

Supplementary material

Supplementary Table 1. List of primers used for *q*PCR determinations.

| Gene | Gene name | Forward (5' to 3') | Reverse (5' to 3') | Amplicon size (pb) |
|-----------------|---|-----------------------------|---------------------------|---------------------------|
| <i>Cpt1b</i> | Carnitine palmitoyltransferase 1b | GCTCGCACATTACAAGGACAT | TGGACACCACATAGAGGCAG | 250 |
| <i>Fasn</i> | Fatty acid synthase | CGGCGAGTCTATGCCACTAT | ACACAGGGACCGAGTAATGC | 222 |
| <i>Fgfr1</i> | Fibroblast growth factor receptor 1 | TCCGCAGACAGGTAACAGTG | AGCTAGCATGGGGGTTCC | 107 |
| <i>Gdi1</i> | GDP dissociation inhibitor 1 | CCGACAAGGCAAATACATC | GACTCTCTGAACCGTCATCAA | 159 |
| <i>Klb</i> | Klotho beta | CCCTCGAACACCGTGGTAAA | AACCAGCCGTTCTCCGAAAT | 119 |
| <i>Mstn</i> | Myostatin | AGCTGCGCCTGGAAACAGCTC | TTCCCGGAGTGGAGGCGCTC | 80 |
| <i>Myocd</i> | Myocardin | CCGTGAAAGAGGCTATAAAAGG | TTCCCGGAGTGGAGGCGCTC | 76 |
| <i>Nppa</i> | Natriuretic peptide A | CACAGATCTGATGGATTTCAAG A | CCTCATCTTCTACCGGCATC | 68 |
| <i>Nppb</i> | Natriuretic peptide B | GTCAGTCGCTTGGGCTGT | CCAGAGCTGGGGAAAGAAG | 105 |
| <i>Nppc</i> | Natriuretic peptide C | AGCGGTCTGGGATGTTAGTG | CCAAGGATGACCTCAGTGC | 75 |
| <i>Pmsa6</i> | Proteasome subunit alpha 6 | TGGCTATGAGATTCCTGTGG | CTGTCTGCTTCACTCCTGCT | 206 |
| <i>Ppara</i> | Peroxisome proliferator activate response alpha | TGTCGAATATGTGGGGACAA | AAACGGATTGCATTGTGTGA | 215 |
| <i>Ppargc1a</i> | PPAR gamma, coactivator 1 alpha | AGGAGGGTCATCGTTTGTGG | GGAGGCAGAAGAGCCGTC | 256 |
| <i>Prkaa2</i> | Protein kinase, 5'- AMP-activated, alpha 2 | CCAAGTGATCAGCACTCCAA | CAACACGTTCTCTGGCTTCA | 199 |

Supplementary Table 2. List of primary antibodies used for Western Blot analysis.

| Protein | Antibody for protein complete name | Company | Reference |
|----------------|--|---------------------------|------------------|
| ACTB | Anti- Beta-Actin | Cell Signaling Technology | 3700 |
| ATGL | Anti- Adipose Triglyceride Lipase | Cayman chemical | 10006409 |
| COXIV | Anti- Cytochrome c oxidase subunit 4 | Cell Signaling Technology | 4844 |
| CPT1 | Anti- Carnitine Palmitoyl Transferase 1 | Santa Cruz Biotechnology | sc-98834 |
| pAKT | Anti- v-AKT murine Thymoma Viral Oncogene homolog 1 phosphorylated at serine 473 | Cell Signaling Technology | 4051 |
| pAMPK | Anti- AMP-Activated Protein kinase phosphorylated at threonine 172 | Cell Signaling Technology | 2535 |

List of Abbreviations

| | | | |
|-------|--|----------|---|
| ACTB | β -actin | Klb | β -Klotho |
| AKT | Protein kinase B | mRNA | Messenger RNA |
| AMPK | 5'-AMP-activated protein kinase | Mstn | Myostatin |
| ANOVA | Analysis of variance | Myocd | Myocardin |
| ATGL | Adipose triglyceride lipase | Nppa | Natriuretic peptide A |
| BP | Blood pressure | Nppb | Natriuretic peptide B |
| COX4 | Cytochrome c oxidase subunit 4 | Nppc | Natriuretic peptide C |
| Cpt1b | Carnitine palmitoyltransferase 1b | PBMC | Peripheral Blood Mononuclear Cell |
| CR | Calorie restriction (group) | PCA | Principal Components Analysis |
| C | Control (group) | PCR | Polymerase chain reaction |
| CRP | Calorie restriction supplemented with pectin (group) | Pmsa6 | Proteasome subunit alpha type-6 |
| DBP | Diastolic blood pressure | Ppara | Peroxisome proliferator-activated receptor α |
| DMS | Minimum Significant Differences | Ppargc1a | PPAR γ -coactivator 1 α |
| DNA | Deoxyribonucleic acid | Prkaa2 | AMPK catalytic subunit alpha-2 |
| Fasn | Fatty acid synthase | RNA | Ribonucleic acid |
| FGF21 | Fibroblast growth factor 21 | SBP | Systolic blood pressure |
| Fgfr1 | FGF21 receptor | SCFA | Short-chain fatty acids |
| Gdi1 | GDP dissociation inhibitor alpha | SD | Standard diet |
| HEP | High esterified pectin | SEM | Standard error of mean |
| HS | High-sucrose diet | TG | Triglycerides |

Supplementary Figure 1

