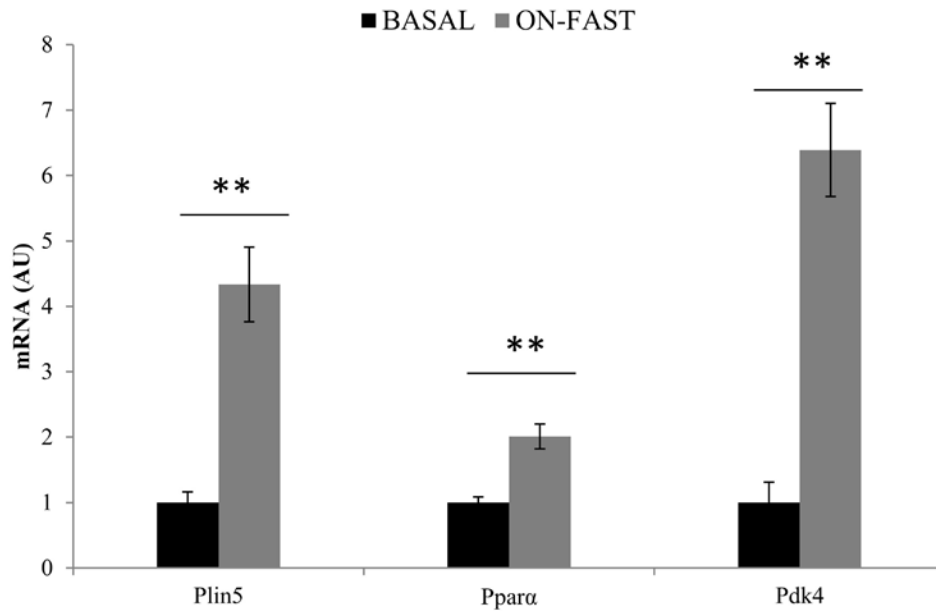


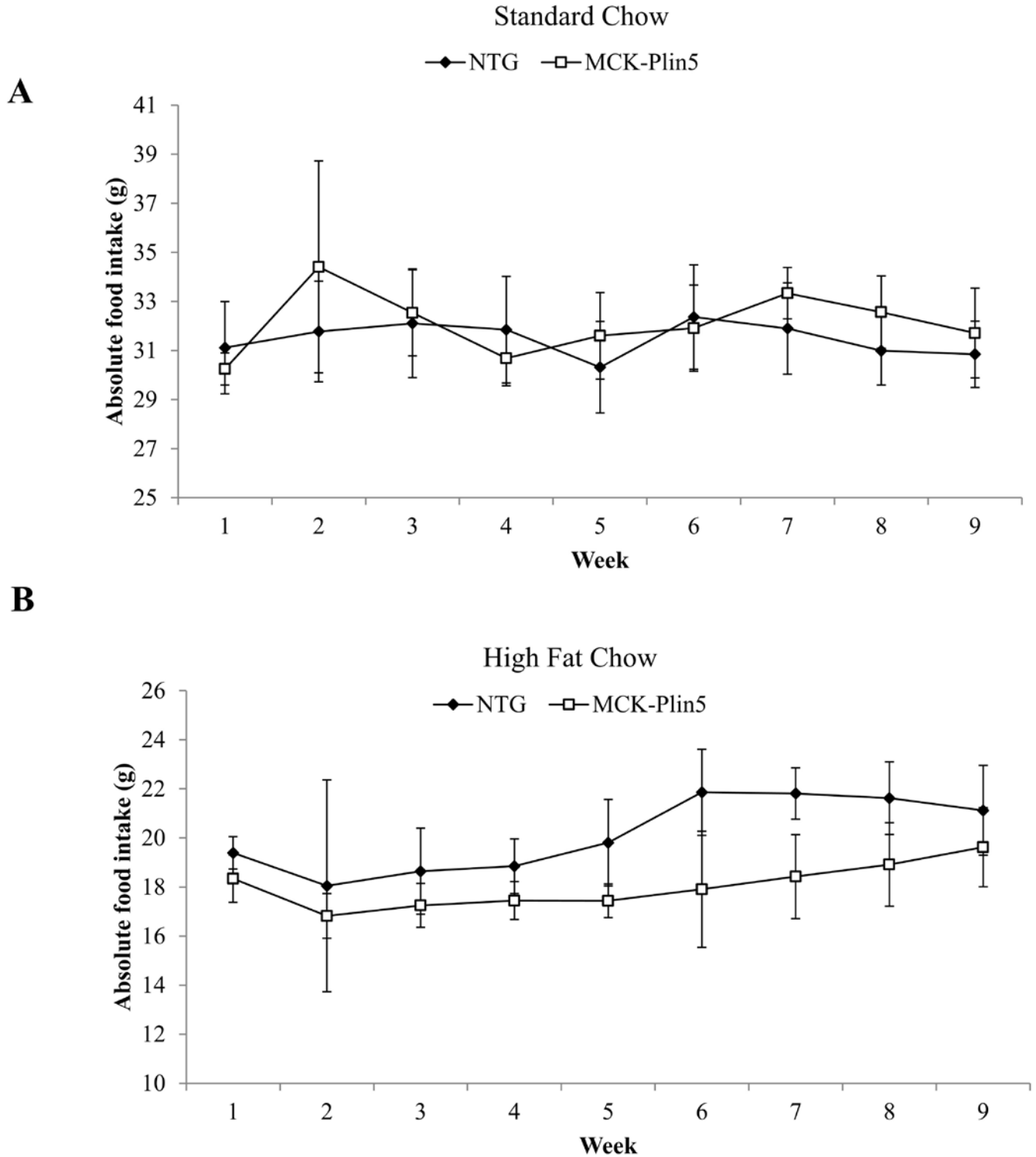
SUPPLEMENTARY DATA

Supplementary Figure 1. Muscle gene expression in NTG mice at basal (4 hr a.m. fast) or overnight fasting conditions. RT-qPCR quantification of (perilipin 5) Plin5 and fasting state indicators Peroxisome proliferator-activated receptor alpha (Ppar α) and Pyruvate Dehydrogenase Kinase 4 (Pdk4) are shown. (basal; n = 5, fasting; n = 6). **, p < 0.01



SUPPLEMENTARY DATA

Supplementary Figure 2. Food intake in MCK-Plin5 and NTG mice over a 9-week period. A) Absolute food intake in mice on standard chow diet. (NTG; n = 10, MCK-Plin5; n = 10). B) Absolute food intake in mice on a high-fat diet. (NTG; n = 10, MCK-Plin5; n = 10). Absolute value of food intake is represented as food intake (in grams) per mouse, per cage.



SUPPLEMENTARY DATA

Supplementary Table 1. RT-qPCR primers

Gene	Gene ID	PCR primers
