

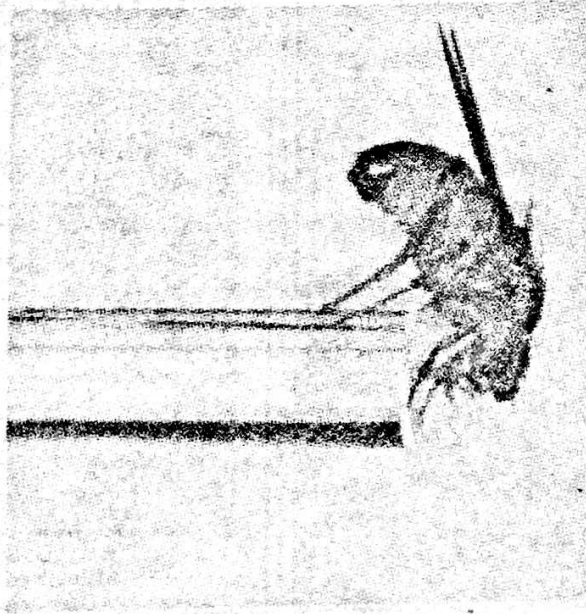
Learning From the Spurned and Tipsy Fruit Fly

By **BENEDICT CAREY**

They were young males on the make, and they struck out not once, not twice, but a dozen times with a group of attractive females hovering nearby. So they did what so many men do after being repeatedly rejected: they got drunk, using alcohol as a balm for unfulfilled desire.

And not one flew off in search of a rotting banana.

Fruit flies apparently self-medicate just like many humans do, drowning their sorrows or frustrations for some of the same reasons, scientists reported Thursday. Male flies subjected to what amounted to a long tease — in a glass tube, not a dance club — preferred food spiked with alco-



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Rejected, male fruit flies turn to alcohol, a new study finds.

hol far more than male flies that were able to mate.

The study, posted online in the journal *Science*, suggests that some elements of the brain's re-

ward system have changed very little during evolution, and these include some of the mechanisms that support addiction. Levels of a brain chemical that is active in regulating appetite predicted the flies' thirst for alcohol. A similar chemical is linked to drinking in humans.

"Reading this study is like looking back in time, to see the very origins of the reward circuit that drives fundamental behaviors like sex, eating and sleeping," said Dr. Markus Heilig, the clinical director of the National Institute on Alcohol Abuse and Alcoholism and the National Institute on Drug Abuse.

Dr. Heilig, who was not involved in the research, said the findings also supported new ap-

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