

Supplementary Table 1: Composition of High fat diet

Ingredient	g	Kcal
Maltodextrin	202	808
Sucrose	109	436
Lard	334	3006
Casein	310	1240
AIN-76 Vitamin mixture	10	0
AIN-76 Mineral mixture	35	0
Total	1000	5490

Supplementary Table 2: High fat diet-induced obese phenotype

	Body weight (g)		Energy intake (Kcal/day)	Blood Glucose (mmol/L) 13-week-old	Serum insulin (μ U/ml) 13-week-old
	6-week-old	13-week-old			
CON	22.0 \pm 1.4	26.1 \pm 1.7	11 \pm 1.7	5 \pm 0.4	8.2 \pm 2.7
HFD	22.8 \pm 1.8	30.2 \pm 4.1*	13 \pm 1.9	9.77 \pm 2.7*	17.5 \pm 3.9*

Statistical analysis of the difference between two groups was determined by using Student's t-test (SigmaPlot 12.0)

* P < 0.05.

Supplementary Table 3: Primer sequences for real-time qPCR

Gene name	Forward (5'-->3')	Reverse (5'-->3')
Sirtuin1	GCTGACGACTTCGACGACG	TCGGTCAACAGGAGGTTGTCT
Ppargc1a	TATGGAGTGACATAGAGTGTGCT	CCACTTCAATCCACCCAGAAAG
Atp5a1	TCTCCATGCCTCTAACACTCG	CCAGGTCAACAGACGTGTCAG
Ndufs8	AGTGGCGGCAACGTACAAG	TCGAAAGAGGTAACCTTAGGGTCA
Sdhb	AATTTGCCATTTACCGATGGGA	AGCATCCAACACCATAGGTCC
Uqcrc1	AGACCCAGGTCAGCATCTTG	GCCGATTCTTTGTTCCCTTGA
Cox5b	TTCAAGGTTACTTCGCGGAGT	CGGGACTAGATTAGGGTCTTCC
GADPH	AGGTCGGTGTGAACGGATTTG	TGTAGACCATGTAGTTGAGGTCA