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## In This Issue

### Articles highlighted

#### **Spatial map of olfactory receptors in the mouse main olfactory epithelium**

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Expression of olfactory receptor (OR) genes is spatially regulated in primates, rodents, fish and insects, which is crucial for downstream projections to the olfactory bulb or antennal lobe. Yet low resolution and number of investigated ORs limit current knowledge about location of most ORs along the dorsomedial-ventrolateral axis of the main olfactory epithelium (MOE). Tan and Xie now determined the expression pattern for 1,033 ORs by sequencing mRNA of twelve isolated MOE pieces. Their map covers 81% of all intact OR genes and 99.4% of the total OR RNA abundance.

#### **Effects of calorie-dense diet on taste responses**

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Rats quickly develop meal size driven hyperphagia in the presence of a calorie-dense diet before body weight changes become evident

suggesting that immediate signals such as altered orosensory sensitivity could be responsible. Treesukosol et al now tested the hypothesis that a high-energy diet would increase responsiveness to palatable stimuli such as sucrose. Whereas they observed increased Chorda tympani responses for sucrose, saccharin and quinine solutions in rats exposed to the high-energy diet relative to control animals, no group differences were obvious for unconditioned lick responses. The data suggest that exposure to high-energy diet alters peripheral gustatory signaling which, however, do not generalize with responsiveness to sucrose.

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