Abstract
This paper presents two experiments on nutrient-based flavor conditioning with rats as subjects and sucrose as the unconditioned stimulus (US). Experiment 1 was aimed at establishing an optimal control for conditioning, comparing simultaneous and serial presentations of a flavor and the US. The results showed that simultaneous, but not serial training, produced conditioning. Experiment 2 was designed to obtain evidence of summation as an index of both conditioned inhibition and predictive learning. Group Simultaneous received Pavlovian conditioned inhibition training during which flavor A was simultaneously paired with sucrose on excitatory trials (A+), and forming an unreinforced compound with flavor B on inhibitory trials (AB-). An independent excitor for the summation test was also trained by simultaneous pairings with sucrose (C+). In the control group (Blocked), the AB-trials were presented forming a block at the beginning of training to avoid a negative contingency relationship with sucrose, and flavor A received serial rather than simultaneous pairing with sucrose (A -> +). On the summation test, only in group Simultaneous was consumption of the CB compound lower than that of flavor C alone, suggesting that, during training, flavor A activated an expectancy of the US occurrence.

Keywords
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