Supplementary Material for:

Consummatory, anxiety-related and metabolic adaptations in female rats with alternating access to preferred food

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Running title: Effects of cyclic access to preferred food

Supplementary materials: 5 Supplementary Figures and Legends

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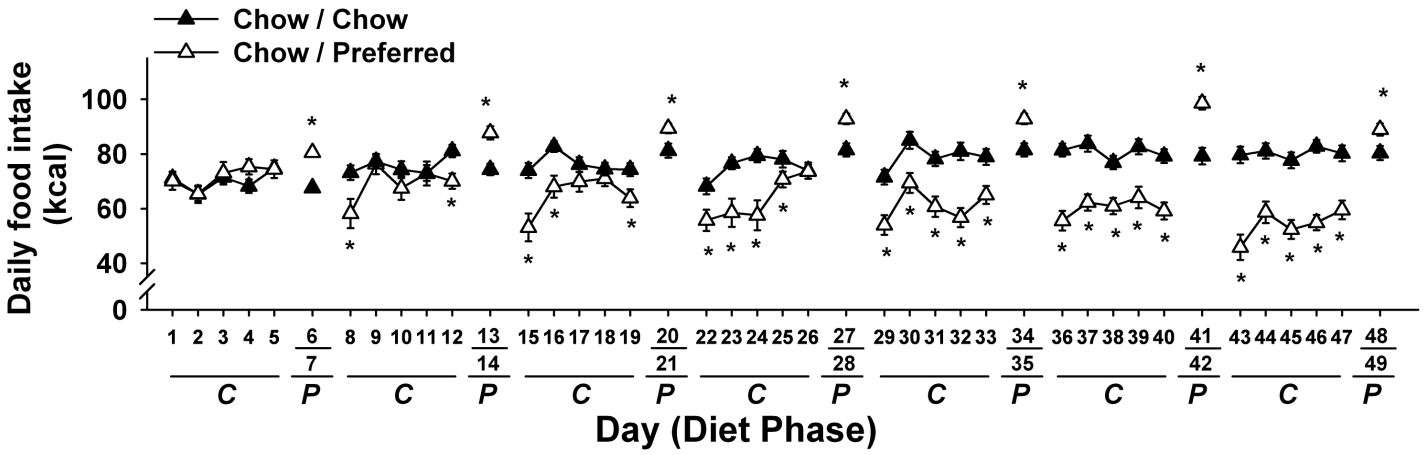
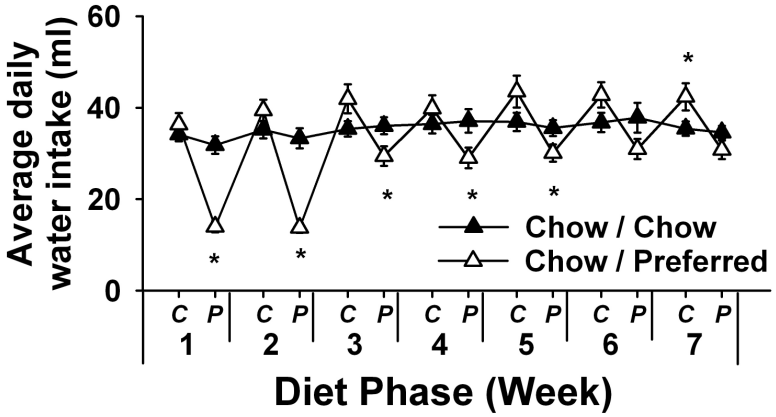
Supplementary Figure 1



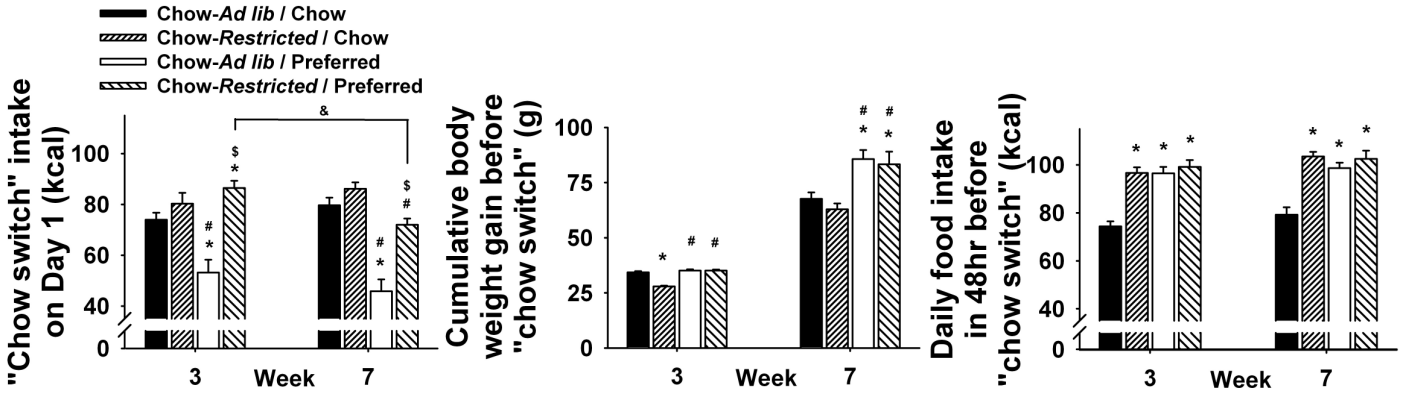
Effects of repeated, alternating 5-day access to chow and 2-day access to either chow (*Chow/Chow, n*=16) or highly preferred chocolate-flavored sugary diet (*Chow/Preferred, n*=14) in female Wistar rats. Panels represent *M*±SEM. Daily food intake, average for 2-day access phase. *differs from *Chow*/*Chow* $p<0.05$.

