

# Impact of sour and carbonated foods and drinks on subsequent intake

Bozorgi Catherina, University of Southern Denmark

Holleufer Celine, University of Southern Denmark

Wendin Karin, Kristianstad University, Sweden and University of Copenhagen, Denmark

## Conclusion

Some sour foods, in this study exemplified by cherry tomatoes, natural yoghurt, and in particular citrus

juice made it easier to swallow a neutral cracker *after* ingestion of these sour products.

## INTRODUCTION

The oral processing of food is important for eating and digestion in order to gain energy and nutrients. Due to disease, accident, or aging individuals may experience difficulties in this process. These difficulties often lead to dysphagia which is strongly associated with malnutrition. Thus, it is of importance to find solutions and strategies that can facilitate intake of food.

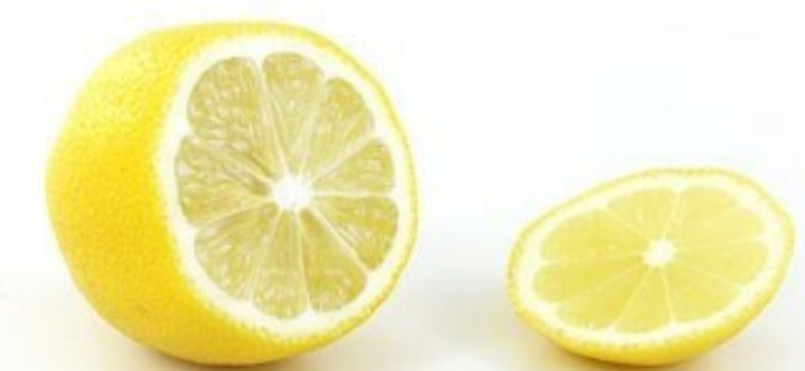
It is well known that sour and/or carbonated foods and drinks increase saliva secretion and trigger the swallowing reflex. However, knowledge of how subsequent food intake is impacted is low.

## PURPOSE

The purpose of this study was to clarify whether sour and/or carbonated foods and drinks have a subsequent impact on swallowing function.

## MATERIAL AND METHOD

Twelve healthy participants evaluated eleven different foods and drinks due to their ability to increase saliva production and make swallowing of a subsequent food easier.



## RESULTS AND DISCUSSION

As expected, sourness and carbonation had a positive impact on saliva secretion and swallowing. No correlation was found between pH / sourness and ease of swallowing the test foods.

Full paper:  
Nutrients 2020, 12, 256; doi:10.3390/nu12010256



Kristianstad  
University  
Sweden

Contact: [Karin.Wendin@hkr.se](mailto:Karin.Wendin@hkr.se)

This study was financed by Vinnova, Sweden