

# Profiling the endocannabinoid response to hedonic eating

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The primary objective is to assess changes in endocannabinoid plasma levels prior, during and after eating of hedonically liked versus non-pleasurable foods.

|                              |                     |
|------------------------------|---------------------|
| <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-OMON42088

### Source

ToetsingOnline

### Brief title

Cravings

### Condition

- Other condition
- Appetite and general nutritional disorders

### Synonym

Obesity, overweight

### Health condition

Obesitas

### Research involving

Human

## Sponsors and support

**Primary sponsor:** Wageningen Universiteit

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

## Intervention

**Keyword:** Endocannabinoid system, Hedonic eating

## Outcome measures

### Primary outcome

The endocannabinoid plasma profile prior, during and after eating of a hedonically liked food product compared to a non-pleasurable food product.

### Secondary outcome

- plasma levels of ghrelin, GLP1, PP, FFA, glucose and insulin prior, during and after eating of a hedonically liked food product compared to a non-pleasurable food product.
- the correlation between eCB profile and FFA profile.
- hunger ratings prior and after eating of a hedonically liked food product compared to a non-pleasurable food product.

## Study description

### Background summary

The endocannabinoid system has been found to be involved in hedonic eating, but as of yet it is unknown during what phase(s) of eating, i.e., if the endocannabinoid system is involved during anticipation and consumption of food and satiety.

### Study objective

The primary objective is to assess changes in endocannabinoid plasma levels prior, during and after eating of hedonically liked versus non-pleasurable

foods.

## **Study design**

The study has a randomized, cross-over design. In two different sessions subjects will receive either hedonically pleasant brownie or non-pleasurable brownie. The two test sessions are at least two weeks apart.

## **Intervention**

NA

## **Study burden and risks**

The study will consist of an intake session that takes 45 minutes, and two test sessions of approximately 4.5 hours per session on separate days, giving a total of approximately 10 hours. The study is non-therapeutic for participants. During each session an intravenous cannula will be inserted and used for blood drawing, this may cause some discomfort for the participants. The Hb value of each participants will be determined before participation, blood collection will therefore not lead to anaemia. Participants will receive their evening meal and breakfast prior to each test session.

## **Contacts**

### **Public**

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Bomenweg 2  
Wageningen 6703 HD  
NL

### **Scientific**

Wageningen Universiteit

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## **Trial sites**

## Listed location countries

Netherlands

## Eligibility criteria

### Age

Adults (18-64 years)

Elderly (65 years and older)

### Inclusion criteria

Male

Healthy

Age: 18-35 years

BMI: 18.5-25 kg/m<sup>2</sup>

### Exclusion criteria

Being allergic for products under study

Not consuming products under study for lifestyle reasons

Endocrine disorder

Use of medication that may influence study outcomes

Smoking >1 cigarette per day

Consuming more than 21 units of alcohol per week

Using cannabis more than 12 times per year

Recent blood donation( <1 month prior to the first test session)

## 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): 27-08-2015  
Enrollment: 25  
Type: Actual

## Ethics review

Approved WMO  
Date: 23-04-2015  
Application type: First submission  
Review commission: METC Wageningen Universiteit (Wageningen)  
Approved WMO  
Date: 15-09-2015  
Application type: Amendment  
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     | NL51830.081.14 |