

THE EFFECTS OF AN MGLUR7 AGONIST, AMN082,
ON CONDITIONED TASTE AVERSION

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ABSTRACT

Metabotropic glutamate receptors impact learning and memory. The current studies examined the effects of AMN082, a recently discovered selective metabotropic glutamate receptor 7 (mGluR7) allosteric agonist, on the acquisition and extinction of conditioned taste aversion. It was shown that in larger doses, AMN082 inhibits the acquisition of conditioned taste aversion, and it also significantly attenuates extinction when administered after an initial extinction trial. An additional experiment demonstrated the ability of AMN082 to serve as an effective unconditioned stimulus in conditioned taste aversion, and this effect accounts for the attenuated extinction rate of the aversion. In sum, the results show that AMN082, an mGluR7 agonist, attenuates taste aversion in learning when administered prior to the conditioning trial, but promotes taste aversion as a malaise-inducing agent when given after the trial.