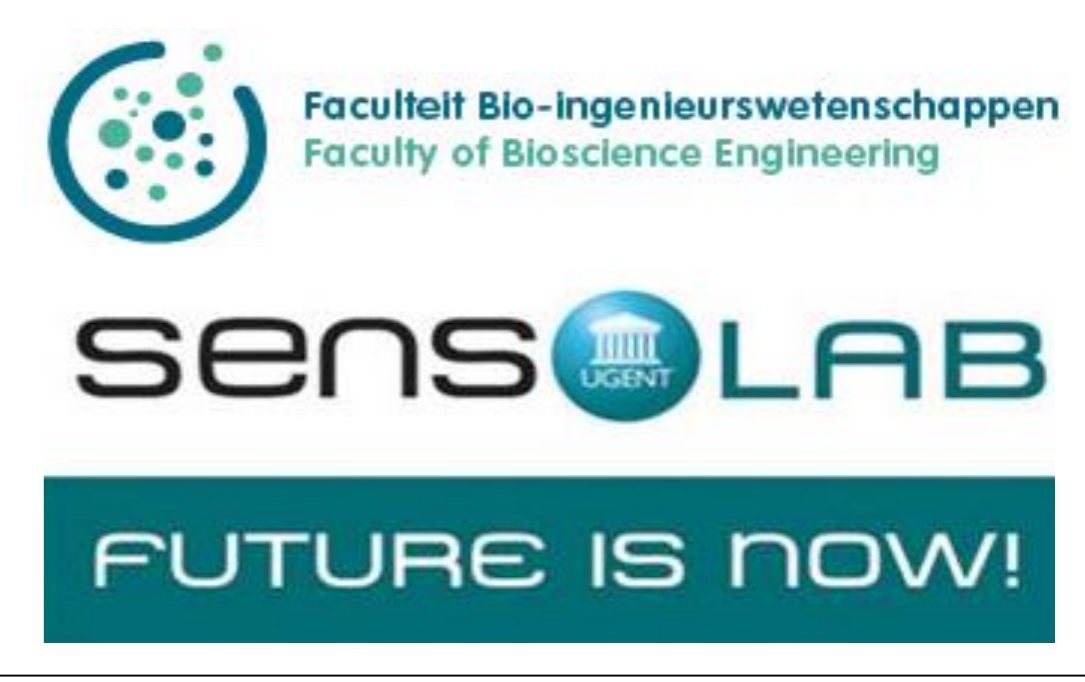


# Implicit measurement of preference and emotion in universal and personally accepted and non-accepted drinks

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## OBJECTIVES

- ✓ To assess responses elicited by food products through implicit methods in order to enhance the understanding of the consumers' food experience

