Cell Metabolism, Volume *8*

Supplemental Data

Regulation of Feeding and Metabolism by Neuronal and Peripheral Clocks in *Drosophila*

Kanyan Xu, Xiangzhong Zheng, and Amita Sehgal

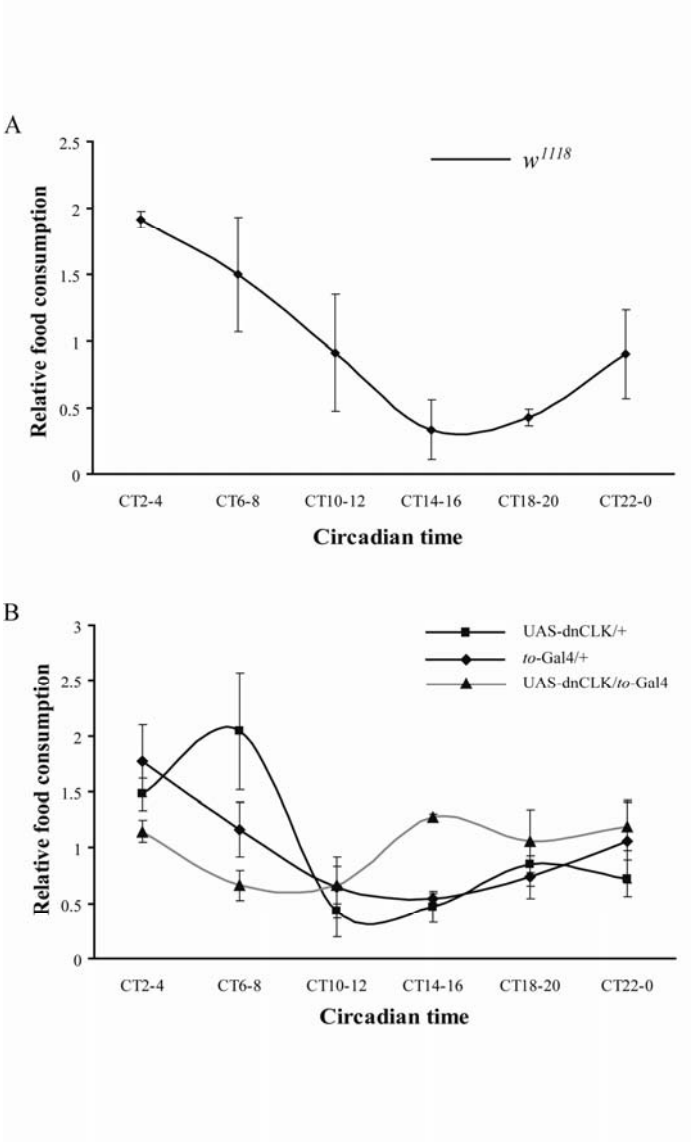

Figure S1. A Drosophila feeding rhythm measured by the CAFÉ assay

(A) w^{1118} flies exhibit a rhythmic feeding pattern in DD.

(B) Flies with a disrupted fat body clock show an altered phase of feeding.

