VALIDITY OF THE PERFORMANCE OF A PANEL TRAINED IN SATIETY ASSESSMENT ON FOOD INTAKE MEASURES

TOPIC 2: Advances in dietary studies, methodology and design

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INTRODUCTION

Enhanced satiety food is one the big challenges for food companies. In this context, we developed a new approach based on the training of panelists in satiety assessment by using visual analogue scales (VAS). This specific training provided discriminative results and the methodology was reproducible (Lesdema et al. submitted). According to the literature subjective appetite ratings do not always reflect the amount of food eaten (Sorensen et al. 2003, Doucet et al. 2003).

OBJECTIVES

Our next challenge was to evaluate the potential link between subjective measures of appetite and actual food intake.

METHODS / DESIGN

15 panelists, mean BMI= 23 ± 3 kg/m², mean age= 48 ± 9 yrs
• TFEQ scores: Cognitive restraint= 7 ± 3, Disinhibition= 4 ± 2
• Cross over design
• 6 separate randomized sessions, each session= one type of product

RESULTS

There is a relatively good coherence between energy intake (EI) and appetite sensations for the least satiating product (Strawberry soft cake) and for 2 of the most satiating products (Baguette, Crumbly biscuit). There are encouraging results regarding the validity of the training when assessing food intake.

CONCLUSIONS

Baguette is more satiating than Strawberry soft cake and Natte (tendency). Crumbly biscuit has a tendency to be more satiating than Strawberry soft cake.

Strawberry soft cake and Vanilla soft cake are the two least satiating products while Baguette, Crumbly biscuit and Whole meal bread are the most satiating products.

There is a significant correlation between appetite sensations and food intake for a delta above 100 kcal.