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Recent advances in the neural regulation of feeding behavior in adult *Drosophila*

Key words: Feeding behavior, *Drosophila melanogaster*, Neuromodulatory regulation, Internal status, Sensory processing

Summary

This review focus on the feeding behavior of adult fruit fly, with an emphasis on how neuromodulation links internal nutrient needs to adaptive behaviors. Since fruit fly shares the conserved metabolic regulation throughout evolution, it will provide reliable insights to feeding related neurological and metabolic studies in humans.

Main points

• Motivational and sensory systems in adult fruit fly provide key cues to make sure feeding behavior are expressed at appropriate situation.

• Specific steps of feeding behavior are finely and independently tuned by various modulators.

