

Feeding decision making in *Drosophila*

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Gustation provides important sensory information in the feeding behavior of organisms. Yet feeding behavior is not a simple reflex triggered by sensation and is regulated by internal nutritional requirements. We are interested in revealing how feeding preferences are modulated depending on the internal state and use the fruit fly, *Drosophila melanogaster*, to study this problem. We found that taste preference for amino acids and sodium is enhanced when flies are deficient for them. *Drosophila* can evaluate the nutritional value to sugars and learn the value associated with odors. I would like to present behavioral genetic studies on these topics.