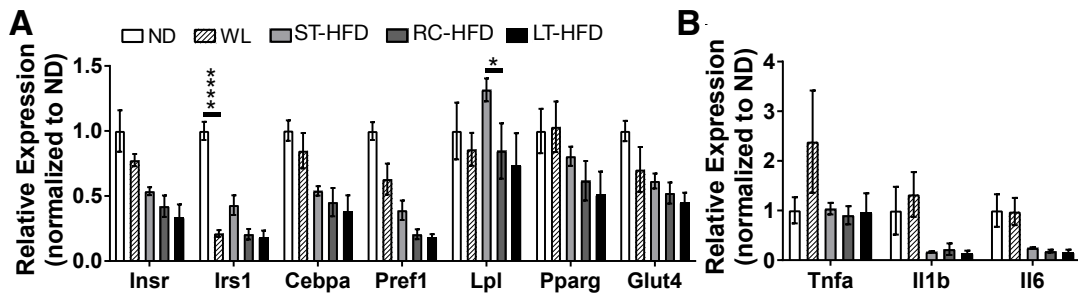
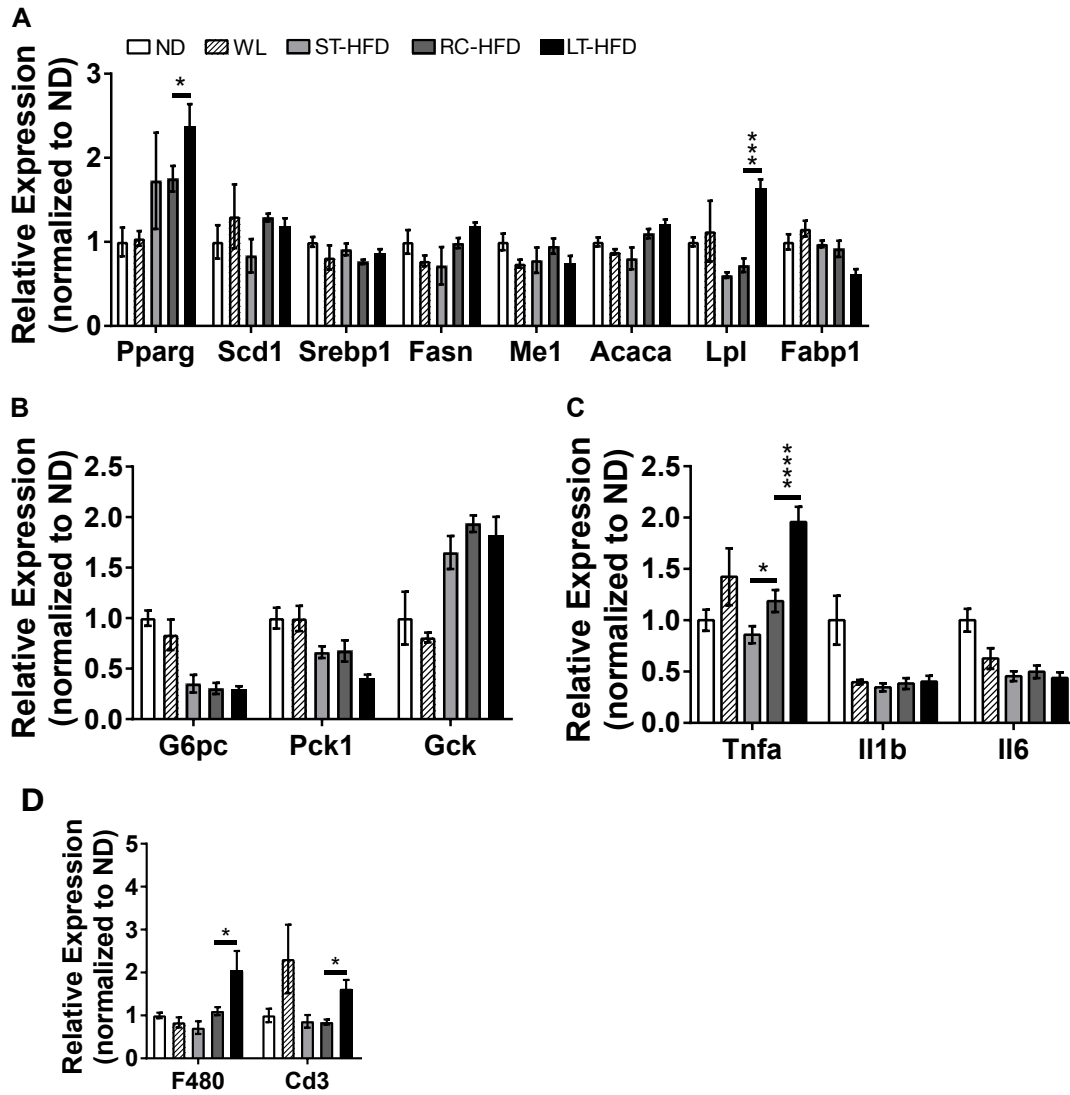


