

# Traumatic brain injury causes loss of smell and taste

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The ability to taste and smell can be lost or impaired after a head injury, according to a new study by scientists from the Université de Montréal, the Lucie Bruneau Rehabilitation Centre, as well as the Center for Interdisciplinary Research in Rehabilitation of Greater Montreal. Published in the journal *Brain Injury*, the investigation established that mild to severe traumatic brain injury could cause olfactory loss.

"The study clearly demonstrates that olfactory deficits can occur in mild traumatic brain injury patients as well as in moderate and severe TBI patients," says study co-author and neuropsychologist Maurice Ptito, a professor at the Université de Montréal School of Optometry. "We also found that patients with a frontal lesion were more likely to show olfactory dysfunctions."

The research team recruited 49 people with TBI (73 percent male with a median age of 43) who completed a questionnaire and underwent two smell tests to measure their olfactory loss. The result: 55 percent of subjects had an impaired sense of smell, while 41 percent of participants were unaware of their olfactory deficit.

"Both tests indicated the same results: patients with frontal injury are more likely to suffer olfactory loss," says lead author Audrey Fortin, a professor at the Université de Montréal School of Optometry and researcher at the Lucie Bruneau Rehabilitation Centre.

Smell plays a vital role in our lives, says Dr. Fortin, since olfaction

influences what we eat, can help us detect gas leaks or fires. [Smell](#) also has a huge impact on interpersonal relationships, since olfactory disorders have been associated with poor quality of life, depression, mood swings, worries about personal hygiene, loss of appetite and cooking difficulties.

"Olfactory dysfunctions have a negative impact on daily life, health and safety," says Dr. Fortin. "It is important to pay attention to this symptom once a patient's condition has been stabilized following a [traumatic brain injury](#)."

**More information:** Paper: [informahealthcare.com/doi/pdf/ ... 09/02699050903446815](https://informahealthcare.com/doi/pdf/10.1016/j.mbs.2010.03.001)

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