

Australian researchers say fat is 'sixth taste'

March 8 2010

It's a theory set to confirm why humans are so fond of fatty foods such as chips and chocolate cake: in addition to the five tastes already identified lurks another detectable by the palate -- fat.

"We know that the human [tongue](#) can detect five tastes -- sweet, salty, sour, bitter and umami (a savoury, protein-rich [taste](#) contained in foods such as soy sauce and chicken stock)," Russell Keast, from Deakin University, said Monday.

"Through our study we can conclude that humans have a sixth taste -- [fat](#)."

Researchers tested 30 people's ability to taste a range of fatty acids in otherwise plain solutions and found that all were able to determine the taste -- though some required higher concentrations than others.

They then developed a screening test to see how sensitive people were to the taste and found that, of the 50 people tested, their ability to detect fat was linked to their weight -- a finding which could help counter [obesity](#).

"We found that the people who were sensitive to fat, who could taste very low concentrations, actually consumed less fat than the people who were insensitive," Keast told AFP.

"We also found that they had lower BMIs (Body Mass Indexes)."

Keast said the research, conducted in collaboration with the University

of Adelaide, New Zealand's Massey University and Australian science body CSIRO, suggested that the taste of fat could trigger a mechanism in the body.

"We all like eating fatty foods. What we speculate is (that) the mechanism is to do with stopping eating. Your body is able to tell you you've had enough and stop," he explained.

"And if you are insensitive to it, you're not getting that feedback."

With fats easily accessible and commonly consumed, it was possible that people may become desensitised to the taste of fat, leaving some more prone to overindulging in calorie-rich foods, he added.

The results, published in the [British Journal of Nutrition](#), have not definitively classified fat as a taste but Keast says the evidence is strong and mounting.

For something to be classified as a taste there needed to be proven receptor mechanisms on taste cells in the mouth, he said.

"We have what... we will call possible candidate receptors for fat on taste receptor cells," he said.

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Citation: Australian researchers say fat is 'sixth taste' (2010, March 8) retrieved 26 April 2024 from <https://medicalxpress.com/news/2010-03-australian-fat-sixth.html>

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