

Assay	Genotype	Phenotype	Reference
Starvation resistance	Lk and Lkr mutants Lk > Lk RNAi DILP2 > Lkr RNAi	Increased survival Increased survival Increased survival ^a	This study [1] This study
Desiccation resistance	Lk and Lkr mutants Lk > Lk RNAi Lk > TrpA1 Lk; Gal80 ^{ts} > Ork	Increased survival Increased survival Decreased survival Increased survival	This study [1] [2] [2]
Water content	Lk and Lkr mutants Lk > Lk RNAi	Increased Increased	This study [1]
Proboscis extension reflex	Lk mutant Lk > TNT Lkr mutant	Decreased Decreased Increased	This study This study This study
Blue dye feeding	Lk and Lkr mutants	No effect	This study
CAFE assay	Lk and Lkr mutants Lk > TrpA1 Lk; Gal80 ^{ts} > Ork Lk > Lk RNAi Lk and Lkr mutants	Decreased Decreased Decreased No effect Up to 48h: increased After 48h: decreased	This study [2] [2] [1] [3]
Negative geotaxis	Lk and Lkr mutants	No effect	This study
Locomotor activity	Lk and Lkr mutants Lk > Shi ^{ts} Lk > Kir2.1	Decreased No effect Decreased	This study [4] [4]
Metabolic rate	Lk and Lkr mutants	Decreased	This study
DILP2 peptide levels	Lk mutant Lkr mutant	No effect Increased	This study This study
DILP3 peptide levels	Lk and Lkr mutants	Increased	This study
DILP5 peptide levels	Lk and Lkr mutants	No effect	This study
<i>DILP2</i> transcript	DILP2 > Lkr RNAi	No effect	This study
<i>DILP3</i> transcript	DILP2 > Lkr RNAi	Increased ^b	This study
<i>DILP5</i> transcript	DILP2 > Lkr RNAi	Decreased ^c	This study

^a Increased starvation survival observed for flies maintained as adults on normal, and high sugar and high protein diet only.

^b *DILP3* transcript is upregulated in flies maintained as adults on normal, and high sugar and high protein diet only.

^c *DILP5* transcript is down regulated in flies maintained as adults on normal diet.

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3. Al-Anzi B, Armand E, Nagamei P, Olszewski M, Sapin V, Waters C, et al. The leucokinin pathway and its neurons regulate meal size in *Drosophila*. Curr Biol. 2010;20(11):969-78. Epub 2010/05/25. doi: S0960-9822(10)00517-8 [pii]10.1016/j.cub.2010.04.039. PubMed PMID: 20493701; PubMed Central PMCID: PMC2896026.
4. Cavey M, Collins B, Bertet C, Blau J. Circadian rhythms in neuronal activity propagate through output circuits. Nat Neurosci. 2016;19(4):587-95. doi: 10.1038/nn.4263. PubMed PMID: WOS:000372909800016.