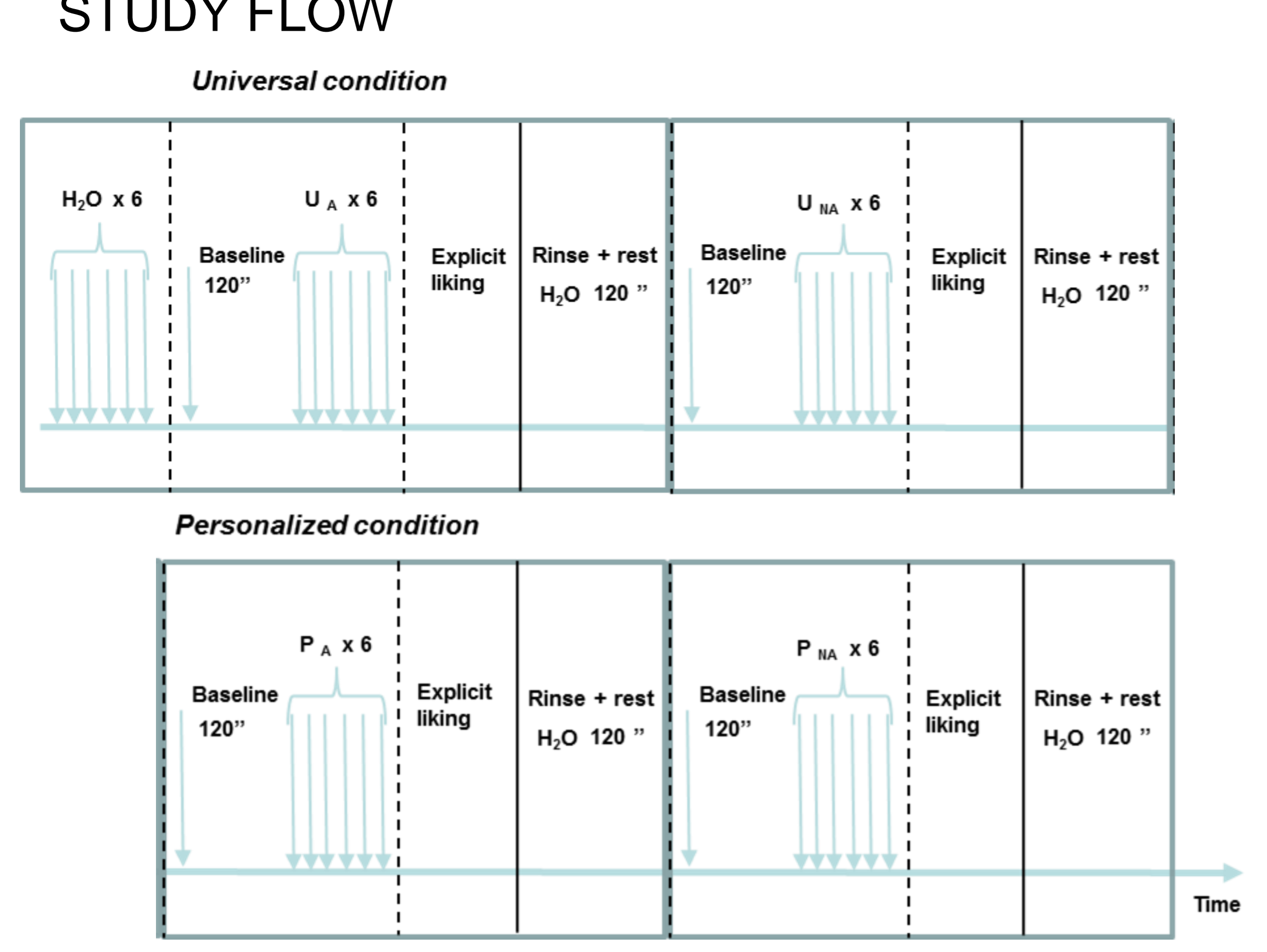
## AIM

- ✓ To explore neurophysiological and physiological responses to accepted and non-accepted solution and drinks
  - ✓ EEG frontal alpha asymmetry (FAA)
  - ✓ ECG heart rate and heart rate variability
  - ✓ Electrodermal activity (EDA)

## MATERIALS & METHODS

### TASTE STIMULI

Universal solutions	
Universal accepted (Ua)	Sucrose solution (150g/l)
Universal non-accepted (Una)	Caffeine solution (1g/l)
Personally selected drinks	
Personal accepted drink (Pa)	Based on questionnaire
Personal non-accepted drink (Pna)	Based on questionnaire

