

Supplemental Table S1:

Real-time PCR primer sequences

<i>Gene</i>	Forward primer	Reverse primer
<i>Pparg</i>	5'-TCGCTGATGCACTGCCTATG-3'	5'-GAGAGGTCCACAGAGCTGATT-3'
<i>Ppara</i>	5'-AACATCGAGTGTCTGAATATGTGG-3'	5'-AGCCGAATAGTTCGCCGAAAG-3'
<i>C/EBPa</i>	5'-CGCAAGAGCCGAGATAAAGC-3'	5'-CGGTCATTGTCACTGGTCAACT-3'
<i>leptin</i>	5'-TGTGCTGCAGATAGCCAATGA-3'	5'-TGGAGAAGGCCAGCAGATG-3'
<i>Lpl</i>	5'-TGTGTCTTCAGGGGTCCTTAG-3'	5'-GGGAGTTTGGCTCCAGAGTTT-3'
<i>Fas</i>	5'-TTGCTGGCACTACAGAATGC-3'	5'-AACAGCCTCAGAGCGACAAT-3'
<i>Fabp4</i>	5'-GGGGCCAGGCTTCTATTCC-3'	5'-GGAGCTGGGTAGGTATGGG-3'
<i>Fabp5(mal1)</i>	5'-ACCCTGGGAGAGAAGTTTGAA-3'	5'-ATCCCACTCCTGATGCTGAA-3'
<i>TNFα</i>	5'-ACCCTCACACTCAGATCATCTTC-3'	5'-TGGTGGTTTGCTACGACGT-3'
<i>IL-6</i>	5'-ACAACCACGGCCTTCCCTACTT-3'	5'-CACGATTTCCAGAGAACATGTG-3'
<i>IL-1β</i>	5'-TGGGCCTCAAAGGAAAGAAT-3'	5'-CAGGCTTGTGCTCTGCTTGT-3'
<i>GAPDH</i>	5'-GTATGACTCCACTCACGGCAA-3'	5'-GGTCTCGCTCCTGGAAGATG-3'

Supplemental Table S2:

Cytotoxicity of 8g in cell lines

Cell line	Cytotoxicity IC ₅₀ (μM)
3T3-L1	60.1±0.5
RAW264.7	58.7±0.2
THP-1	85.5±0.1

Supplemental Table S3:

Effects of 8g on Bodyweight, food intake rate, plasma biochemical parameters in DIO mice for 6 weeks

	Normal	Model	8g (5 mg/kg)	8g (10 mg/kg)	8g (20 mg/kg)
n	6	6	6	6	6
TC (mM)	2.41±0.02***	5.46±0.27	4.30±0.22*	3.13±0.70*	2.72±0.63**
HOMA-IR	0.73±0.04**	5.92±0.21	5.68±0.22	4.64±0.23*	3.68±0.21*
GTT AUC (mg/dL/min)	17515±37**	30548±192	29052±72	23096±60*	22151±112*
ITT AUC (mg/dL/min)	5648±19*	14263±264	10186±42	9785±66	7781±45
HbA1c (%)	4.47±0.04	4.97±0.07	4.90±0.12	4.75±0.07	4.65±0.07

TC, total cholesterol; GTT, glucose tolerance test; ITT, insulin tolerance test; AUC, area under the curve; HOMA-IR, homeostasis model assessment (HOMA) of insulin resistance. Values are expressed as means±S.E.M. * $P<0.05$, ** $P<0.01$, and *** $P<0.001$ vs. the Model group.

Supplemental Figure S1: Effect of **8g** on the lipid accumulation in 3T3-L1 adipocytes. (A) The absorbance of Oil Red O staining was quantitated at 500nm. (B) Effect of **8g** on the expression of *fabp4* and *Fabp5* genes in LL2 cells.