Supplementary Figure 2



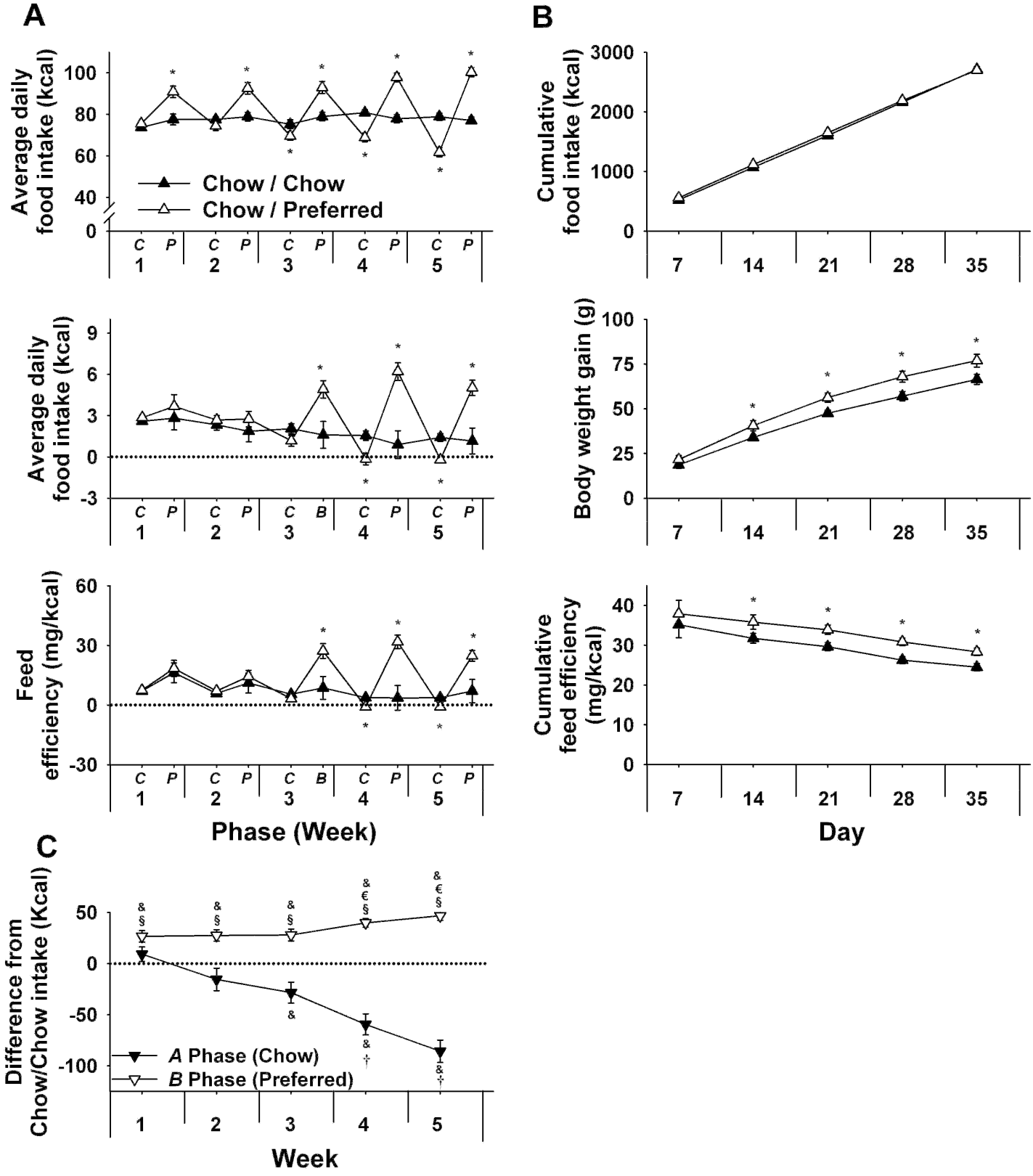
Effects of repeated, alternating 5-day access to chow and 2-day access to either chow (*Chow/Chow, n*=16) or highly preferred chocolate-flavored sugary diet (*Chow/Preferred, n*=14) in female Wistar rats. Panels represent *M*±SEM. Average daily water intake during each 5- (*C Phase*) or 2-day (*P Phase*) diet phase of each week. *differs from *Chow*/*Chow* $p<0.05$.