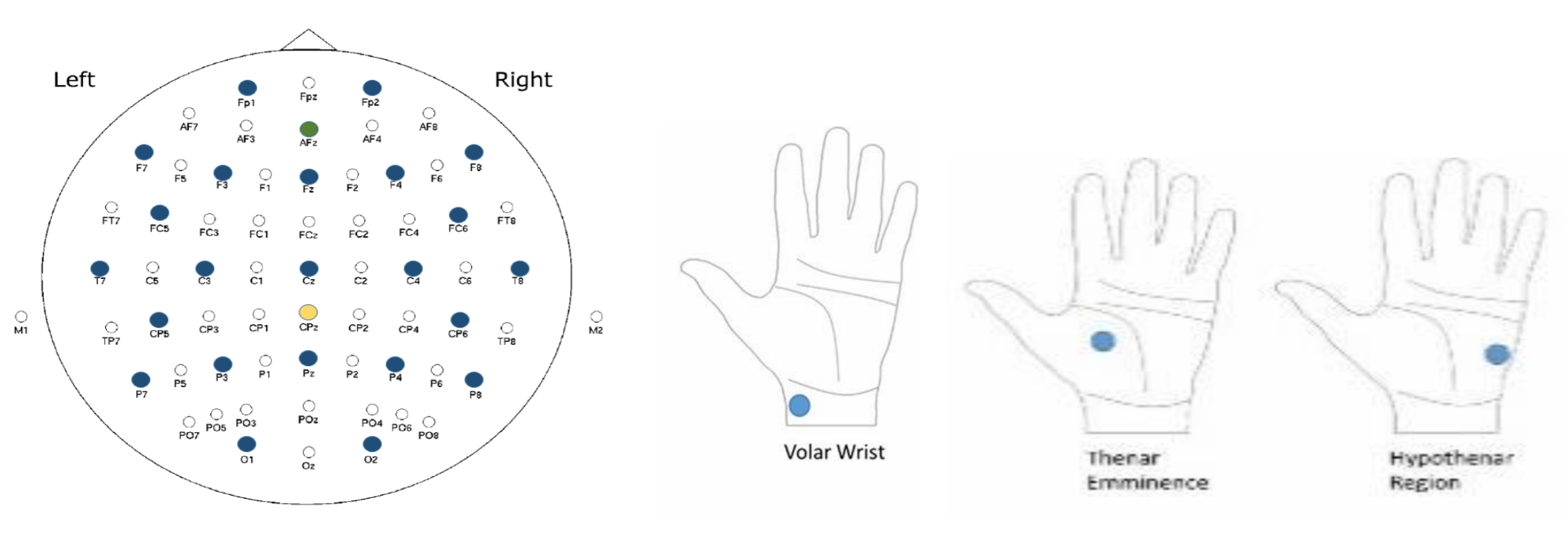


### NEUROPHYSIOLOGICAL RECORDINGS

- EEG: 25 surface electrodes including ground and reference electrode (international 10-20 system)

### PHYSIOLOGICAL RECORDINGS

- ECG: two clip electrodes on wrists of participant
- EDA: 8 mm Ag/AgCl electrodes on the thenar and hypothenar eminences of the palm of the non-dominant hand



