

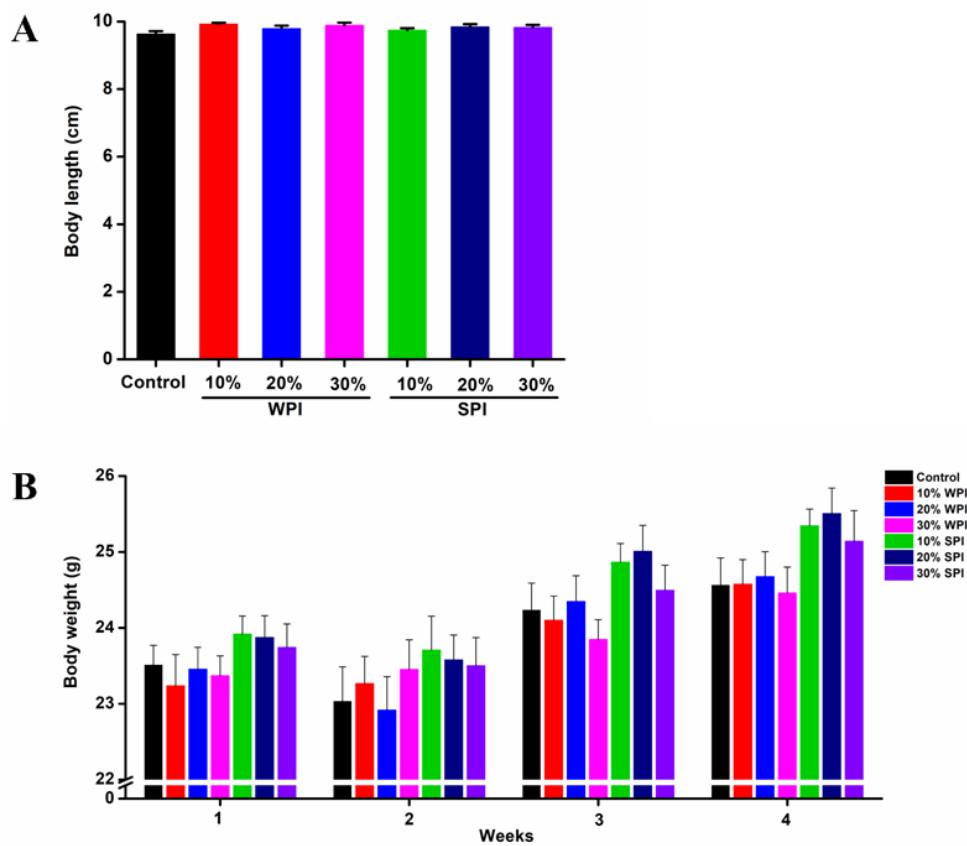
Supplementary Table 1 Compositions of experimental diets

	Control	10% WPI	20% WPI	30% WPI	10% SPI	20% SPI	30% SPI
Ingredient (g)							
Casein	200	0	0	0	0	0	0
Whey protein isolate	0	100	200	300	0	0	0
Soy protein isolate	0	0	0	0	100	200	300
L-Cystine	3	3	3	3	3	3	3
Corn starch	506.2	0	0	0	0	0	0
Maltodextrin 10	125	125	125	97.8	125	125	97.8
Sucrose	72.8	172.8	72.8	0	172.8	72.8	0
Cellulose, BW200	50	50	50	50	50	50	50
Soybean oil	25	25	25	25	25	25	25
Cocoa butter	20	245	245	245	245	245	245
Mineral mix S10026B	50	50	50	50	50	50	50
Vitamin mix V10001C	1	1	1	1	1	1	1
Choline bitartrate	2	2	2	2	2	2	2
FD&C yellow dye #5	0.04	0	0	0	0	0	0
FD&C blue dye #1	0.01	0.05	0.05	0.05	0.05	0.05	0.05
Total (g)	1055.05	773.85	773.85	773.85	773.85	773.85	773.85
Energy (kcal %)							
Protein	20%	10%	20%	30%	10%	20%	30%
Carbohydrate	70%	30%	20%	10%	30%	20%	10%
Fat	10%	60%	60%	60%	60%	60%	60%
Energy density (kcal/g)	3.85	5.22	5.22	5.22	5.22	5.22	5.22

Supplementary Table 2 Primers sequences used in Real-time PCR

Genes	Sequence
<i>UCP1</i> forward	TCACCACCCCTGGCAAAAACA
<i>UCP1</i> reverse	GCAGGTGTTCTCTCCCTGAA
<i>PGC-1α</i> forward	ACCATGACTACTGTCAGTCACTC
<i>PGC-1α</i> reverse	GTCACAGGAGGCATCTTGAAG
<i>AMPKα</i> forward	CTACCTAGCAACCAGCCCAC
<i>AMPKα</i> reverse	ACGTCTGAGGGCTTCCTTG
<i>Cidea</i> forward	GCCGTGTTAAGGAATCTGCTGAGG
<i>Cidea</i> reverse	GGATGGCTGCTCTCTGTATCGC
<i>SREBP1c</i> forward	GGATGCGGCTGTTGTCTACCATAAG
<i>SREBP1c</i> reverse	CCAGGTTAGAACAGCAAGATGTCC
<i>PPARγ</i> forward	GCCAAGGTGCTCCAGAACATGAC
<i>PPARγ</i> reverse	GTGAAGGCTCATGTCTGTCTGTC
<i>LPL</i> forward	CGCTCTCAGATGCCCTACAAAGTG
<i>LPL</i> reverse	TTGTGTTGCTGCCATCCTCAGTC
<i>DGAT1</i> forward	AGCTATCCAGACAAACCTGACCTACC
<i>DGAT1</i> reverse	TCAAGAACTCGTCGTAGCAGAAAGC
<i>CD36</i> forward	GCAGGTCTATCTACGCTGTGTTCG
<i>CD36</i> reverse	TGTCTGGATTCTGGAGGGTGATG
<i>SLC27A1</i> forward	TCTACGGGTTGACGGTGGTACTG
<i>SLC27A1</i> reverse	CTCAGCAGGTAGCGGCAGATTTC
<i>HSL</i> forward	GACAGGACAGCAAGGTACTCAACAG
<i>HSL</i> reverse	GCCTCCGTGGATGTGAACAACC
<i>CPT1b</i> forward	GAGGAAGGGTAGAGTGGCAGAG
<i>CPT1b</i> reverse	TCATCCAGGGTCACAAAGAAAGCAG
<i>RPL13A</i> forward	GAGGTCGGGTGGAAGTACCA
<i>RPL13A</i> reverse	TGCATCTTGGCCTTTCCCTT

UCP1, uncoupling protein 1; *PGC-1α*, peroxisome proliferator-activated receptor gamma coactivator-1α; *AMPKα*, AMP-activated protein kinase alpha; *Cidea*, cell death-inducing DNA fragmentation factor-like effector A; *SREBP1c*, sterol regulatory element binding protein-1c; *PPARγ*, peroxisome proliferator-activated receptor gamma; *LPL*, lipoprotein lipase; *DGAT1*, diacylglycerol O-acyltransferase 1; *CD36*, cluster of differentiation 36; *SLC27A1*, solute carrier family 27 member 1; *HSL*, hormone-sensitive lipase; *CPT1b*, carnitine palmitoyl transferase 1b; *RPL13A*, ribosomal protein L13A.



Supplementary Fig. 1 Impact of WPI, SPI and the P/C ratio on body length of mice after 12 weeks of intervention (A) and body weight during the first 4 weeks of dietary intervention (B).