

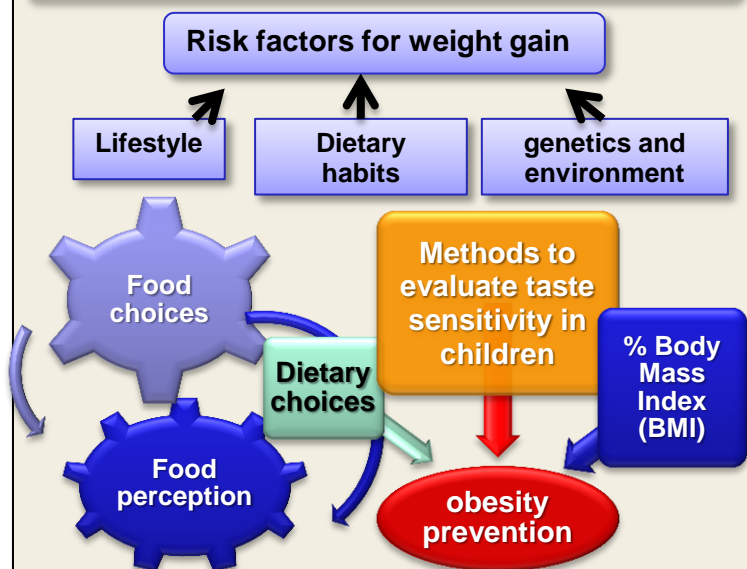
# Influence of taste sensitivity in diet choices and obesity among children

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## Introduction

childhood overweight/obesity in Portugal > 35%<sup>[1]</sup>



## Results

Sweet

- Sweet taste solutions used in other european children <sup>[2]</sup> are valid to discriminate according to sensitivity in Portuguese children

Bitter

- Children discriminated erratically bitter taste concentrations used
- For bitter taste in 80% of children the answers were not consensual with the range of concentrations.

## Materials and Methods

- ❖ 20 Children with 8-10 years old
- ❖ 5 solutions of sweet taste (3 – 16 g/L sucrose)
- ❖ 5 solutions of bitter taste (0,05 – 0,25 g/L caffeine)
- ❖ For each taste:
  - ❖ Children were asked to separate solutions they perceived equal to water from the ones they perceived different from water
- ❖ Pause of 15 minutes between the two tastes sampling
- ❖ Taste thresholds from each child were assessed by the lowest tastant concentration he/she perceived as different from water
- ❖ Only sequential responses were considered as valid

## Conclusions

Portuguese children differ from other European children in bitter taste sensitivity

It is essential to adjust tastant levels according to sociocultural habits in order to access bitter taste sensitivity in children and to relate it to obesity

## References

- [1] Rito et al. (2012) Pediatric Obesity 7:413-422.  
[2] Knof K et al. (2011) International Journal of Obesity 35:S131–S136

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