Taste is one of the five basic senses. Previous experiments with humans have shown that exposure to a taste stimulus (e.g. sucrose or monosodium glutamate, MSG) at sub-threshold concentrations for 10 days lowers the detection threshold for approximately 10 days after the last exposure. This phenomenon is called 'taste induction' and the mechanism behind this shift in threshold is unknown. One possibility is that there may be a change in the taste receptor cells. Previous literature in mice and rats have shown that the taste receptor, T1R1/T1R3, is important for umami (e.g. MSG) taste transduction. The current study has two aims. The first is to determine if taste induction occurs in mice. If it does, then the second aim is to determine if the T1R3 subunit of the T1R1/T1R3 receptor is important for experience-induced changes to MSG taste thresholds in mice.