# Cerebral blood flow measurements with fMRI.

No registrations found.

**Ethical review** Positive opinion **Status** Recruiting

Health condition type -

**Study type** Interventional

## **Summary**

#### ID

NL-OMON23542

**Source** 

NTR

#### **Health condition**

Bestuderen van de bloeddoorstroming van de hersenen in reactie op een hoog calorische stimulus.

To study cerebral blood flow with 1Tesla MRI before and after ingestion of a liquid meal.

## **Sponsors and support**

**Primary sponsor:** Academisch Medisch Centrum

**Source(s) of monetary or material Support:** fonds = verrichter = sponsor

#### Intervention

#### **Outcome measures**

#### **Primary outcome**

Percentage and/or absolute changes in local cerebral blood flow after a liquid meal.

## **Secondary outcome**

1. Difference in cerebral blood flow between males and females;

2. Influence of ingestion of a liquid meal.

# **Study description**

#### **Background summary**

The brain is the master regulator of food intake. It has been shown that there are anatomical differences between certain brain areas in obese compared with lean people. Also, the response to food related ques seems to be different between these groups. The latter can be studied by measuring cerebral blood flow with fMRI.

#### Study objective

The response in cerebral blood flow upon ingestion of a liquid meal differs between males and females.

#### Study design

One measurement (fMRI).

#### Intervention

Ingestion of a high-caloric liquid meal.

## **Contacts**

#### **Public**

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# **Eligibility criteria**

## Inclusion criteria

- 1. 15 lean male subjects/ 15 lean female subjects;
   2. BMI 20- 25 kg/m²;
   3. Age 18 60 years;
- 4. Stable weight 3 months prior to study inclusion;
- 5. Caucasian;
- 6. Written informed consent;
- 7. Right handed.

#### **Exclusion criteria**

- 1. Claustrophobia;
- 2. Metal objects in the body (e.g. pacemaker);
- 3. Left handed;
- 4. Smoking and/or Alcohol/Drug abuse;
- 5. Intensive exercise (more than 3 times per week);
- 6. Eating disorder (other DSM IV diagnosis);
- 7. Medication use that interferes with dopamine metabolism or nutrient absorption;
- 8. DM.

# Study design

## **Design**

Study type: Interventional

Intervention model: Parallel

Allocation: Non controlled trial

Masking: Open (masking not used)

Control: N/A, unknown

## Recruitment

NL

Recruitment status: Recruiting
Start date (anticipated): 01-05-2010

Enrollment: 30

Type: Anticipated

## **Ethics review**

Positive opinion

Date: 04-05-2010

Application type: First submission

# **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

NTR-new NL2194 NTR-old NTR2318

Other METC AMC: 09/248

ISRCTN wordt niet meer aangevraagd.

# **Study results**

## **Summary results**

N/A