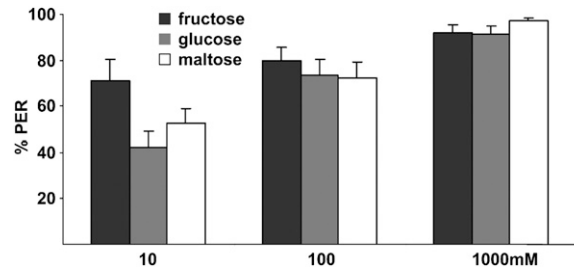
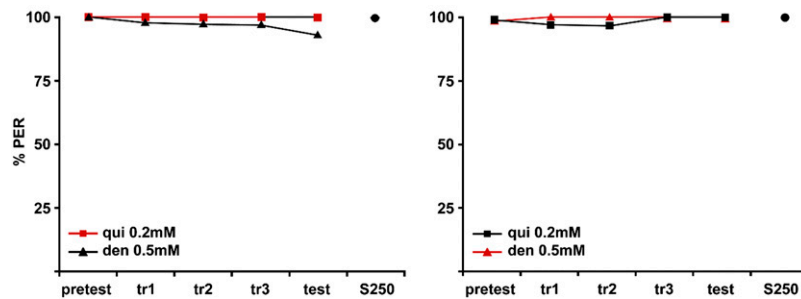


# Supporting Information

Masek and Scott 10.1073/pnas.1009318107



**Fig. S1.** Innate preference of different sugars is similar. The PER was monitored to 10-, 100-, and 1000-mM concentrations of fructose, glucose, and maltose. In this single-choice assay, the responses to different sugars are not statistically different (Student's *t* test), except for 10 mM fructose ( $P < 0.05$ ). Data are mean  $\pm$  SEM ( $n = 9$ –12 experiments, 5 flies per experiment).



**Fig. S2.** Probability of proboscis extension does not decrease to bitter compounds in the absence of laser punishment. The taste associative learning paradigm was performed without laser punishment. Quinine (qui, 0.2 mM) and denatonium (den, 0.5 mM) were applied sequentially. Neither compound was associated with laser treatment. The PER response did not decrease over the course of the experiment in the presence of bitter compounds. Data are mean  $\pm$  SEM ( $n = 3$  experiments, 5 flies per experiment).



