



Supplementary Figure 1 Fasting serum lipid profile and pancreatic amylase activity in response to dietary interventions. A) triglycerides (TG), B) total cholesterol levels, C) HDL-Cholesterol, D) ALT activity (U/L), E) AST activity (U/L), and F) pancreatic amylase activity were measured at weeks 4 and 8 in control, HFD, HF-EFr, and HFrD groups. Data are expressed as mean \pm SEM (n = 5 per group).

Statistical analysis was performed using two-way ANOVA with Tukey's *post hoc* test unless otherwise indicated. Data are expressed as mean \pm SEM (n=5/group).

^a $p < 0.05$ vs. control;

^b $p < 0.05$ vs. HFD;

^c $p < 0.05$ vs. HF-EFr.

Supplementary Table 1 List of primers that involved in this study:

Name	Forward 5'-3'	Reverse 5'-3'
IRS-2	CTACCCACTGAGCCCAAGAG	CCAGGGATGAAGCAGGACTA
MC4R	CACAGTATCGGGCGTTCTTT	GTAATTGCGCCCTTCATGTT
Leptin receptor	GTTCTGGCCATCAATTCCAT	ATGGGCCATGAGAACGTAAG
IL-1b	TACCTATGTCTGGCCCGTGGA G	ATCATCCCACGAGTCACACAGG
PAI-1	TCATCCTGCCTAAGTTCTCTC TG	CGATCTTGACCTTTTGTAGTGCT
CXCL-1	GGCAGGGATTCACTTCAAGA	GCCATCGGTGCAATCTATCT
PECAM-1	TCAGCTGCCAGTCAGTAAAT GG	TCTGGAAGTTGCTCTTTGCTCTT
GCR	CATTACCACAGCTCACCCCTA	TCACTGCTGCAATCACTTGAC
LXR- α	TGTTGACTTTGCCAAACAGC	GTTGTACCTCCGCGATGTCT
GluT5	TGCAGAGCAACGATGGAGAA A	ACAGCAGCGTCAGGGTGAAG
β -actin	ACCACCATGTACCCAGGCAT T	CCACACAGAGTACTTGCGCTCA
UBC	CACCAAGAAGGTCAAACAGG AA	AAGACACCTCCCCATCAAACC