

# Brain is key to recovering sense of smell

PhD student Elbrich Postma examined the brains of patients who had lost their sense of smell.

‘About 5 to 20 per cent of the Dutch have a diminished sense of smell and/or taste,’ says Elbrich Postma, a PhD student at Human Nutrition and Health. Postma studied a group of 105 people who have not been able to smell well for years. The patients indicated that they enjoy their food less, but their diets were found to be just as healthy as those of people

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with a good sense of smell. Postma: ‘Loss of smell seems to have less effect on the actual intake food; it mainly affects the experience. But these people have suffered from loss of smell for a long time and it could be that they make a conscious effort to eat well even though they don’t enjoy their food so much.’

Postma put the patients in an MRI scanner and had them ‘smell’ various aromas. ‘Even though the patients had said in the smell test that they don’t smell anything, their brains did react to smells: it seems that the brain does pick up odours, but people are not conscious of them. These people were able to smell things in the past, so it could be that the brain still reacts in a kind of reflex, but that the patient doesn’t register it consciously.’

## Training

Postma thinks this suggests therapeutic possibilities. ‘You can train your sense of smell. It would be interesting to do further research on where exactly in the brain things go wrong.’ The PhD student is now doing research on the loss of smell and taste in coronavirus patients. She is going to look at whether it can be used to diagnose cases at an early stage of infection. At this point, that looks likely. TL



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