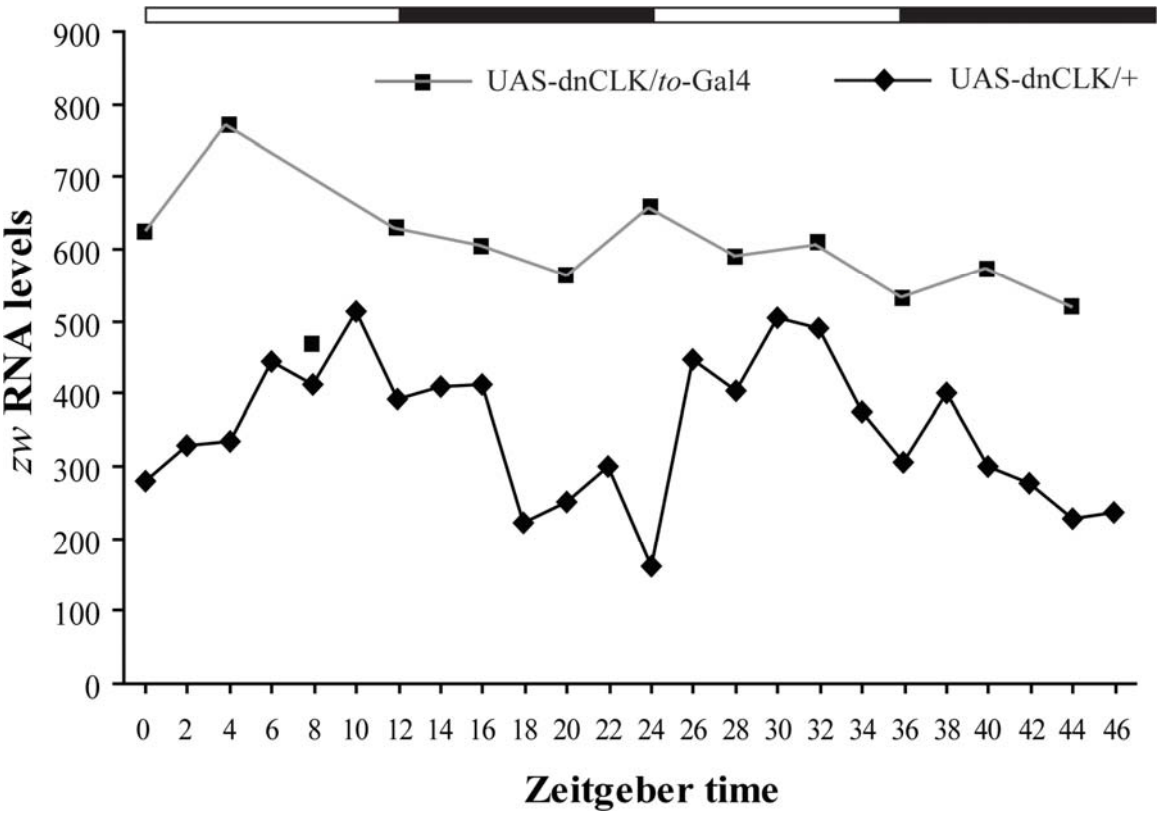

Figure S2. *zw* cycles in the fat body of control flies carrying UAS-dnCLK alone, but not in the fat body of flies carrying both UAS-dnCLK and *to*-Gal4.

