



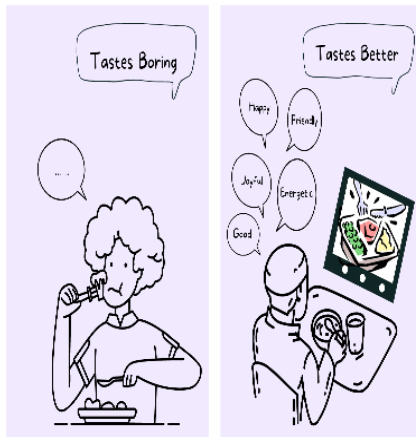
Watch Your Flavors: Augmenting People's Flavor Perceptions and Associated Emotions based on Videos Watched while Eating

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Background

- People engage in different activities while eating alone, such as watching television or scrolling through social media on their phone or laptop.
- However, the impacts of these visual contents on human cognitive processes, particularly related to flavor perception and its attributes, are still not thoroughly explored.



Motivation

To introduce:

- A novel approach to investigate possible augmentations on taste sensations, liking, and emotions based on different videos watched while eating.

To study:

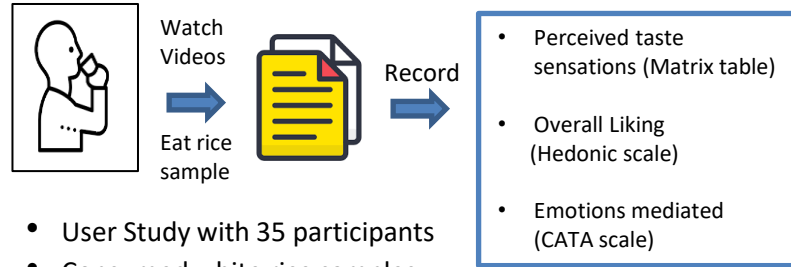
- Videos watched while eating and changes in flavor perception
- Changes in hedonic liking, and taste sensations
- Emotions mediated through different videos while eating, including novel food video genre: mukbang

Research Question

Do **videos watched while eating** augment people's flavor perceptions in terms of **taste sensations, liking, and emotions** ?



Methods



- User Study with 35 participants
- Consumed white rice samples
- Six video conditions: No video, Cooking video, Nature video, Conversational Mukbang video, Mukbang video (with and without sound)



Contribution

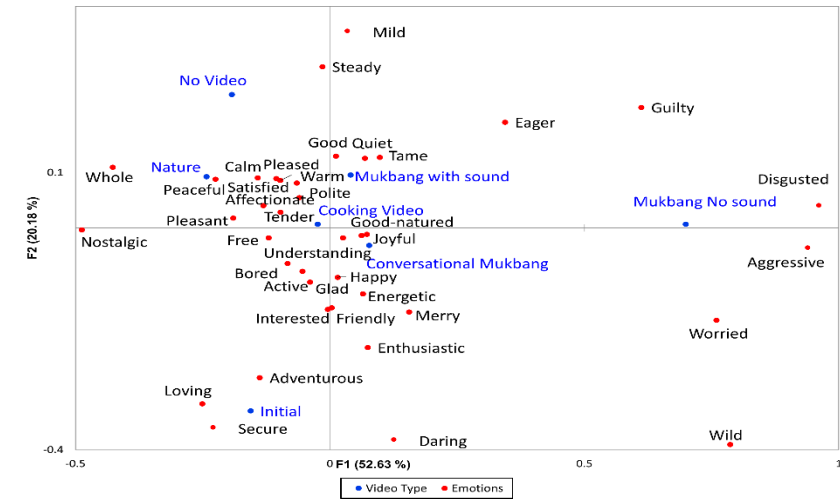
Our research explores the effects of watching different types of videos while eating, on participants' flavor perception in terms of taste sensations, liking, and elicited emotions.

Results show that food-based videos watched while eating:

- 1) augment taste sensations, consequently, the flavors, and
- 2) produce positive emotional changes in participants which would result in an enjoyable eating experience.

It is envisioned that in the future potential health applications can be explored to reduce calorie intake while increasing the enjoyment of food and beverages.

Results



- 1) Videos watched while eating augment the taste sensations without the need for physical or chemical flavorings,
- 2) Different types of food-based videos influenced different types of taste sensations
- 3) Elicited emotions were different based on types of videos watched while eating, and
- 4) Positive emotional changes were reported when food-based videos were watched (especially mukbang videos elicited an enjoyable eating experience).

Future Work

- Expand this study to explore the impacts of the effect of video content on appetite, satiety, and related functions on people's taste sensations, liking, and emotions.
- Investigate the effects of personality traits and external sensory stimuli such as sound, smell, ambient lighting, and temperature on people's flavor perceptions and related cognitive functions.