*  $p < 0.01$