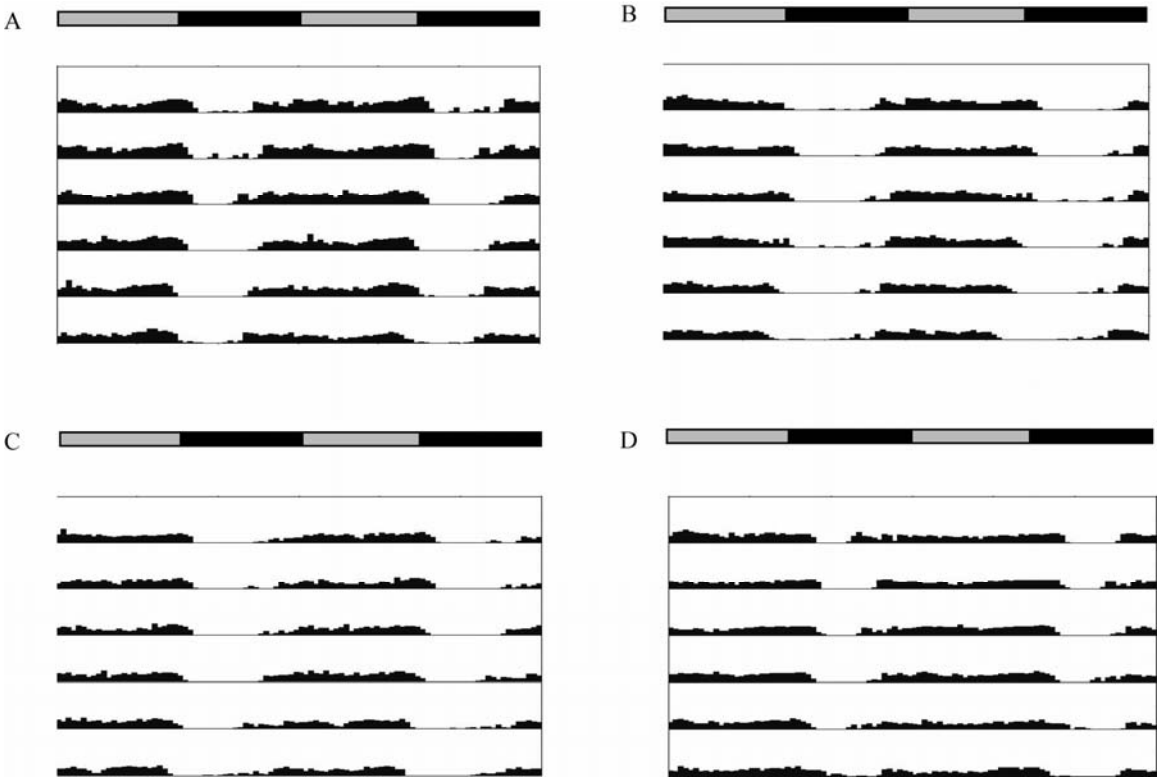

Figure S3. Locomotor activity rhythms do not change in flies with a disrupted fat body clock.

(A) and (B) Activity records of two representative flies carrying UAS-dnCLK and *to*-Gal4. (C) and (D) Activity records of two control flies carrying only UAS-dnCLK.

