

Supplementary Table S1. Detailed results of the three-way ANOVA shown in Figure 3.

Analysis	Main Effect	F (DFn, DFd)	p value
Fig. 3A. <i>Ucp1</i> mRNA expression	Time	F (2, 45) = 0.5073	0.6055
	Sex	F (1, 45) = 3.533	0.0666
	Genotype	F (1, 45) = 5.193	0.0275
	Time x Sex	F (2, 45) = 2.122	0.1316
	Time x Genotype	F (2, 45) = 1.878	0.1646
	Sex x Genotype	F (1, 45) = 2.841	0.0988
	Time x Sex x Genotype	F (2, 45) = 2.405	0.1018
Fig. 3B. <i>Pparg1a</i> mRNA expression	Time	F (2, 45) = 5.011	0.0108
	Sex	F (1, 45) = 1.153	0.2887
	Genotype	F (1, 45) = 0.002431	0.9609
	Time x Sex	F (2, 45) = 1.438	0.2482
	Time x Genotype	F (2, 45) = 0.7500	0.4782
	Sex x Genotype	F (1, 45) = 0.3526	0.5556
	Time x Sex x Genotype	F (2, 45) = 1.277	0.2886
Fig. 3C. <i>Prdm16</i> mRNA expression	Time	F (2, 45) = 2.590	0.0862
	Sex	F (1, 45) = 1.015	0.3191
	Genotype	F (1, 45) = 8.673	0.0051
	Time x Sex	F (2, 45) = 7.908	0.0011
	Time x Genotype	F (2, 45) = 3.657	0.0338
	Sex x Genotype	F (1, 45) = 7.081	0.0108
	Time x Sex x Genotype	F (2, 45) = 9.336	0.0004
Fig. 3D. <i>Pparg</i> mRNA expression	Time	F (2, 45) = 5.275	0.0087
	Sex	F (1, 45) = 0.2978	0.5879
	Genotype	F (1, 45) = 3.486	0.0684
	Time x Sex	F (2, 45) = 2.164	0.1267
	Time x Genotype	F (2, 45) = 0.7871	0.4613
	Sex x Genotype	F (1, 45) = 7.154	0.0104
	Time x Sex x Genotype	F (2, 45) = 3.275	0.0470
Fig. 3E. <i>Fabp4</i> mRNA expression	Time	F (2, 45) = 10.29	0.0002
	Sex	F (1, 45) = 7.123	0.0105
	Genotype	F (1, 45) = 5.492	0.0236
	Time x Sex	F (2, 45) = 2.849	0.0684
	Time x Genotype	F (2, 45) = 2.766	0.0736
	Sex x Genotype	F (1, 45) = 3.204	0.0802
	Time x Sex x Genotype	F (2, 45) = 5.193	0.0094
Fig. 3F. <i>Glut4</i> mRNA expression	Time	F (2, 45) = 11.69	<0.0001
	Sex	F (1, 45) = 0.1189	0.7319
	Genotype	F (1, 45) = 4.972	0.0308
	Time x Sex	F (2, 45) = 2.828	0.0697
	Time x Genotype	F (2, 45) = 0.5259	0.5946
	Sex x Genotype	F (1, 45) = 5.080	0.0291
	Time x Sex x Genotype	F (2, 45) = 2.979	0.0610
Fig. 3G. <i>Adipoq</i> mRNA expression	Time	F (2, 45) = 6.042	0.0047

	Sex	F (1, 45) = 6.038	0.0179
	Genotype	F (1, 45) = 7.406	0.0092
	Time x Sex	F (2, 45) = 5.291	0.0086
	Time x Genotype	F (2, 45) = 2.096	0.1348
	Sex x Genotype	F (1, 45) = 0.3258	0.5710
	Time x Sex x Genotype	F (2, 45) = 3.218	0.0494
Fig. 3H. <i>Leptin</i> mRNA expression	Time	F (2, 44) = 11.46	<0.0001
	Sex	F (1, 44) = 25.59	<0.0001
	Genotype	F (1, 44) = 7.446	0.0091
	Time x Sex	F (2, 44) = 13.31	<0.0001
	Time x Genotype	F (2, 44) = 3.098	0.0551
	Sex x Genotype	F (1, 44) = 5.267	0.0266
	Time x Sex x Genotype	F (2, 44) = 4.416	0.0179
Fig. 3I. <i>Obrb</i> mRNA expression	Time	F (2, 45) = 12.15	<0.0001
	Sex	F (1, 45) = 4.377	0.0421
	Genotype	F (1, 45) = 1.194	0.2804
	Time x Sex	F (2, 45) = 0.1432	0.8670
	Time x Genotype	F (2, 45) = 2.215	0.1209
	Sex x Genotype	F (1, 45) = 0.6393	0.4282
	Time x Sex x Genotype	F (2, 45) = 1.164	0.3214
Fig. 3J. <i>Tardbp</i> mRNA expression	Time	F (2, 43) = 5.896	0.0055
	Sex	F (1, 43) = 1.050	0.3112
	Genotype	F (1, 43) = 21.03	<0.0001
	Time x Sex	F (2, 43) = 1.874	0.1658
	Time x Genotype	F (2, 43) = 1.913	0.1600
	Sex x Genotype	F (1, 43) = 1.577	0.2160
	Time x Sex x Genotype	F (2, 43) = 3.826	0.0296

Statistically significant results are shown in bold ($p < 0.05$).