

# Influences of odors on appetite responses, food preferences and intake

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To determine appetite responses to different odors (signalling different food products), measured by appetite questionnaires, a food preference task, saliva production and food intake

<b>Ethical review</b>	Approved WMO
<b>Status</b>	Recruitment stopped
<b>Health condition type</b>	Other condition
<b>Study type</b>	Interventional

## Summary

### ID

NL-OMON42521

### Source

ToetsingOnline

### Brief title

Flair-2

### Condition

- Other condition
- Appetite and general nutritional disorders

### Synonym

eating behavior; food cue reactivity

### Health condition

sensoriek en eetgedrag

### Research involving

Human

## Sponsors and support

**Primary sponsor:** Wageningen Universiteit

**Source(s) of monetary or material Support:** Ministerie van OC&W

## Intervention

**Keyword:** appetite, food intake, food preferences, odor exposure

## Outcome measures

### Primary outcome

ad libitum food-intake, food preferences, subjective appetite ratings

### Secondary outcome

saliva production.

## Study description

### Background summary

In view of the obesity epidemic, it is important to understand how exposure to food cues, for example, the smell of freshly baked bread, can influence food choice and intake by enhancing appetite and salivation

### Study objective

To determine appetite responses to different odors (signalling different food products), measured by appetite questionnaires, a food preference task, saliva production and food intake

### Study design

counterbalanced cross-over within-subject intervention study

### Intervention

Participants will participate in one screening session and five test sessions. In each test session, participants will be exposed to an ambient odor and will be tested for physiological and behavioural measures that reflect food cue reactivity.

## Study burden and risks

This study is non-therapeutic. Participation with this study is associated with a negligible burden and risk. Compared to other studies the burden can be considered as low. The study includes five site visits in a non-satiated state plus a screening session.

## Contacts

### Public

Wageningen Universiteit

Bomenweg 2  
Wageningen 6703 HD  
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### Scientific

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## Trial sites

### Listed location countries

Netherlands

## Eligibility criteria

### Age

Adults (18-64 years)

Elderly (65 years and older)

### Inclusion criteria

- Gender: female
- Age: from 18 to 55 years
- Language: Dutch as mothertongue, and good English reading and writing skills

- BMI:  $18.5 \leq \text{BMI} \leq 25 \text{ kg/m}^2$
- Health: good general health (subjective)
- Appetite: healthy appetite
- Smell and taste: Normal sense of smell and taste

## Exclusion criteria

- Mental status that is incompatible with the proper conduct of the study
- pregnant or breast feeding, current or during the past 6 months
- (post)Menopausal
- Food allergy or intolerance for strawberry, apple, cacao, egg, gluten, lactos, lupin, beef, pork or carrot
- Food preference incompatible with food odors and products used in the study
- Reported vegetarian life-style
- Problems with chewing and/or swallowing
- Smoking
- restrained eater
- Reported weight loss or weight gain of  $> 5 \text{ kg}$ , or following a diet, in the two months prior to screening
- Chronic use of medication, except paracetamol or contraceptives
- Being personnel of Wageningen University, division of Human Nutrition, or currently performing a MSc thesis at the division of Human Nutrition.
- Currently participating in other research from the Division of Human Nutrition (except for the Eet-Meet-Weet onderzoek)

## Study design

### Design

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

### Recruitment

NL	
Recruitment status:	Recruitment stopped
Start date (anticipated):	26-10-2015

Enrollment: 30  
Type: Actual

## Ethics review

Approved WMO  
Date: 21-09-2015  
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	NL54464.081.15