

## WEIGHT STATUS AND OLFACTORY CAPACITIES

The relationship between olfactory capacities and obesity remains equivocal in the scientific literature. Some authors have reported that olfactory capacities are poorer in obesity compared to normal weight<sup>1</sup>, while other authors observed that individuals with obesity have a heightened sensitivity to food odours<sup>2</sup>.

Recently, CSGA researchers contributed to this debate by testing the olfactory capacities of 41 adults with normal-weight, 45 adults with overweight and 38 adults with obesity. The researchers used the European Test of Olfactory Capabilities (ETOC), which assesses participants' abilities to detect and identify food and non-food smells.

The results showed no differences in detection or identification performance, for food as well as for non-food odours between individuals with different weight status, except that adults with overweight or obesity tended to identify non-food odours better than adults with normal-weight. The results also confirmed that the detection scores for low-intensity food smells decreases with age and that women obtained better identification scores than men.

To further examine the link between olfactory abilities and weight status, it would be interesting to control certain variables better such as the participants' hormonal status along with the level of familiarity and the hedonic value of the odours used in the tests. To be continued...



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### To know more

Mas M, Chabanet C, Sinding C, Thomas-Danguin T, Brindisi MC & Chambaron S (2021). Olfactory capabilities towards food and non-food odours in men and women of various weight statuses. *Chemosensory Perception*, 1-10.

### Keywords

Overweight; obesity; olfactory capacities; detection; identification; ETOC test

<sup>1</sup>Fernandez-Garcia et al, 2017, Plos One ; <sup>2</sup>Skrandies & Zschieschang, 2015, Physiology & Behavior ; <sup>3</sup>Thomas-Danguin et al, 2003, Rhinology.