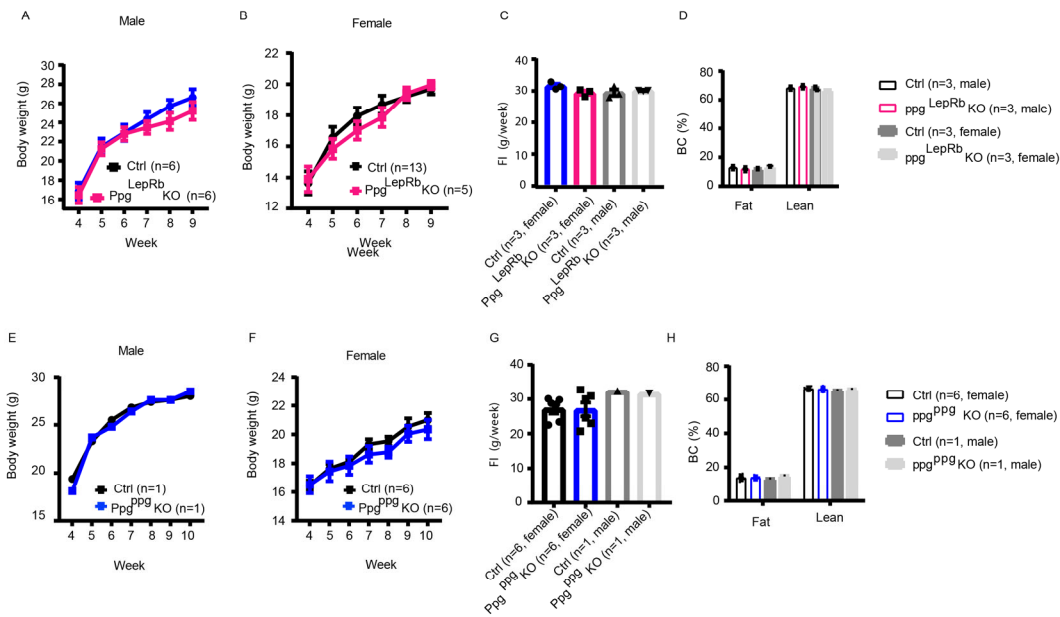


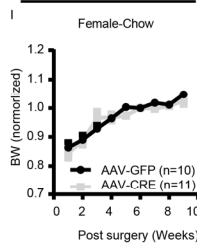
# Supplemental Figures

Supplemental figure 1

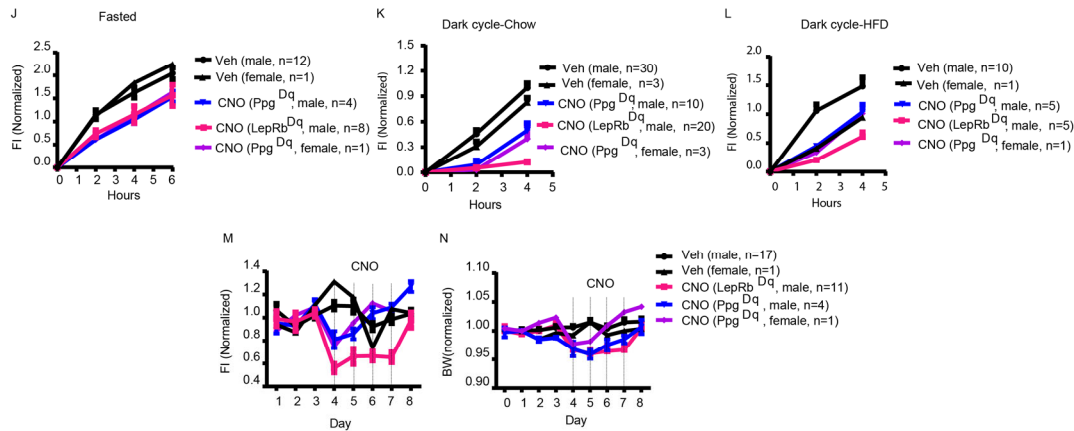
For Figure 2



For Figure 3

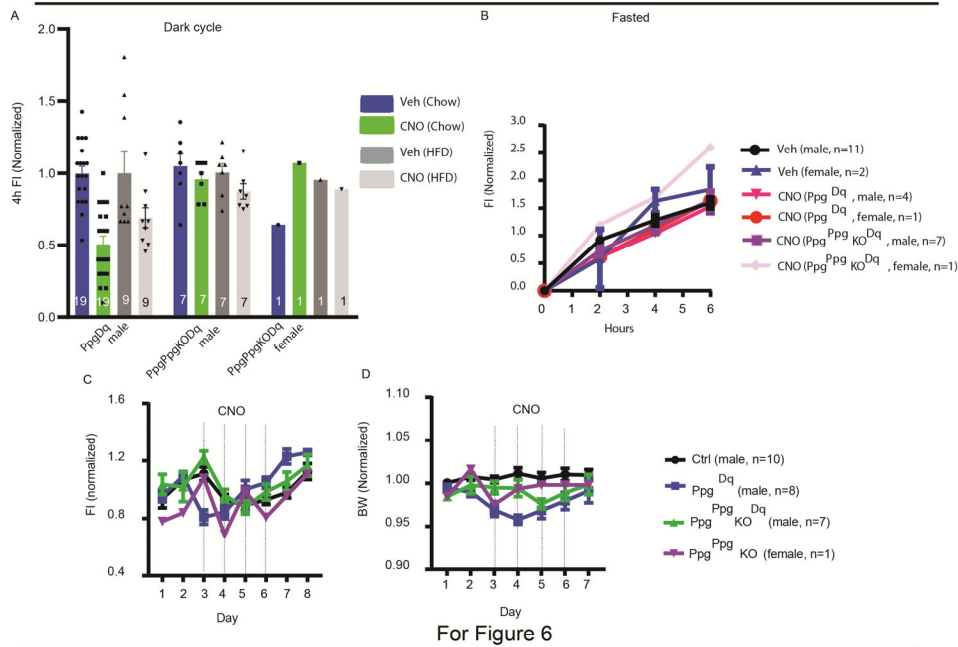


For Figure 4

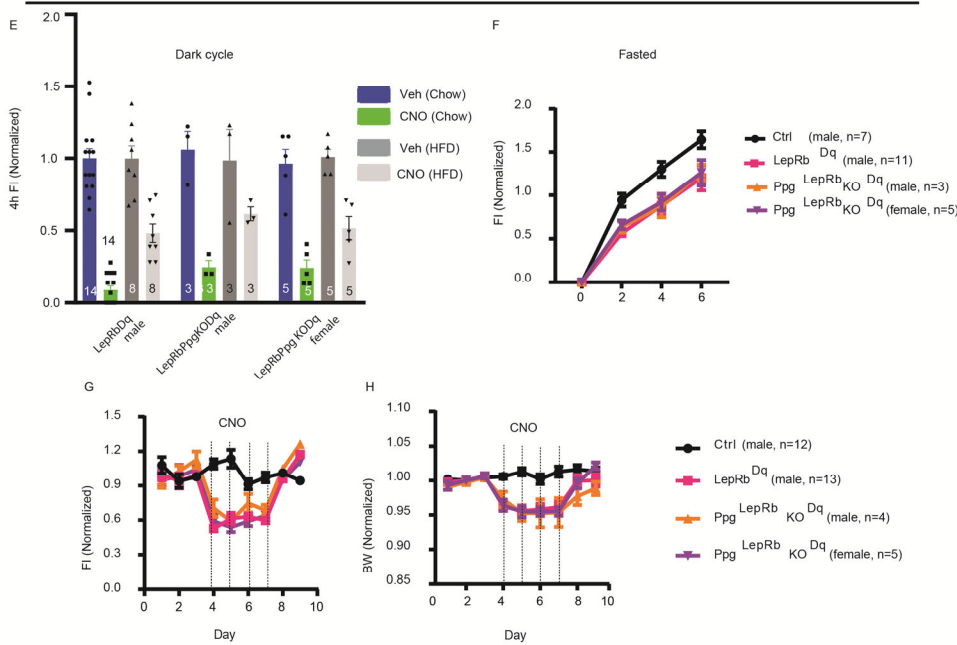


Supplemental Figure 1: Ablation of *Ppg* in *LepRb*<sup>NTS</sup> and *GLP1*<sup>NTS</sup> neurons and activation of *LepRb*<sup>NTS</sup> or *GLP1*<sup>NTS</sup> neurons- male and female data separated. (A-D) Body weight, food intake, and body composition data for Ppg<sup>LepRb</sup>KO mice from

Figure 2, separated by sex. **(E-H)** Body weight, food intake, and body composition data for Ppg<sup>ppg</sup>KO mice from Figure 2, separated by sex. **(I)** Body weight data for female Ppg<sup>AAV-NTS</sup>KO mice (similar to the male data shown for Figure 3D). **(J-N)** Body weight and food intake data from LepRb<sup>NTS</sup>-Dq and GLP1<sup>NTS</sup>-Dq mice from Figure 4, separated by sex. Mean +/- SEM is shown; n for each group is shown in each panel.

