- Senses and sensation

Your nose might be tasting before your tongue does, says study

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Ever noticed how even the most flavourful dish can seem bland when you have a blocked nose? Or how flavoured water can suddenly seem sweet, even without any sugar? It turns out, your nose might be doing more of the tasting than you think.



A new study from the Karolinska Institute in Sweden suggests that the brain may start processing flavours through the nose even before the tongue gets involved. Researchers have found that retronasal odours — aromas that travel to the nose from inside the mouth — can activate the brain's taste cortex in a way that closely mimics the response to actual flavours.

Using functional MRI scans on 25 healthy adults, scientists observed how the brain reacted to stimuli that involved either tasteless aromas or taste without smell. Remarkably, the same brain regions lit up in both cases, with nearly identical patterns of activity.

At the centre of this process is the insula, often referred to as the brain's "taste cortex." This region doesn't simply wait for signals from the tongue; it actively merges smell and taste into a cohesive flavour experience, before the brain's emotional or decisionmaking centres even come into play.