Supplementary materials

Table S1. Fatty acid profiles of HOPO and EVOO.

Table S2. Compositions of the diets.

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Figure S1. Venn diagram of operational taxonomic units abundance.

Table S1. Fatty acid profiles of HOPO and EVOO. HOPO: high-oleic acid peanut oil, EVOO: extra virgin olive oil.

Fatty acid / %	HOPO	EVOO
UFA	9.66	14.30
MUFA	77.23	78.48
PUFA	10.10	8.41

Table S2. Compositions of the diets. NC: normal control group, M: model group, HOPO: high-oleic

acid peanut oil group, EVOO: extra virgin olive oil group.

	NC	M	HOPO	EVOO
Fat / % kcal	10	45	45	45
Protein / % kcal	14.1	14.1	14.1	14.1
Carbohydrate / % kcal	75.9	40.9	40.9	40.9
HOPO / %	—	—	10	—
EVOO / %	—	—	—	10
Soybean oil / %	4	3	—	—
Lard / %	—	19.6	12.6	12.6
Energy	3.6 kcal/g	4.5 kcal/g	4.5 kcal/g	4.5 kcal/g

Table S3. Composite specific bacterial primers

Target gene	Sequence(5'-3')	Product Length
Real-time primers		
ACC-1	F:GGACAGACTGATCGCAGAGA	75
	R:TGGAGAGCCCCACACACA	
CD36	F:GGAACTGTGGGCTCATTGC	68
	R:CATGAGAATGCCTCCAAACAC	
CPT1β	F:GGCACCTCTTCTGCCTTTAC	85
	R:TTTGGGTCAAACATGCAGAT	
FABP	F:AGCATCATAACCCTAGATGGCG	114
	R:CATAACACATTCCACCACCAGC	
FAS	F:CCCTTGATGAAGAGGGATCA	115
	R:ACTCCACAGGTGGGAACAAG	
PGC1α	F:GGAGCCGTGACCACTGACA	176
	R:TGGTTTGCTGCATGGTTCTG	
UCP1	F:TAAGCCGGCTGAGATCTTGT	84
	R:GGCCTCTACGACTCAGTCCA	
UCP3	F:ATGAGTTTTGCCTCCATTCG	184
	R:GGCGTATCATGGCTTGAAAT	
GAPDH	F:GTCGTGGATCTGACGTGCC	72
	R:TGCCTGCTTCACCACCTTCT	
16S rRNA (V3+V4) primers		
	F:ACTCCTACGGGAGGCAGCA	
	R:GGACTACHVGGGTWTCTAAT	

Figure S1. Venn diagram of operational taxonomic units abundance. NC: normal control group,

M: model group, HOPO: high-oleic acid peanut oil group, EVOO: extra virgin olive oil group.
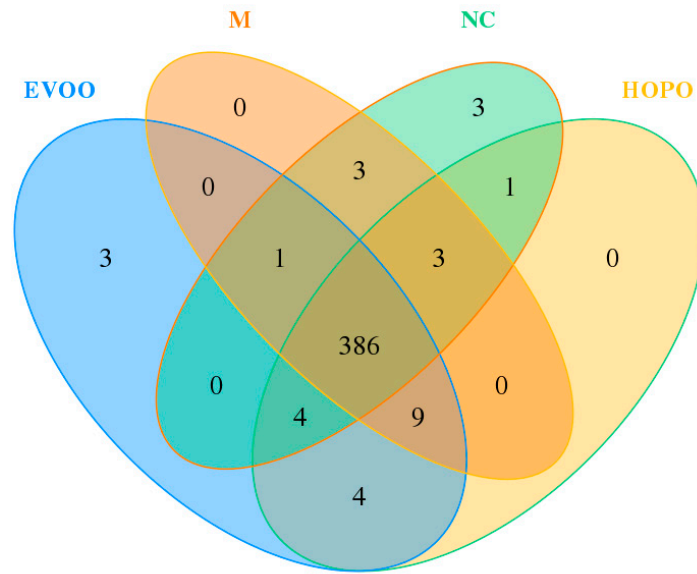
Table S4. Simpson, Shannon, ACE and Chao1. NC: normal control group, M: model group, HOPO:

high-oleic acid peanut oil group, EVOO: extra virgin olive oil group.

	NC	M	HOPO	EVOO
Simpson	0.044±0.011	0.043±0.012	0.053±0.034	0.054±0.019
Shannon	4.00±0.17	3.95±0.22	3.91±0.41	3.81±0.31
ACE	343.87±12.01a	347.95±18.74a	356.04±17.66b	369.23±14.60ab
Chao1	348.54±9.54a	351.29±19.03a	361.13±22.94ab	374.92±20.01b

Data are expressed as means ±SD. The different letters represent significant differences between

different groups ($p < 0.05$).