Table S1. The origins of tangerine peel oil sample

Tangerine peel oil sample	Area of source for dried tangerine peels
TPO1	Xinhui City, Guangdong Province
TPO2	Xinhui City, Guangdong Province
TPO3	Xinhui City, Guangdong Province
TPO4	Zhaoqing City, Guangdong Province
TPO5	Zhaoqing City, Guangdong Province
TPO6	Qingyuan City, Guangdong Province
TPO7	Qingyuan City, Guangdong Province
TPO8	Qingyuan City, Guangdong Province
TPO9	Qingyuan City, Guangdong Province
TPO10	Yunfu City, Guangdong Province
TPO11	Yunfu City, Guangdong Province
TPO12	Yunfu City, Guangdong Province
TPO13	Wuzhou City, Guangxi Province
TPO14	Wuzhou City, Guangxi Province
TPO15	Wuzhou City, Guangxi Province
TPO16	Wuzhou City, Guangxi Province
TPO17	Guilin City, Guangxi Province
TPO18	Guilin City, Guangxi Province
TPO19	Guilin City, Guangxi Province
TPO20	Fuzhou City, Jiangxi Province
TPO21	Sichuan Province
TPO22	Sichuan Province

Table S2. Composition and energy distribution of animal diets

	GROUPS				
	ND	HFD	HFD+LTAN	HFD+MTAN	HFD+HTAN
INGREDIENT (%)					
Standard rat chow	100	52.2	52.2	52.2	52.2
Sucrose	0	20	20	20	20
Lard	0	15	15	15	15
Casein	0	10	10	10	10
Cholesterol	0	1.2	1.2	1.2	1.2
Calcium hydrogen phosphate (CaHPO4)	0	0.6	0.6	0.6	0.6
Calcium carbonate stone powder	0	0.4	0.4	0.4	0.4
Premix	0	0.4	0.4	0.4	0.4
Sodium cholate	0	0.2	0.2	0.2	0.2
TAN	0	0	0.02	0.04	0.08
ENERGY DISTRIBUTION					
Protein (% kcal)	21	17	17	17	17
carbohydrate (% kcal)	68	46	46	46	46
Fat (% kcal)	11	37	37	37	37
Total caloric value (kcal/g diet)	3.4	4.4	4.4	4.4	4.4

Table S3. Primer sequences used for qRT-PCR

Gene	Primer Sequence
GAPDH	F:5'-AGGTCGGTGTGAACGGATTTG-3'
	R:5'-TGTAGACCATGTAGTTGAGGTCA-3'
CPT-1	F:5′-GCTCGCACATTACAAGGACAT-3′
	R: 5′-TGGACACCACATAGAGGCAG-3′
ACC	F:5′-AGGAAGATGGTGTCCCGCTCTG-3′
	R: 5′-GGGGAGATGTGCTGGGTCAT-3′
FAS	F:5′-CTTGGGTGCCGATTACAACC-3′
	R: 5′-GCCCTCCCGTACACTCACTC-3′
SREBP-1c	F:5′-AGCCATGGATTGCACATTTG-3′
	R: 5′-GGTACATCTTTACAGCAGTG-3′
AMPK	F:5′-ACACCTCAGCGCTCCTGTTC-3′
	R: 5′-CTGTGCTGGAATCGACACT-3′
PPARα	F:5′-CATCGAGTGTCGAATATGTGG-3′
	R: 5′-GCAGTACTGGCATTTGTTCC-3′
PPARγ	F:5′-CATGACCAGGGAGTTCCTCAA-3′
	R:5′-AGCAAACTCAAACTTAGGCTCCAT-3′
CYP7A1	F:5'-AACAACCTGCCAGTACTAGATAGC -3'
	R:5'-GTGTAGAGTGAAGTCCTCCTTAGC -3'
CYP27A1	F:5'-GCCTCACCTATGGGATCTTCA -3'
	R:5'-TCAAAGCCTGACGCAGATG -3'
SCD1	F:5'-TCCTCCTTGGATTGTGTAGAAACTT-3'
	R:5'-AATGTCAGAAGAAATCAGGTGGGTA-3'
LXRα	F:5'-TCAGAAGAACAGATCCGCTTG-3'
	R:5'-CGCCTGTTACACTGTTGCT-3'