Understanding the role of human microbiota on sensory perception:
THE MICROSENS PROJECT

CONTEXT

Sensory perception of food is a key factor driving eating behaviors even if the mechanisms underlying food intake dynamics are not yet fully understood. Recent evidence suggest that microbiota may modulate, as well, eating behaviors by leading the host to choose what to eat in order to enhance their fitness and, at same time, suppress their competitors in the gut environment. Despite a possible influence of microbiome on eating behaviors is also supported by animal models, to date, no studies dealing with the associations between, taste, flavour perception, satiety, attitudes and emotions towards food and gut/oral microbiota abundancies on healthy humans have been reported.

AIM

Therefore, the MICROSENS project aims at investigating the putative role of the ecological structures of the host, directly involved in the dynamics of food intake (oral and gut microbiota), once sensory perception of food occurs.

METHODS

The project is highly interdisciplinary as it involves sensory sciences, psychometrics, and metagenomics. It will involve **100** healthy volunteers in Italy and in Denmark whose sensory responses to both water solution and real food matrices will be collected and then related to psychometrics, nutritional and metagenomics data.

SUPERVISION

The student will be supervised by Prof. Davide Giacalone from SDU (Denmark) and by Prof.ssa Flavia Gasperi from University of Trento-C3A (Italy).

MAIN REFERENCES

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