### STATISTICS

Linear mixed model analysis

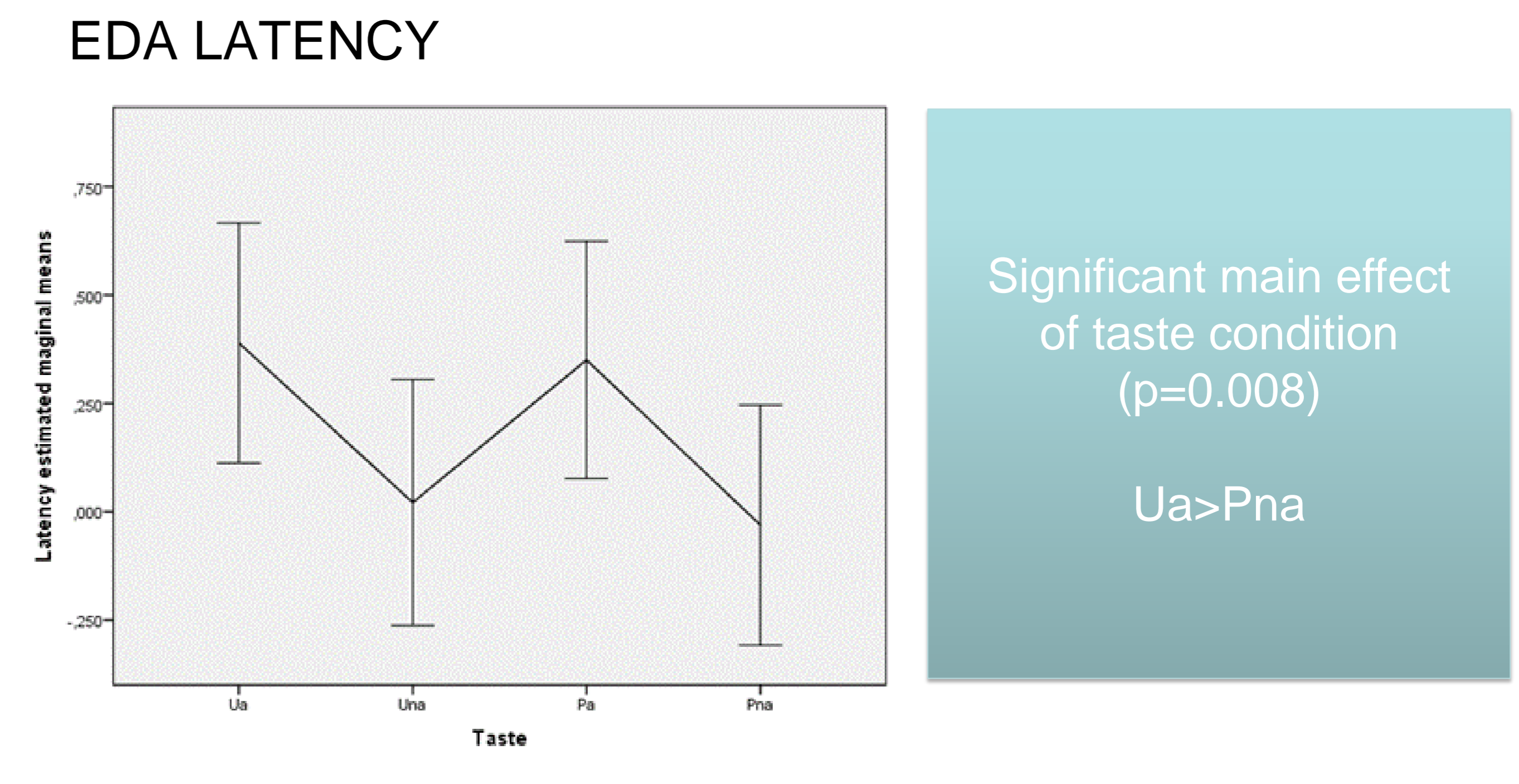
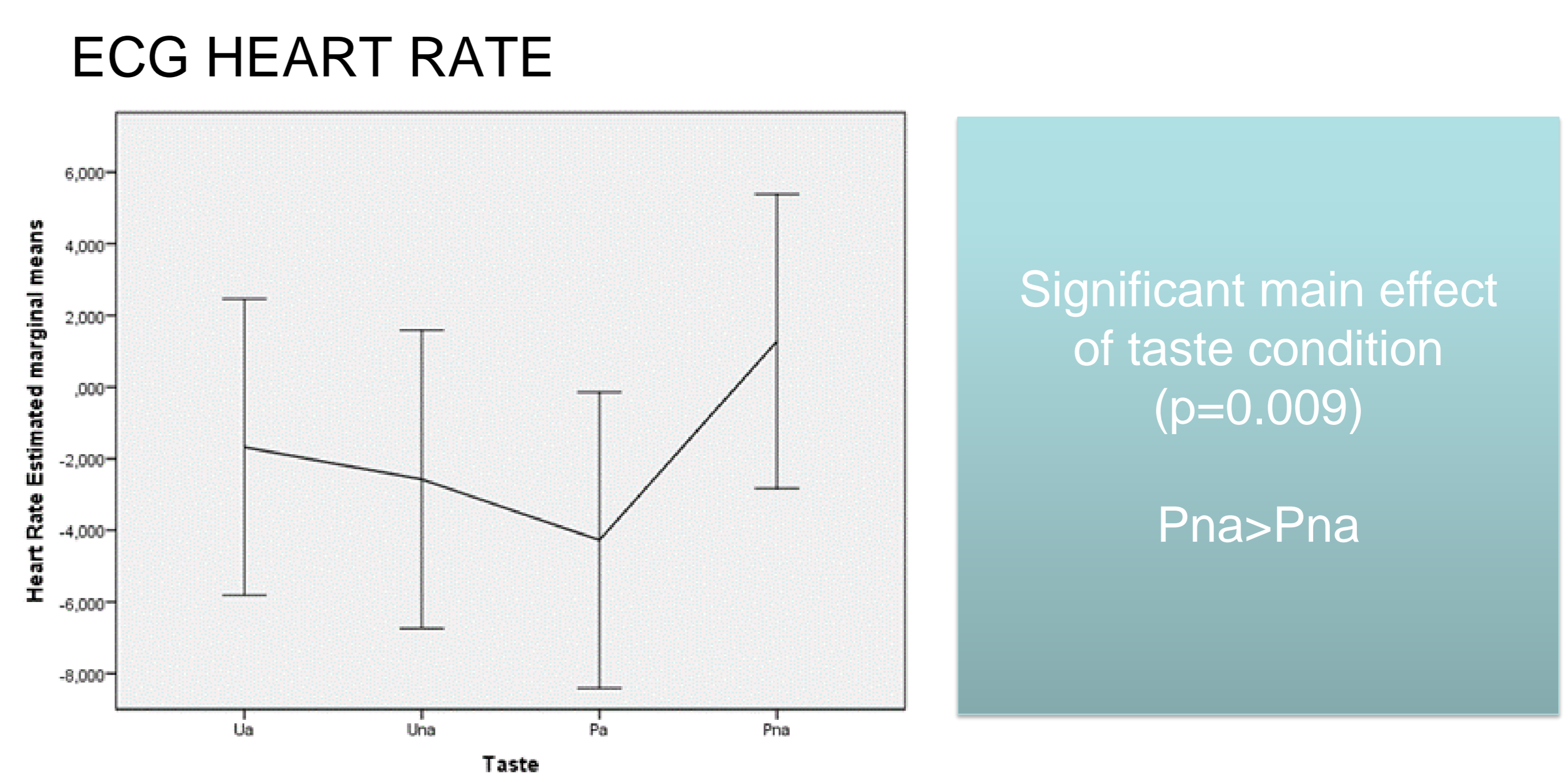
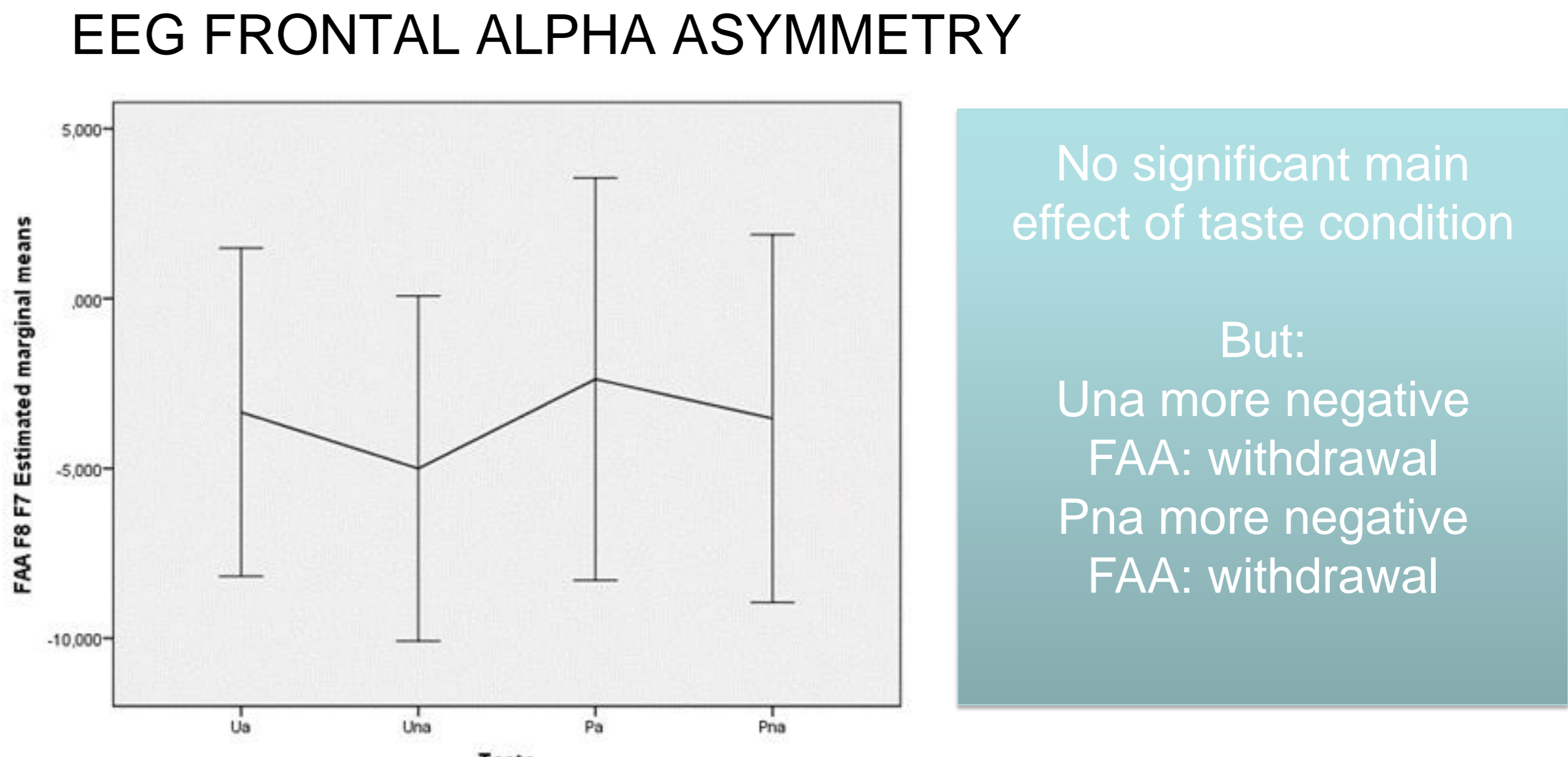
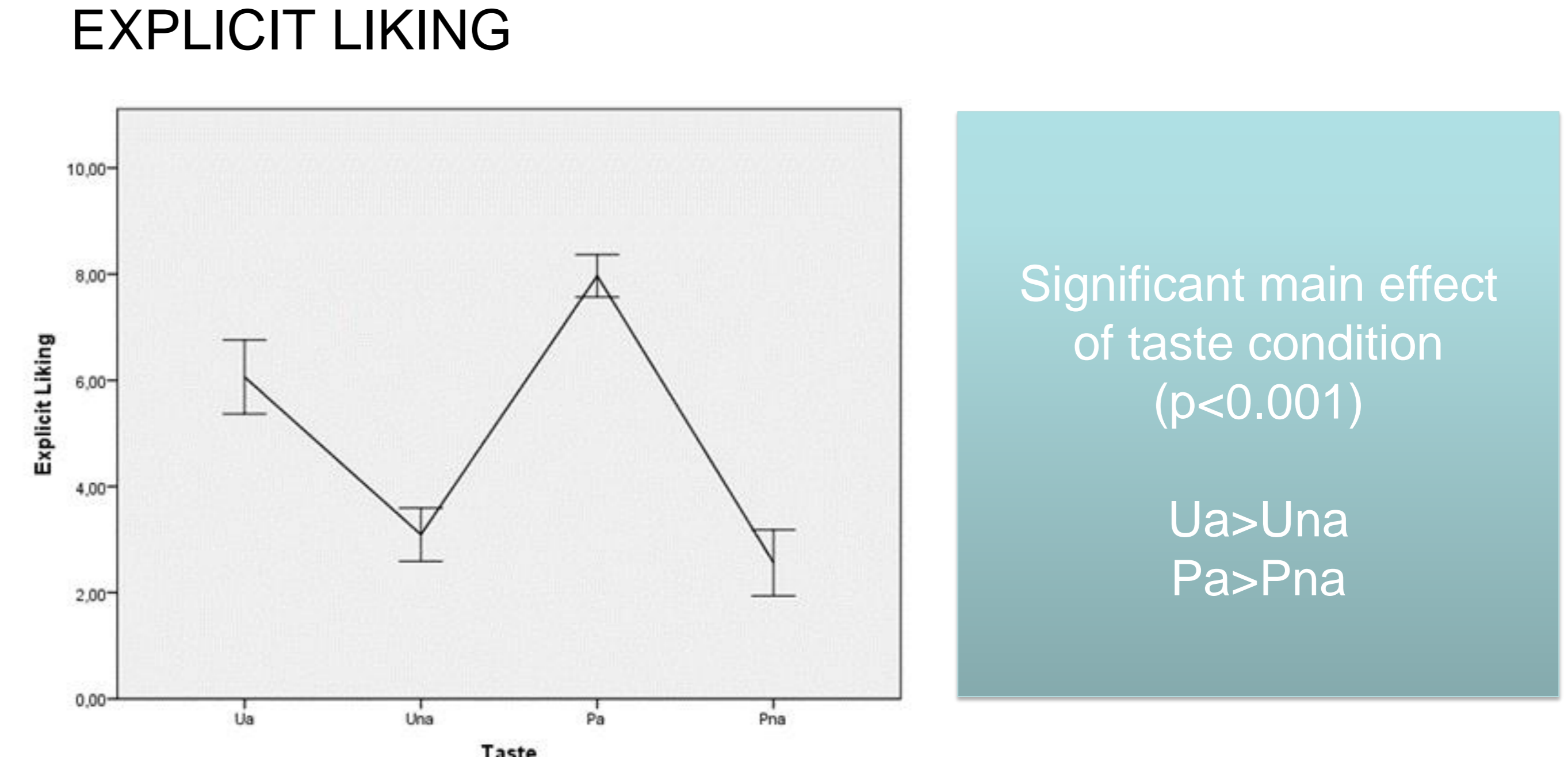
- Fixed effect: taste condition
- Random effect: consumer

## RESULTS

### PARTICIPANTS

32 Belgian participants

- 16 ♂, 16 ♀
- Mean age 25.53 ( ± 3.7)



## CONCLUSIONS

- ✓ Implicit methods could enhance the understanding of consumers' food experience, although measurement still presents challenges
- ✓ Future research should build on optimizing methods and developing a standard method for food stimuli with tasting of the food products