

Supplementary Table 2. Post-hoc analysis for 2-way repeated measures ANOVA on female mouse averaged body weight. Data are shown in Figure 1C and 1D.

Female	Sidak's post-hoc analysis for averaged body weight			
	Genotype Pomc ^{wt/wt} LF v Pomc ^{tm1/tm1} LF	Genotype Pomc ^{wt/wt} HF v Pomc ^{tm1/tm1} HF	Diet Pomc ^{wt/wt} LF v Pomc ^{wt/wt} HF	Diet Pomc ^{tm1/tm1} LF v Pomc ^{tm1/tm1} HF
Days on Diet	F (1,22) = 2.658 P = 0.1173	F (1,22) = 25.73 P < 0.0001	F (1,22) = 1.722 P = 0.2030	F (1,22) = 7.739 P = 0.0109
0	ns	ns	ns	ns
2	ns	ns	ns	ns
4	ns	ns	ns	ns
7	ns	ns	ns	p < 0.05
9	ns	ns	ns	ns
11	ns	p < 0.05	ns	ns
14	ns	p < 0.001	ns	ns
16	ns	p < 0.001	ns	ns
18	ns	p < 0.0001	ns	ns
21	ns	p < 0.0001	ns	ns
23	ns	p < 0.0001	ns	ns
25	ns	p < 0.0001	ns	ns
28	ns	p < 0.0001	ns	p < 0.05
30	ns	p < 0.0001	ns	p < 0.05
32	ns	p < 0.0001	ns	p < 0.01
35	ns	p < 0.0001	ns	p < 0.05
Weeks on diet	F (1,22) = 17.57 P = 0.0004	F (1,22) = 58.80 P < 0.0001	F (1,22) = 1.722 P = 0.2030	F (1,22) = 19.57 P = 0.0002
0	ns	ns	ns	ns
1	ns	ns	ns	ns
2	ns	ns	ns	ns
3	ns	ns	ns	ns
4	ns	p < 0.001	ns	ns
5	p < 0.05	p < 0.001	ns	ns
6	p < 0.05	p < 0.0001	ns	ns
7	p < 0.01	p < 0.0001	ns	ns
8	p < 0.01	p < 0.0001	ns	p < 0.05
9	p < 0.001	p < 0.0001	ns	p < 0.01
10	p < 0.0001	p < 0.0001	ns	p < 0.01
11	p < 0.0001	p < 0.0001	ns	p < 0.01
12	p < 0.0001	p < 0.0001	ns	p < 0.0001
13	p < 0.0001	p < 0.0001	ns	p < 0.0001
14	p < 0.001	p < 0.0001	ns	p < 0.0001
15	p < 0.0001	p < 0.0001	ns	p < 0.0001
16	p < 0.0001	p < 0.0001	ns	p < 0.0001