Adiponectin	Adipoq	<i>Forward</i> GAT GGC ACT CCT GGA G <i>Reverse</i> TCT CCA GGC TCT CCT TT
Asparagine Synthetase	Asns	<i>Forward</i> TTC CGT GCA GTG TCT GAG TG <i>Reverse</i> GCA GCA GTT GGT GTA TCC ATT G
Activating transcription factor 3	Atf3	<i>Forward</i> CAG ACC CCT GGA GAT GTC AGT <i>Reverse</i> TTC TTG TTT CGA CAC TTC GCA
Activating transcription factor 4	Atf4	<i>Forward</i> CCG AGA TGA GCT TCC TGA <i>Reverse</i> CTC CTT GCC GGT GTC TGA
Cell Death Activator	Cide a	<i>Forward</i> TGC TCT TCT GTA TCG CCC AGT <i>Reverse</i> GCC GTG TTA AGG AAT CTG CTG
CCAAT/enhancer binding protein a	Cebp-a	<i>Forward</i> CCA GAA CAG CAA CGA GTA CCG <i>Reverse</i> GTC ACT GGT CAA CTC CAG CAC
Cluster of Differentiation 36	Cd36	<i>Forward</i> GAT GAC GTG GCA AAG AAC AG <i>Reverse</i> CAG TGA AGG CTC AAA GAT GG
Fibroblast growth factor 21	Fgf 21	<i>Forward</i> GCT GCT GGA GGA CGG TTA CA <i>Reverse</i> CAC AGG TCC CCA GGA TGT TG

SUPPLEMENTARY DATA

Supplementary Table 1. RT-qPCR primers (continued)