**Figure S1**



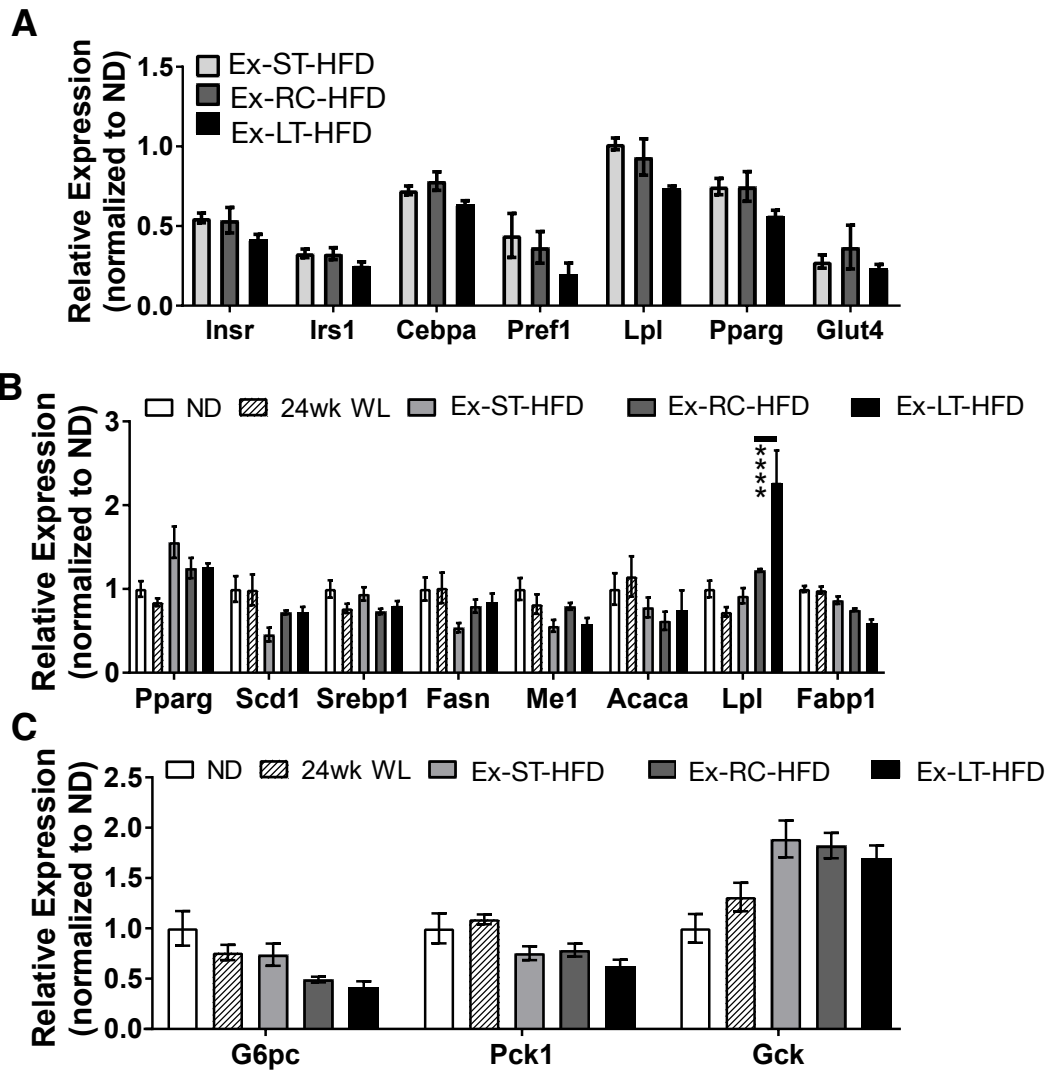
Inguinal adipose tissue gene expression. (A) Adipogenic genes. (B) Inflammatory genes. \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*\*  $p < 0.0001$ , significance was only compared for ST HFD versus RC HFD, LT HFD versus RC HFD or ND versus WL.

