

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

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

Ethische beoordeling	Positief advies
Status	Werving gestart
Type aandoening	-
Onderzoekstype	Observationeel onderzoek, zonder invasieve metingen

Samenvatting

ID

NL-OMON25079

Bron

Nationaal Trial Register

Verkorte titel

Chew it!

Aandoening

obesity overweight

Ondersteuning

Primaire sponsor: Top Institute Food and Nutrition

Overige ondersteuning: self-financing

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

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

Toelichting onderzoek

Achtergrond van het onderzoek

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.

Doel van het onderzoek

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

Onderzoeksopzet

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

Onderzoeksproduct en/of interventie

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

Contactpersonen

Publiek

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Wetenschappelijk

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Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

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.

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

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.

Onderzoeksopzet

Opzet

Type: Observationeel onderzoek, zonder invasieve metingen

Onderzoeksmodel:	Parallel
Toewijzing:	N.v.t. / één studie arm
Blinding:	Open / niet geblindeerd
Controle:	N.v.t. / onbekend

Deelname

Nederland	
Status:	Werving gestart
(Verwachte) startdatum:	16-01-2012
Aantal proefpersonen:	30
Type:	Verwachte startdatum

Ethische beoordeling

Positief advies	
Datum:	08-03-2012
Soort:	Eerste indiening

Registraties

Opgevolgd door onderstaande (mogelijk meer actuele) registratie

ID: 35715
Bron: ToetsingOnline
Titel:

Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

In overige registers

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

Register

OMON

ID

NL-OMON35715

Resultaten

Samenvatting resultaten

N/A