

Supplemental data for:

**Beneficial Effects of a Low-dose of Conjugated Linoleic Acid on Body
Weight Gain and Other Cardiometabolic Risk Factors in Cafeteria Diet-fed
Rats**

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Table S1. Primer sequences used in qPCR amplification.

Gene	Sequence	Product size (bp)	GenBank accession n°
<i>Ccl2</i>	Forward 5'-GCTGCTACTCATTCACTGGC Reverse 5'-GGTGCTGAAGTCCTTAGGGT	241	NM_031530.1
<i>Tnf-α</i>	Forward 5' - ACCACGCTCTTCTGTCTACTG Reverse 5' - CTTGGTGGTTTGCTACGAC	169	NM_012675.3
<i>Ppia</i>	Forward 5' - CTTGAGCTGTTTGCAGACAA Reverse 5' - AAGTCACCACCCTGGCACAT	138	NM_017101.1
<i>Hmgcr</i>	Forward 5' - CCTGGTCTTGTTCACGCTC Reverse 5' - GCTCGATGTCCATGCTGATC	210	NM_013134.2
<i>Ldlr</i>	Forward 5' - AGTGCGATGGCCCTAACAAA Reverse 5' - CTCGTTGGTCTTGCACTCCT	128	NM_175762.2
<i>Cyp7a1</i>	Forward 5' - GTTGATTCCGTACCTGGGCT Reverse 5' - TGCTTCTGTGTCCAAATGCC	230	NM_012942.2
<i>Asbt</i>	Forward 5' - TGGGCTTCCTCTGTCAGTTT Reverse 5' - GCAAAGGGGCATCATTCCAA	224	NM_017222.2

Ccl2, C-C motif chemokine ligand 2; *Tnf- α* , tumour necrosis factor α ; *Ppia*, peptidylprolyl isomerase A; *Hmgcr* reductase, 3-hidroxi-3-metil-glutaril-CoA reductase; *Ldlr*, Low-Density Lipoprotein receptor; *Cyp7a1*, Cytochrome P450 Family 7 Subfamily A Member 1; *Asbt*, Apical Sodium Dependent Bile Acid Transporter.

Table S2. Relative tissue weights.

	STD	CAF	CLA 100	CLA 200	CLA 300
Liver (%)	2.92 ± 0.1	2.98 ± 0.1	2.94 ± 0.1	3.00 ± 0.1	2.80 ± 0.1
Muscle (%)	0.59 ± 0.01 ^a	0.45 ± 0.03 ^b	0.49 ± 0.02 ^b	0.48 ± 0.02 ^b	0.44 ± 0.01 ^b
eWAT (%)	2.03 ± 0.2 ^a	3.61 ± 0.3 ^b	3.73 ± 0.4 ^{b, c}	3.68 ± 0.3 ^{b, c}	4.57 ± 0.1 ^c
iWAT (%)	0.23 ± 0.03 ^a	1.03 ± 0.2 ^b	0.68 ± 0.2 ^{a, b}	1.22 ± 0.4 ^b	1.34 ± 0.3 ^b
rWAT (%)	0.83 ± 0.04 ^a	1.72 ± 0.2 ^b	1.77 ± 0.2 ^b	1.75 ± 0.2 ^b	2.02 ± 0.2 ^b
BAT (%)	0.12 ± 0.01 ^a	0.22 ± 0.02 ^c	0.20 ± 0.01 ^{b, c}	0.18 ± 0.01 ^b	0.22 ± 0.01 ^c

BAT, brown adipose tissue; Bw, body weight; eWAT, iWAT and rWAT, epididymal, inguinal and retroperitoneal white adipose tissue, respectively. Values are presented as the mean ± SEM of six animals per group. Different letters represent significant differences between groups (one-way ANOVA and Duncan's post hoc test; P<0.05).

