Food properties, eating behaviour and food intake of composite foods

No registrations found.

Ethical review	Not applicable
Status	Pending
Health condition type	-
Study type	Observational non invasive

Summary

ID

NL-OMON25889

Source
Nationaal Trial Register

Brief title
PLANEaT

Health condition

Obesity

Sponsors and support

Primary sponsor: Wageningen University
Source(s) of monetary or material Support: TiFN

Intervention

Outcome measures

Primary outcome

The main study outcomes are eating behavior parameters (number of bites, total consumption time, eating rate measured from the video recordings) and intake from both the cracker and the cheese (measured from ad libitum amount).

Secondary outcome

N/A

Study description

Background summary

Eating behaviour and thereby food intake can be modified by changing the properties of the food consumed. When targeting the elderly population with decreased eating capabilities, one might look for opportunities to increase food intake. On the other hand, when targeting the general population, one might look for effective strategies to slow down food consumption to lower food intake and consequently the risk of chronic diseases such as diabetes and obesity. It is well-known that texture properties of foods influence the eating behaviour and the amount of food eaten, with liquids being consumed faster and in higher amounts than (semi)-solids. Most studies investigated this effect of food texture in model foods (e.g. gels) or single foods (e.g. soups). However, many foods are frequently consumed in combination with additional foods (i.e. composite foods) such as bread/cracker with cheese, salad with dressing or yogurt with cereals. It is not known whether such texture effects are sufficient to influence eating behaviour and food intake of composite foods. In addition, although an effect of food texture is often observed, it is not known whether variation in product shape can also influence eating behaviour and food intake. We hypothesize that single products (e.g. cracker or condiment) can be optimized for their shape or texture properties to develop composite foods that assist in food intake regulation. Thererefore, the aim of this study is to study the influence of cracker shape and cheese viscosity on eating behaviour and ad libitum food intake of cracker-cheese combinations

Study objective

We expect that the shape of the cracker influences the amount of cheese consumers will add to their cracker (increase / decrease cheese intake). In addition, we expect that increased cheese viscosity increases oro-sensory exposure time (increased satiation / decreased intake).

Study design

N/A

Intervention

Participants will eat crackers with a cheese dip until they are satisfied (while being video recorded). The four conditions of this study are 1) flat cracker with high viscous cheese dip, 2) flat cracker with low viscous cheese dip, 3) cracker stick with high viscous cheese dip, and 4) cracker stick with low viscous cheese dip.

Contacts

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Eligibility criteria

Inclusion criteria

Age between 18-35 years old at the day of inclusion
European nationality and Caucasian ethnicity
Be a frequent consumer of crackers and cheese (dip), defined as at least once a month (self-reported)
Good general health and appetite (self-reported)

Exclusion criteria

Have any food allergy or intolerance to any ingredient of the food assessed in the study (self-reported)
Are a smoker (self-reported)
Are an intensive exerciser (not including walking or biking) (more than 8 hours per week)
Have dental braces (not including a dental wire) (self-reported)
Have piercings in or around the mouth (not including removable piercings)(self-reported)
Smell or taste disorders (self-reported)
Difficulties with chewing, swallowing and/or eating in general (self-reported)
Use medication that may affect the function of taste, smell, mastication and salivation (self-reported)
History of eating disorders (self-reported)
Have followed an energy restricted diet during the last 2 months (self-reported)
Gained or lost 5 kg of body weight over the last half year (self-reported)
Being pregnant or lactating (self-reported)
Participate in a medical study (self-reported)
Are an employee of the Division of Human Nutrition at Wageningen University

Are thesis student or intern at the chair group of Sensory Science and Eating Behaviour at Wageningen University

Study design

Design

Study type:	Observational non invasive
Intervention model:	Crossover
Allocation:	Randomized controlled trial
Masking:	Open (masking not used)
Control:	N/A , unknown

Recruitment

NL

Recruitment status:	Pending
Start date (anticipated):	01-09-2019
Enrollment:	55
Type:	Anticipated

IPD sharing statement

Plan to share IPD: No

Plan description
N/A

Ethics review

Not applicable

Application type:	Not applicable

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register	ID
NTR-new	NL7741
CCMO	NL70240.081.19

Study results

Summary results
N/A