Supplementary Figure 3



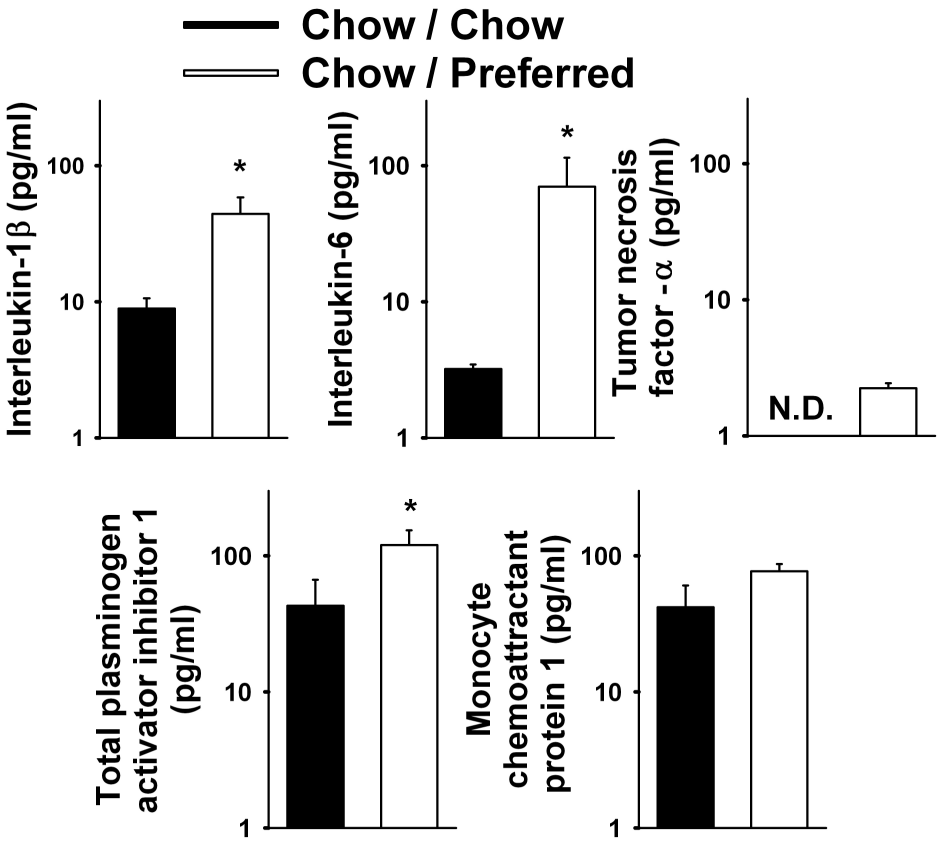
Effects of diet alternation with or without caloric restriction during chow access. Effects of diet and caloric restriction history on intake upon return to chow (*left*) Highlight of Day 1 chow intake in weeks 3 and 7. (*middle*) Cumulative body weight gain or (*right*) preceding daily intake during *P* phases prior to switching from preferred to chow diets at onset of weeks 3 and 7. Panels represent *M*±SEM. Differs from **Chow-Ad lib/Chow* $p<0.05$; #*Chow-Restricted/Chow* $p<0.05$; $*Chow-Ad lib/Preferred* $p<0.05$.

Supplementary Figure 4



Effects of repeated, alternating 5-day access to chow and 2-day access to either chow (*Chow/Chow, n*=19) or highly preferred chocolate-flavored sugary diet (*Chow/Preferred, n*=20) in female Wistar rats. Panels represent *M*±SEM. (**A**) (*Top*) Average daily food intake, (*Middle*) average daily change in body weight, and (*Bottom*) "local" feed efficiency (body weight change/energy intake) during each 5- (*C Phase*) or 2-day (*P Phase*) diet phase of each week. (**B**) Weekly perspective of cumulative (*Top*) food intake (note that error bars are smaller than symbols), (*Middle*) body weight gain, (*Bottom*) feed efficiency, as calculated at each week's end. (**C**) Underacceptance and hyperphagia of food in *Chow/Preferred* rats within *C (Chow)* and *P* (*Preferred*) phase diets, respectively, in relation to *Chow/Chow* intake. *differs from *Chow*/*Chow* $p<0.05$, &differs from 0 $p<0.05$, †differs from *A* Phase of Week 2 $p<0.05$, €differs from *P* Phase of Week 2 $p<0.05$, §differs from *C* Phase $p<0.05$.

Supplementary Figure 5



Long-term effects of diet schedule on circulating adipokine levels. Panel shows (*M*+SEM) plasma levels of proinflammatory adipokines of a random subset of female Wistar rats from Experiment 1 (*n*=15). On Day 92, rats were fed chow diet only for 10 consecutive days to control for acute diet effects. On day 102, overnight fasted rats were decapitated 2-5 hr into the dark cycle, and trunk blood was collected. Data were log-transformed for statistical analysis, and panels therefore depict antilog values on a logarithmic scale. Differs from **Chow/Chow* $p<0.05$.