

Effect of taste on sensory specific satiety.

Gepubliceerd: 30-03-2009 Laatst bijgewerkt: 18-08-2022

The quality of taste affects sensory specific satiety. This is shown in both liking and wanting processes.

Ethische beoordeling	Positief advies
Status	Werving gestopt
Type aandoening	-
Onderzoekstype	Interventie onderzoek

Samenvatting

ID

NL-OMON25366

Bron

NTR

Verkorte titel

LunchTime

Aandoening

Eating behaviour

Ondersteuning

Primaire sponsor: Wageningen University,
Division of Human Nutrition

Overige ondersteuning: STW

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

Our main outcome measures of the different test-conditions are: The difference in habituation (responses) during the sweet and savoury meal (test-condition 1), the difference in

motivation after a sweet or savoury meal to work for a certain food (test-condition 2) and the differences in different aspects of food choice after eating a sweet or savoury meal (test-condition 3). Agreements on the outcomes of the different methodologies used in the three test-conditions are assessed.

Toelichting onderzoek

Achtergrond van het onderzoek

Rationale:

Sensory properties have been shown to play a role in food selection and intake. A phenomenon which describes the impact of sensory properties on food intake is sensory specific satiety (SSS). This is defined as the decrease in reward of an eaten food in comparison to food that have not been eaten. When examining the role of food reward in eating behaviour, one can differentiate between food ;®liking; - and food ;®wanting; -. In humans, food liking and wanting can be distinctively assessed using different methods. Regarding the nature of sensory signals that affect intake, probably the most important dimension is the sweet-savoury domain.

Objective:

The primary objective of this study is to determine the effect of sweet and savoury taste on SSS by investigating liking and wanting separately using several methods. Agreements on the outcomes of the different methodologies used are assessed.

Study design:

A cross-over intervention study consisting of three test-conditions whereby two tastes are compared, resulting in six experimental conditions. Each subject participates in each of the six experimental conditions whereby the order is randomized. Subjects will be offered a rice meal whereby depending on the test-condition different methods of assessing liking and wanting are used. Commercially available rice will be used as a test product, served in a sweet or savoury variant.

Study population:

The study population will consist of 60 apparently healthy, non-smoking, unrestrained volunteers between the age of 18 and 35 with a normal weight.

Main study parameters/endpoints:

Our main outcome measures of the different test-conditions are: The difference in habituation (responses) during the sweet and savoury meal (test-condition 1), the difference in motivation after a sweet or savoury meal to work for a certain food (test-condition 2) and the differences in different aspects of food choice after eating a sweet or savoury meal (test-condition 3). Agreements on the outcomes of the different methodologies used in the three test-conditions are assessed.

Doe~~l~~ van het onderzoek

The quality of taste affects sensory specific satiety. This is shown in both liking and wanting processes.

Onderzoeksopzet

Per individual 6 measuring time-points, between 18/03/2009 and 29/04/2009.

Onderzoeksproduct en/of interventie

Lunchmeal, either with a sweet or savoury flavour.

Contactpersonen

Publiek

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Wetenschappelijk

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Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

1. Age: 18-35 year;
2. BMI: 18.5 °C 25.0 kg/m²;
3. Healthy (as judged by the participant);
4. Liking for test products (assessed in screening-questionnaire with a 9-point hedonic scale, subjects have to like or have a neutral attitude towards the products: score ≥ 5).

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

1. Restraint eating (men: score > 2.25; women: score > 2.80) [13];
2. Lack of appetite for any (unknown) reason;
3. Usage of a energy restricted diet during the last two months;
4. Weight loss or weight gain of 5 kg or more during the last two months;
5. Stomach or bowel diseases;
6. Diabetes, thyroid disease, or any other endocrine disorder;
7. Having difficulties with swallowing/eating;
8. Hypersensitivity (allergy and/or intolerance) for the food products under study;
9. Smoking (at least one cigarette a day);
10. For women: pregnant or lactating;
11. Being a vegetarian;
12. Having participated in "RiceTime" or current participation in other research from the division of human nutrition (WUR).

Onderzoeksopzet

Opzet

Type:	Interventie onderzoek
Onderzoeksmodel:	Cross-over
Toewijzing:	Gerandomiseerd
Blinding:	Open / niet geblindeerd
Controle:	N.v.t. / onbekend

Deelname

Nederland	
Status:	Werving gestopt
(Verwachte) startdatum:	18-03-2009
Aantal proefpersonen:	60
Type:	Werkelijke startdatum

Ethische beoordeling

Positief advies	
Datum:	30-03-2009
Soort:	Eerste indiening

Registraties

Opgevolgd door onderstaande (mogelijk meer actuele) registratie

Geen registraties gevonden.

Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

In overige registers

Register	ID
NTR-new	NL1654
NTR-old	NTR1752
Ander register	MEC Wageningen / ABR : 08/25 / 25900.081.08
ISRCTN	ISRCTN wordt niet meer aangevraagd

Resultaten

Samenvatting resultaten

N/A