Supplementary materials

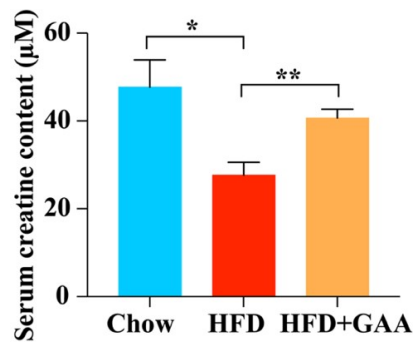**Table S1.** Primer sequences used for qRT-PCR.

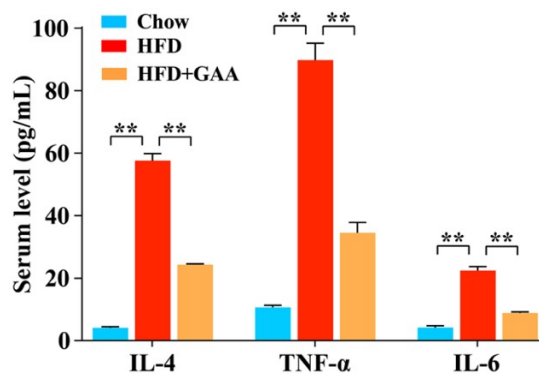| Genes	Forward (5′–3′)	Reverse (5′–3′)
18S	TTGTTGGTTTTCGGAACTGAGGC	GGCAAATGCTTTCGCTCTGGTC
Ndufv1	TGTTTGGATGCCCCACAACT	CTGTGACACCACCAGCATGT
IL-4	AGTGAGCTCGTCTGTAGGGC	CAGGCATCGAAAAGCCCGAA
TNF-α	GCCAACGGCATGGATCTCAA	TAGCAAATCGGCTGACGGTG
IL-1β	TCGCAGCAGCACATCAACAA	TCCACGGGAAAGACACAGGT
IL-6	CCACTTCACAAGTCGGAGGC	TCTGCAAGTGCATCATCGTTGT
PPARγ	AGGCCGAGAAGGAGAAGCTGTTG	TGGCCACCTCTTTGCTCTGCTC
FASN	GGAGGTGGTGATAGCCGGTAT	TGGGTAATCCATAGAGCCCAG
ACC	AGCAAGGTCGAGACCGAAAG	TAAGACCACCGGCGGATAGA
HSL	TCGGGGAGCACTACAAACG	CACGCAACTCTGGGTCTATGG
ATGL	GGTGCCAACATTATTGAGGTG	AAACACGAGTCAGGGAGATGC
FABP1	GTGGTCCGCAATGAGTTCAC	TGTCGCCCAATGTCATGGT
APOB	CAAGTCCACGTCATCCCCAA	GGGGCTGGACACTTCAATCA
UCP1	GTGAACCCGACAACTTCCGAA	TGCCAGGCAAGCTGAAACTC
PGC-1α	GAAATCCGAGCGGAGCTGAA	GAATAGGGCTGCGTGCCATC
Cidea	ATCACAACTGGCCTGGTTACG	TACTACCCGGTGTCCATTTCT
Ndufs3	CGTGTGTTCTCCGGCTACTT	TCAAGGCAGGACACCTGAAC
Sdhb	AGAGTCGGCCTGCAGTTTC	CAACACCATAGGTCCGCACT
Sdhd	CAAGCCACCACTCTGGTTCC	GGGTGTCCCCATGAACGTAG
Uqcrc1	GGCTAACCCAGACAACGTGA	GGTACATAGGCGCATCCACT
Uqcrc2	CCGGGTCCTTCTCGAGATTTT	TGCTTCAATCCCACGGGTTA
Cox2	CCCACTTTGCCATTATATTTGTAGG	TTTCATGTGGTGTAAGCATCTGG
Cox7a	CAGCGTCATGGTCAGTCTGT	AGAAAACCGTGTGGCAGAGA
Atp5a1	CCTTGACCTTCCTTTGCGCT	CATTTTTGGAGACCAGTCCCG
Gamt	GCAGCCACATAAGGTTGTTCC	CTCTTCAGACAGCGGGTACG

Ckb	GCCTCACTCAGATCGAAACTC	GGCATGTGAGGATGTAGCCC
Alpl	TCAACACCAATGTAGCCAAGA	GTAGCTGGCCCTTAAGGATTC
Slc6a8	TGCATATCTCCAAGGTGG CAG	CTACAAACTGGCTGTCCAGA

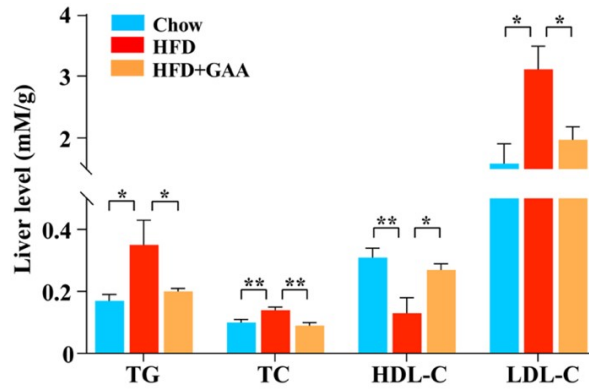
Fig. S1 The average food intake weekly from the chow, HFD, and HFD+GAA groups

($n = 8$).
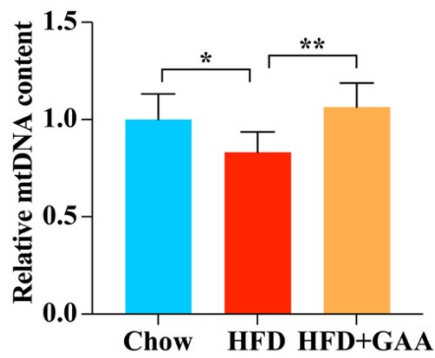

Fig. S2 The serum creatine content from the chow, HFD, and HFD+GAA groups ($n = $

6). *$P < 0.05$, **$P < 0.01$.

Fig. S3 The serum levels of IL-4, TNF-α, and IL-6 in mice were determined by ELISA

($n = 6$). **$P < 0.01$.

Fig. S4 The levels of TG, TC, HDL-C and LDL-C in the liver of mice were determined by ELISA ($n = 6$). *$P < 0.05$, **$P < 0.01$.

Fig. S5 The relative mtDNA content (mtDNA/nDNA ratio) in the iWAT of mice ($n = 6$). *$P < 0.05$, **$P < 0.01$.