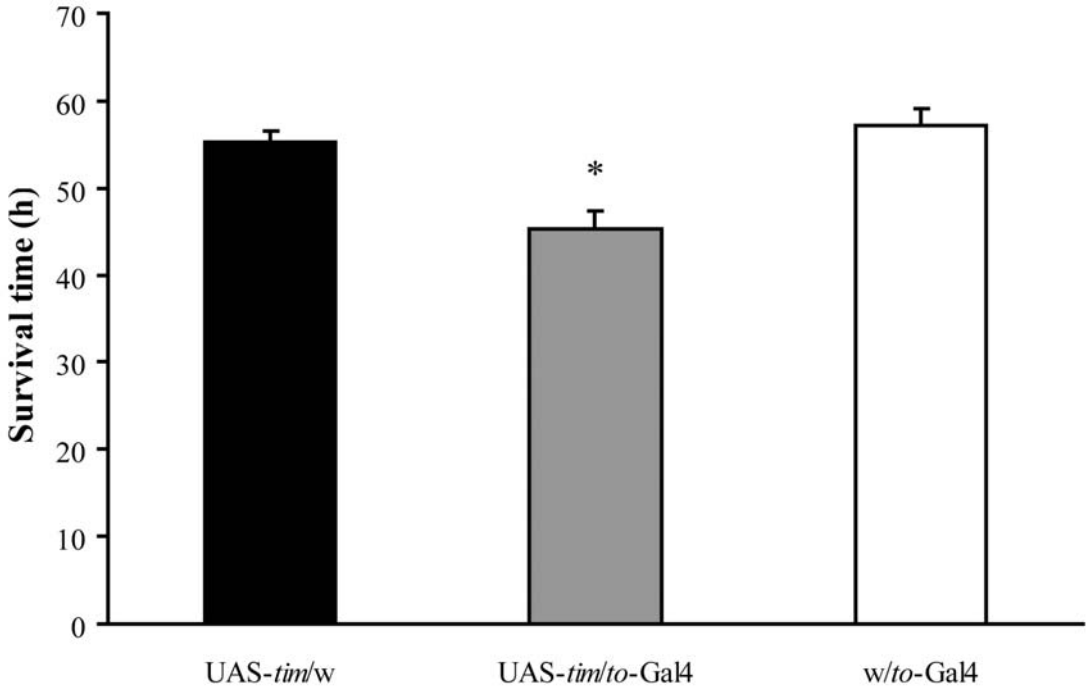

Figure S4. Overexpressing TIM in the fat body increases sensitivity to starvation. The phenotype is weaker than that produced by overexpressing dnCLK. Asterisks indicate significant difference ($p<0.05$). Statistical significance was determined by two-tailed Student's t-test with unequal variance.

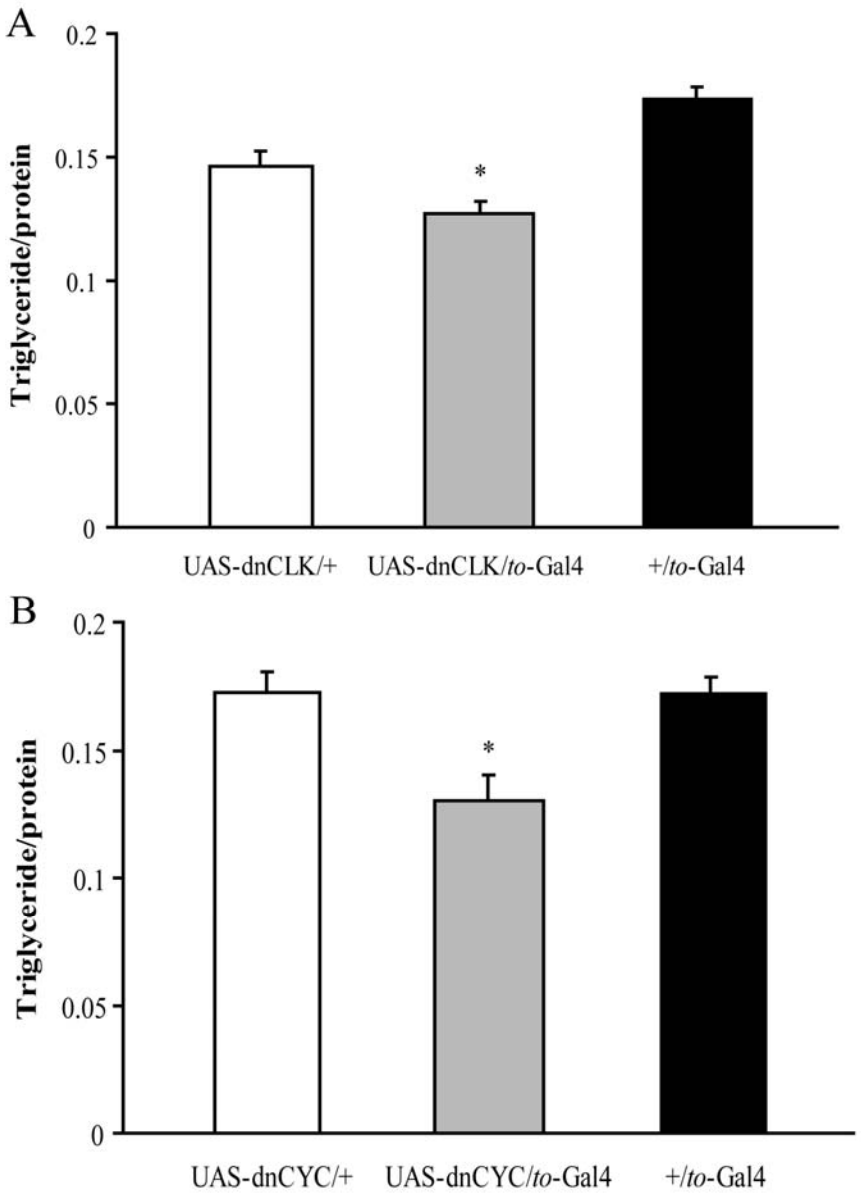

Figure S5. The clock in the fat body affects lipid storage.

