

# PROP Super Taster or Super Sensor?

Fats are in many of the foods and drinks we consume. Sensors have been found to detect them in both the mouth when eating, and the gut during digestion.

Fats are responsible for some of the pleasure associated with eating, such as the mouth feel of chocolate melting in the mouth. But why do some people prefer fatty foods more than others?

PROP tasters have been found to have a heightened taste experience when they eat or drink compared to non tasters

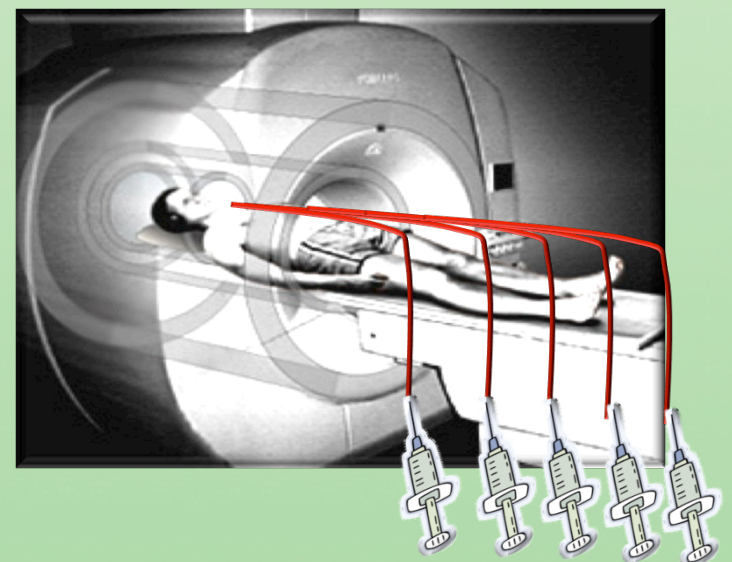


A study at the university of Nottingham explored how PROP taster status effects how fat is perceived

Functional magnetic resonance imaging (fMRI) was used to measure brain activity when subjects were given samples containing different % of fat to consume. The samples were sprayed into their mouths while they were laying down being scanned

The strength of brain activation to the different fat samples was recorded and compared between PROP tasters and PROP non tasters

The results showed that PROP tasters had greater brain activation to the high fat samples than that of PROP non tasters



PROP tasters also reported a higher preference for the low fat samples than PROP non tasters. This indicates that PROP tasters are less likely to consume high fat foods

These findings are interesting because this differing response to fat could be effecting food choices. It is important to understand the factors driving fat consumption because of increasing rates of obesity in the current population

## SOURCE OF INFORMATION

Eldeghaidy, S., Marciani, L., McGlone, F., Hollowood, T., Hort, J., Head, K., Taylor, A. J., Busch, J., Spiller, R. C., Gowland, P. A., Francis, S. T. (2011) 'The Cortical Response to the Oral Perception of Fat Emulsions and the effect on Taster Status'. *Journal of Neurophysiology* 105: pp 2572-2581.