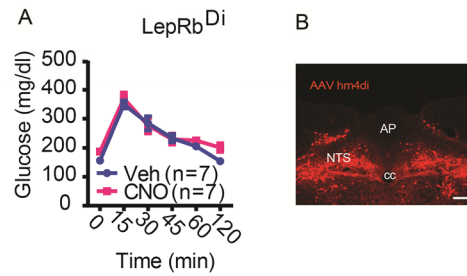


For Figure 6



**Supplemental Figure 2: Food intake and body weight data for Figures 5-6, separated by sex. (A-D)** Food intake and body weight data from Figure 5C-F, separated by sex. **(E-H)** Food intake and body weight data from Figure 6C-F, separated by sex. Mean +/- SEM is shown; n for each group is shown in each panel.

Supplemental Figure 3



**Supplemental Figure 3: Inhibition of LepRb<sup>NTS</sup> neurons failed to alter glucose clearance.** AAV<sup>hm4di</sup> was delivered in the NTS of LepRb<sup>cre</sup> mice (LepRb<sup>Di</sup> mice). Vehicle (Veh) or CNO (1 mg/kg IP)-paired with glucose (2g/kg, IP) were injected and glucose concentration in the blood was monitored up to two hours **(A)**. Mean +/- SEM is shown. Two-way ANOVA analysis was performed, no significance found. **(B)** A representative image showing mCherry-IR (red) to detect DREADD-mCherry in the NTS. AP- area postrema, cc- central canal; scale bars equal 150  $\mu$ m.