Triglyceride levels are lower in male flies carrying either UAS-dnCLK and *to*-Gal4 (A) or UAS-dnCYC and *to*-Gal4 (B). Asterisks indicate significant differences ($p<0.05$). Statistical significance was determined by two-tailed Student's t-test with unequal variance.

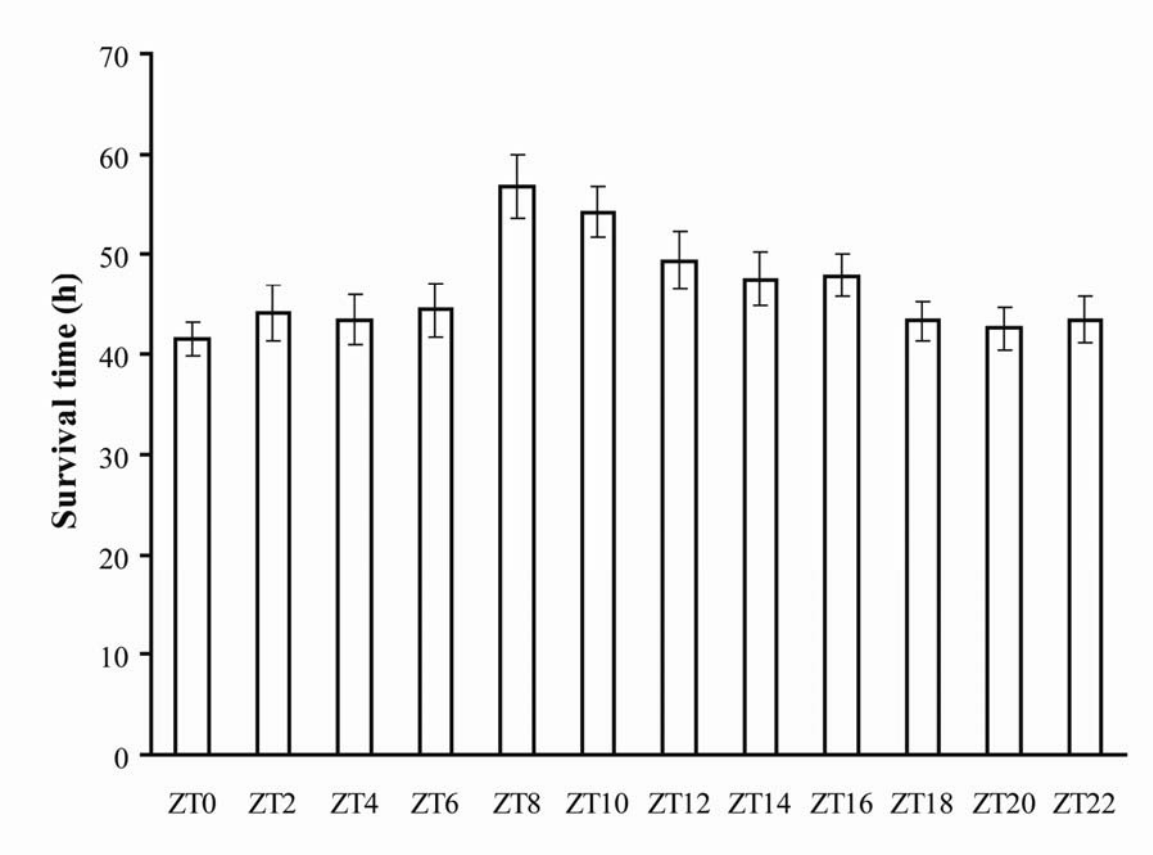

Figure S6. The response to starvation varies at different times of day in an LD cycle.

Starvation was initiated at the times shown and survival was measured as described earlier. Resistance to starvation was greatest at ZT8 and ZT10.