

The role of sensory signals on satiety and food preferences

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To determine the effect of sensory signals on satiety and food preferences.

Ethical review	Approved WMO
Status	Recruitment stopped
Health condition type	Other condition
Study type	Interventional

Summary

ID

NL-OMON35799

Source

ToetsingOnline

Brief title

ShowTime

Condition

- Other condition

Synonym

obesity, overweight

Health condition

obesitas

Research involving

Human

Sponsors and support

Primary sponsor: Wageningen Universiteit

Source(s) of monetary or material Support: STW,CSM,Danone Vitapole,Friesland Nutrition,TNO,Unilever

Intervention

Keyword: food preferences, satiety, sensory signals

Outcome measures

Primary outcome

Our main outcome measurement is the difference in energy intake (kJ) during an ad lib test meal after 24h of a sweet diet, a savoury diet, and a control diet.

Secondary outcome

- To assess the effect of a sweet diet, a savoury diet, and a control diet on subjective ratings of appetite using a VAS;
- To assess the effect of a 24h sweet diet, a savoury diet, and a control diet on different aspects of food liking and wanting measured with an Food Preference Questionnaire.
- To assess the effect of a 24h sweet diet, a savoury diet, and a control diet on cognitive associations of towards different food categories using a Sorting Paired Features (SPF) task.

Study description

Background summary

Sensory properties of food play an important role in food selection and intake. Within our food range, products containing high protein levels are in general more savoury, while products containing carbohydrates are generally more sweet. Protein has been found to be the more satiating macronutrient. The role of sensory signals in the satiating effects of protein, however, requires further clarification.

Study objective

To determine the effect of sensory signals on satiety and food preferences.

Study design

The study will consist of three test days, which will be separated by 1 week. These test days involve consumption of pre-determined iso-caloric diets consisting of only sweet products (sweet diet), only savoury products (savoury diet) or a combination of sweet and savoury products (control diet), using a randomized crossover design. Afterward energy intake of an ad libitum test meal is measured. In addition, during the test days, sensations of appetite and several measures of food preferences will be assessed.

Intervention

Consumption of pre-determined iso-caloric diets consisting of only sweet products (sweet diet), only savoury products (savoury diet) or a combination of sweet and savoury products (control diet)

Study burden and risks

The study is non-therapeutic to the participants. The risk associated with participation is negligible and the burden can be considered as low. No invasive measurements are present.

Contacts

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Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age

Adults (18-64 years)

Elderly (65 years and older)

Inclusion criteria

Section 4.2 from the research proposal

- Age: 18-35 years
- BMI: 18.5 - 25.0 kg/m²
- Healthy (as judged by the participant)

Exclusion criteria

Section 4.3 from the research proposal

- Restraint eating (men: score > 2.25; women: score > 2.80) [7]
- Lack of appetite
- Having difficulties with swallowing/eating
- Usage of an energy restricted diet during the last two months
- Weight loss or weight gain of 5 kg or more during the last two months
- Stomach or bowel diseases
- Kidney disorders
- Diabetes, thyroid disease, other endocrine disorders
- Usage of daily medication other than birth control pills
- For women: pregnant or lactating
- Smoking (at least one cigarette a day)
- Being a vegetarian
- Being allergic/intolerant for products under study
- Having participated in studies that have used the LFPQ: *RiceTime*, *LunchTime*, *ProStudy*, and *ProTime*, or current participation in other research from the division of human nutrition (WUR).

Study design

Design

Study type:	Interventional
Intervention model:	Crossover
Masking:	Open (masking not used)
Control:	Uncontrolled
Primary purpose:	Basic science

Recruitment

NL	
Recruitment status:	Recruitment stopped
Start date (anticipated):	10-05-2011
Enrollment:	32
Type:	Actual

Ethics review

Approved WMO	
Application type:	First submission
Review commission:	METC Wageningen Universiteit (Wageningen)

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
CCMO	NL36114.081.11