



Supplementary Figure S1. Effect of CA on browning of 3T3-L1 adipocytes. Western blot analysis of UCP1 and PGC1α were performed in 3T3-L1 treated with or without CA. Results were expressed relative to GAPDH. MDI, differentiation medium; CA, bitter orange (*Citrus aurantium* Linné).

Supplementary Table S1. Composition of experimental diets (g/kg).

Formula	NC	HFD
Casein	200.0	265.0
L-Cystine	3.0	4.0
Corn Starch	397.486	-
Maltodextrin	132.0	160.0
Sucrose	100.0	90.0
Lard	-	310.0
Soybean Oil	70.0	30.0
Cellulose	50.0	65.5
Mineral Mix ^a	35.0	48.0
Calcium Phosphate	-	3.4
Vitamin Mix ^b	10.0	21.0
Choline Bitartrate	2.5	3.0
TBHQ, antioxidant ^c	0.014	-
Blue Food Color	-	0.1

^aMineral Mix, AIN-93G-MX (94046) containing (g/kg): calcium phosphate dibasic 500, sodium chloride 74, potassium citrate 220, potassium sulfate 52, magnesium oxide 24, manganous carbonate 3.5, ferric citrate 6, zinc carbonate 1.6, cupric carbonate 0.3, potassium iodate 0.01, sodium selenite 0.01, chromium potassium sulfate 0.55

^bVitamin Mix, AIN-93-VX (94047) containing (g/kg): thiamin HCl 0.6, riboflavin 0.6, pyridoxine HCl 0.7, niacin 3, calcium pantothenate 1.6, folic acid 0.2, biotin 0.02, vitamin B12 (0.1 % trituration in mannitol) 1, dry vitamin A palmitate (500,000 U/g) 0.25, manadione sodium bisulfite complex 0.15

^cTBHQ: tertiary butylhydroquinone

Supplementary Table S2. The primer sequences used for Real-Time RT-PCR.

Gene	Primer sequences	Accession No. (GenBank)
<i>Pparg</i>	5'-TGCCAGTACTGCCGTTTTCA-3' (sense) 5'-GCCAATTGCATTGTGTGACAT-3' (antisense)	NM_001127330
<i>Cebpa</i>	5'-GCCGAGATAAAGCCAAACAA-3' (sense) 5'-CCTTGACCAAGGAGCTCTCA-3' (antisense)	NM_001287514
<i>Fabp4</i>	5'-CGTAAATGGGGATTGGTCA-3' (sense) 5'-TCGACTTTCCATCCCACTTC-3' (antisense)	NM_024406
<i>Adipoq</i>	5'-AGACCTGGCCACTTTCTCCTCATT-3' (sense) 5'-AGAGGAACAGGAGAGCTTGCAACA-3' (antisense)	NM_009605
<i>Retn</i>	5'-TTCCTTGTCCCTGAACTGCT-3' (sense) 5'-AGCTCAAGACTGCTGTGCCT-3' (antisense)	NM_001204959
<i>Pgc1a</i>	5'-AATGCAGCGGTCTTAGCACT-3' (sense) 5'-TGTTGACAAATGCTCTTCGC-3' (antisense)	NM_008904
<i>Ucp1</i>	5'-AACTGTACAGCGGTCTGCCT-3' (sense) 5'-TAAGCCGGCTGAGATCTTGT-3' (antisense)	NM_009463
<i>Prdm16</i>	5'-TGGGCTCACTACCCTACCAC-3' (sense) 5'-GAC TTT GGC TCA GCC TTG AC-3' (antisense)	NM_001291026
<i>Sirt3</i>	5'-TCGAAGGAAAGATGTGGTCC-3' (sense) 5'-ATCTGTCTGTCCATCCAGC-3' (antisense)	NM_002433
<i>Cidea</i>	5'-TCAGACCTTAAGGACAACACGCA-3' (sense) 5'-TTCTTTGGTTGCTTGACAGACTGGG-3' (antisense)	NM_007702
<i>Cytc</i>	5'-TTGTTTTCAGAAGTGTGCCAG-3' (sense) 5'-CCAGGTGATGCCTTTGTTCT-3' (antisense)	NM_007808
<i>Gapdh</i>	5'-AACTTTGGCATTGTGGAAGG-3' (sense) 5'-GGATGCAGGGATGATGTCT-3' (antisense)	NM_001289726