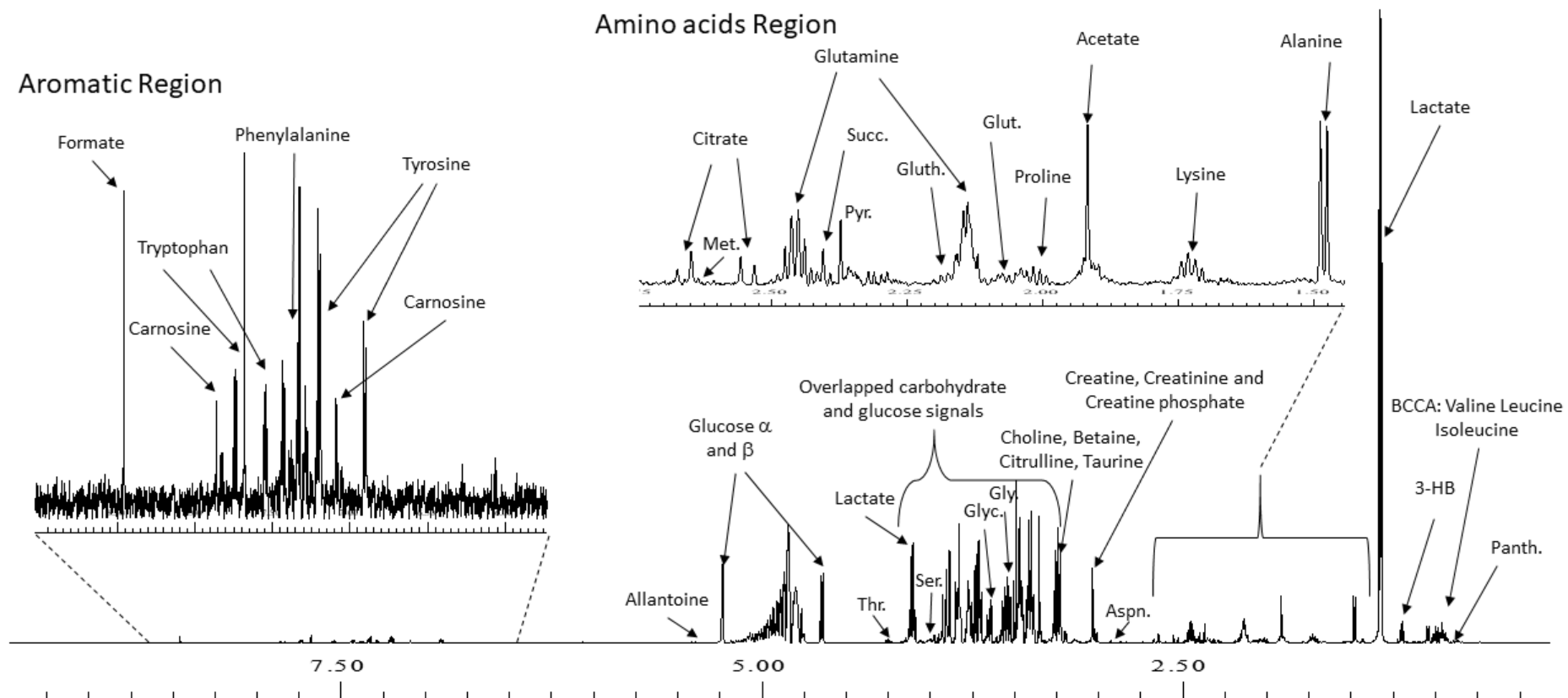


Figure S1. General view and metabolite assignment of representative serum extract NMR aqueous spectra. BCCA: Branched Chain Aminoacids; 3-HB: 3-Hydroxybutirate; Panth: Panthotenate; Glut: Glutamate; Gluth: Glutathione; Asp: Asparagine; Pyr: Pyruvate; Succ: Succinate; Met: Methionine; Gly: Glycine; Glyc: Glycerol; Ser: Serine; Thr: Threonine;.

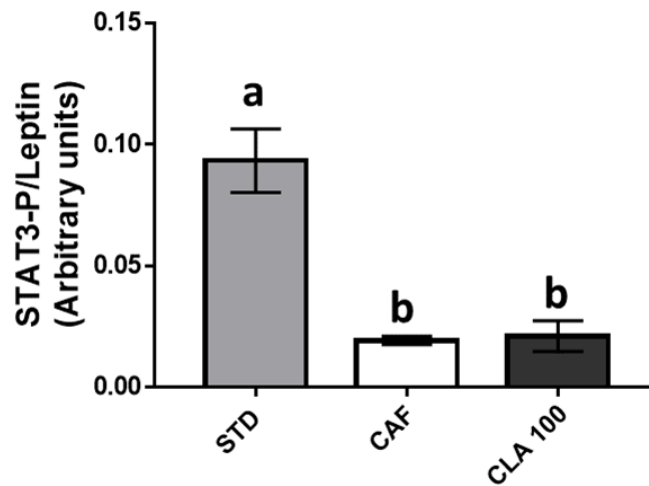


Figure S2. Hepatic leptin sensitivity. Leptin sensitivity values was obtained by the ratio between p-STAT3 (assessed by western blotting) and serum leptin levels as previously described [1]. The rats were fed the STD or CAF diet for 9 weeks and then were treated orally with CLA at 100 mg per kg of bw for 3 weeks. Data are expressed as the mean \pm SEM. ^{a,b} denotes $p < 0.05$ assessed by one-way ANOVA and Duncan's post hoc test. CAF: cafeteria diet; CLA: conjugated linolenic acid; STD: standard chow diet.

[1] Ardid-Ruiz A, Ibars M, Mena P, Del Rio D, Muguerza B, Bladé C, Arola L, Aragonès G, Suárez M. Potential Involvement of Peripheral Leptin/STAT3 Signaling in the Effects of Resveratrol and Its Metabolites on Reducing Body Fat Accumulation. *Nutrients*. 2018, 10, E1757