**Figure S2**



Liver lipid metabolism and lipogenesis gene expression is not significantly different between ST HFD and RC HFD mice groups. Gene expression for select liver (A) lipid metabolism, (B) glucose metabolism, (C) inflammatory cytokine genes, and (D) leukocyte genes. \*  $p < 0.05$ , \*\*\*  $p < 0.001$ , \*\*\*\*  $p < 0.0001$ , significance was only compared for ST HFD versus RC HFD, LT HFD versus RC HFD or ND versus WL.

**Figure S3**



Adipose tissue and liver gene expression after rechallenge after prolonged period off diet. (A) Expression of select adipocyte maturation genes from whole eWAT. Gene expression for select liver (B) lipid metabolism and (C) glucose metabolism genes. \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ , \*\*\*\*  $p < 0.0001$ , significance was only compared for Ex-ST-HFD versus Ex-RC-HFD, Ex-LT-HFD versus Ex-RC-HFD, or ND versus WL.

**Table S1 - Primers for qRT-PCR analysis**

<b>Gene</b>	<b>Forward Primer</b>	<b>Reverse Primer</b>
<b>Insr</b>	TTTGTCATGGATGGAGGCTA	CCTCATCTTGGGGTTGAACT
<b>Irs1</b>	CGATGGCTTCTCAGACGTG	CAGCCCGCTTGTTGATGTTG
<b>Cebpa</b>	CAAGAACAGCAACGAGTACCG	GTCACTGGTCAACTCCAGCAC
<b>Pref1 (Dlk1)</b>	TTCGGGCTTGACACTCAA	GGAGCATTCTGACTGGCCTTT
<b>Lpl</b>	TGTGTCTTCAGGGGTCCTTAG	GGGAGTTTGGCTCCAGAGTTT
<b>Pparg</b>	GGAAGACCACTCGCATTCTT	TCGCACTTTGGTATTCTTGGAG
<b>Akt1</b>	ATGAACGACGTAGCCATTGTG	TTGTAGCCAATAAAGGTGCCAT
<b>Glut4</b>	GTGACTGGAACACTGGTCCTA	CCAGCCACGTTGCATTGTAG
<b>Tnfa</b>	ACGGCATGGATCTCAAAGAC	AGATAGCAAATCGGCTGACG
<b>Il1b</b>	AAATACCTGTGGCCTTGGGC	CTTGGGATCCACACTCTCCAG
<b>Il6</b>	AGTGAGGAACAAGCCAGAGC	CATTTGTGGTTGGGTCAGG
<b>Scd1</b>	GCTGGAGTACGTCTGGAGGAA	TCCCGAAGAGGCAGGTGTAG
<b>Srebp1</b>	GATGTGCGAACTGGACACAG	CATAGGGGGCGTCAAACAG
<b>Fasn</b>	GGAGGTGGTGATAGCCGGTAT	TGGGTAATCCATAGAGCCCAG
<b>Me1</b>	GTCGTGCATCTCTCACAGAAG	TGAGGGCAGTTGGTTTTATCTTT
<b>Acaca</b>	TAATGGGCTGCTTCTGTGACTC	CTCAATATCGCCATCAGTCTTG
<b>Fabp1</b>	ATGAACTTCTCCGGCAAGTACC	CTGACACCCCCTTGATGTCC
<b>G6pc</b>	CGACTCGCTATCTCCAAGTGA	GTTGAACCAGTCTCCGACCA
<b>Pck1</b>	CTGCATAACGGTCTGGACTTC	CAGCAACTGCCCGTACTCC
<b>Gck</b>	ATGGCTGTGGATACTACAAGGA	TTCAGGCCACGGTCCATCT
<b>Fabp4</b>	AAGGTGAAGAGCATCATAACCCT	TCACGCCTTTCATAACACATTCC