Mond en kauwbewegingen in relatie tot de waarneming van smaak en textuur van (half)vloeibare voedingsmiddelen.

No registrations found.

Ethical review	Positive opinion
Status	Recruiting
Health condition type	-
Study type	Observational non invasive

Summary

ID

NL-OMON25079

Source
Nationaal Trial Register

Brief title
Chew it!

Health condition

obesity overweight

Sponsors and support

Primary sponsor: Top Institute Food and Nutrition
Source(s) of monetary or material Support: self-financing

Intervention

Outcome measures

Primary outcome

Movements of mouth and tongue measured by EMA (articulography).

Secondary outcome

Muscle activity of jaw muscles measured by EMG.

Study description

Background summary

Rationale:

Currently several fat and sugar-reducing strategies are used to decrease the energy density of foods, some are accepted by the consumer and some are not. We hypothesize that the successful strategies have specific effects on foods that are able to mimic certain taste and texture related sensations. However, no data is available on specific oral processing movements or patterns that are used to perceive the taste and texture of products. Knowledge of these movements/patterns might bring the development of fat and sugar-reducing strategies to a higher level.

Objective:

The primary objective of this study is to identify specific oral processing movements and/or patterns that occur during consumption of (semi-)liquid foods, with respect to taste and texture related properties (e.g. taste intensity and viscosity), and the sensory perception thereof (e.g. rated taste intensity and thickness).

Study population:

The study population will consist of 30 healthy, normal weight volunteers, aged between 18 and 50 y.

Study design:

The experiment is observational. Within the sessions we make within person comparisons between products and rated attributes of a series of foods. Each subject will participate in three sessions spaced one week apart.

Study outcomes:

Oral processing will be measured with different techniques. Tongue and jaw movements will be measured by means of articulography (EMA); sensors will be placed on the face and on the tongue to monitor spatial and temporal movement. Additionally, electromyography (EMG) will assess muscle contraction and muscle force needed to process the foods.

Study objective

Perception of specific sensory attributes depends on specific oral exploratory procedures, ie oral movement patterns.

Study design

Measurements during single bites of the foods. In total 3 sessions of 2 hours with series of samples.

Intervention

No intervention. Observational study with different food samples, such as yogurt drinks with added thickener, sweetener and aroma.

Contacts

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Eligibility criteria

Inclusion criteria

1. Adults: 18–50 years;

2. Normal weight: BMI 18.5 – 25.0 kg/m2;

3. Apparently healthy (self-reported by the participant);

4. Successful screening session including the EMA measurement.

Exclusion criteria

1. Regular smoker (> 1 cigarette per day);

2. Aversion or dislike for the foods under study (score<3 on a 5-point scale);

3. Current participation in other experiments;

4. Having followed an energy-restricted diet during the last 2 months;

5. Hypersensitivity (allergy and/or intolerance) for food products under study;

6. Use of anticoagulants;

7. Hypersensitivity for latex;

8. Experienced discomfort or difficulties with swallowing or chewing;

9. Wearing a pace maker;

10. Wearing braces, that limit oral movements;

11. Mouth/tongue piercings.

Study design

Design

Study type:	Observational non invasive
Intervention model:	Parallel

Allocation:	Non controlled trial
Masking:	Open (masking not used)
Control:	N/A , unknown

Recruitment

NL

Recruitment status:	Recruiting
Start date (anticipated):	16-01-2012
Enrollment:	30
Type:	Anticipated

Ethics review

Positive opinion

Date:	08-03-2012
Application type:	First submission

Study registrations

Followed up by the following (possibly more current) registration

ID: 35715
Bron: ToetsingOnline
Titel:

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

No registrations found.

In other registers

Register	ID
NTR-new	NL3136
NTR-old	NTR3336
CCMO	NL38196.081.11
ISRCTN	ISRCTN wordt niet meer aangevraagd.
OMON	NL-OMON35715

Study results

Summary results
N/A