Gene	Gene ID	PCR primers
Peroxisome proliferator-activated receptor alpha	Ppara α	<i>Forward</i> CCC TGT TTG TGG CTG CTA T <i>Reverse</i> TCG GAC TCG GTC TTG TTG AT
Peroxisome proliferator-activated receptor gamma coactivator 1-alpha	Pgc1-a	<i>Forward</i> CGG AAA TCA TAT CCA ACC AG <i>Reverse</i> TGA GGA CCG CTA GCA AGT TTG
Stearoyl-CoA Desaturase	Scd-1	<i>Forward</i> CCG GAG ACC CCT TAG ATC GA <i>Reverse</i> TAG CCT GTA AAA GAT TTC TGC AAA
Solute carrier family 7 member 5	Slc7a5	<i>Forward</i> ATA TCA CGC TGC TCA ACG GTG <i>Reverse</i> GGT GGG CGT CAC GAA GAT G
Solute carrier family 7 member 11	Slc7a11	<i>Forward</i> AGG GCA TAC TCC AGA ACA CG <i>Reverse</i> CAG ACC AGA AAA CCA GGG ACA
Tumor Necrosis Factor	Tnf-a	<i>Forward</i> CAC CAC GCT CTT CTG TCT ACT G <i>Reverse</i> CTT TGA GAT CCA TCG CGT TG
Uncoupling Protein 1	Ucp1	<i>Forward</i> CTC ACT CAG GAT TGG CCT CTA <i>Reverse</i> TCT GAC CTT CAC GAC CTC TGT A
Pyruvate Dehydrogenase Kinase 4	Pdk4	<i>Forward</i> TTT CTC GTC TCT ACG CCA AG <i>Reverse</i> GAT ACA CCA GTC ATC AGC TTC G
chemokine (C-X-C motif) ligand 1	Cxcl1	<i>Forward</i> GCT GGC TTC TGA CAA CAC TAT <i>Reverse</i> CAA GCA GAA CTG AAC TAC CAT
chemokine (C-X-C motif) ligand 5	Cxcl5	<i>Forward</i> ATG AAC TCC CTG CTT TGA TGA <i>Reverse</i> TTC CGA TAG TGT GAC AGA TAG

SUPPLEMENTARY DATA

Supplementary Table 1. RT-qPCR primers (continued)

Gene	Gene ID	PCR primers
Interleukin 6	Il-6	<i>Forward</i> AGC CAG AGT CCT TCA GAG AGA T <i>Reverse</i> GCA CTA GGT TTG CCG AGT AGA T
Interleukin 18	Il-18	<i>Forward</i> TTC CTC TTG GCC CAG GAA CAA T <i>Reverse</i> GTA CAG TGA AGT CGG CCA AAG
Integrin, Alpha M	Itgam	<i>Forward</i> CAT GGC TTC AAT CTG GAC AC <i>Reverse</i> TGC TGT AGT CAC ACT GGT AGA GG
Lipoprotein Lipase	Lpl	<i>Forward</i> GAA ACC AGT AGG GCA TGT TG <i>Reverse</i> CAT TCA GCA GGG AGT CAA TG
Monocyte chemoattractant protein1	Mcp1	<i>Forward</i> AGC TCT TTC CTC CAC CA <i>Reverse</i> CTA CAG CTT CTT TGG GAC ACC T
Interleukin 6	Il-6	<i>Forward</i> AGC CAG AGT CCT TCA GAG AGA T <i>Reverse</i> GCA CTA GGT TTG CCG AGT AGA T
fibronectin type III domain containing 5	Fndc5	<i>Forward</i> ATG AAG GAG ATG GGG AGG AA <i>Reverse</i> GCG GCA GAA GAG AGC TAT AAC A
leukemia inhibitory factor	Lif	<i>Forward</i> GCG CCA ATG CTC TCT TCA TT <i>Reverse</i> TGG TCT TCT CTG TCC CGT TG

SUPPLEMENTARY DATA

Supplementary Table 2. Antibody list

Antibody	Vendor	Catalog #
Anti-Rt/Ms Total OxPhos Complex kit	Invitrogen	458099
Ran (C-20)	Santa Cruz	Sc-1156
Perilipin 5	American Research Products	03-GP31
Caveolin	BD Transduction Laboratories	610060