

# The effect of baclofen on food craving scores and binge eating episodes in obese subjects

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To establish the efficacy of 60 mg baclofen compared to placebo in inducing a decrease in food craving, as assessed by a food craving questionnaires (G-FCQ-T) over 6 months in obese subjects.

|                              |  |
|------------------------------|--|
| <b>Ethical review</b>        | Not approved                               |
| <b>Status</b>                | Will not start                             |
| <b>Health condition type</b> | Appetite and general nutritional disorders |
| <b>Study type</b>            | Interventional                             |

## Summary

### ID

NL-OMON37514

### Source

ToetsingOnline

### Brief title

The baclofen study

### Condition

- Appetite and general nutritional disorders

### Synonym

obesity, overweight

### Research involving

Human

### Sponsors and support

**Primary sponsor:** Slotervaartziekenhuis

**Source(s) of monetary or material Support:** via de SKWOSZ (stichting klinisch wetenschappelijk onderzoek slotervaartziekenhuis)

## Intervention

**Keyword:** Baclofen, Binge eating, Foodcraving, Obese

## Outcome measures

### Primary outcome

Food-craving score, measured by the food craving questionnaire

### Secondary outcome

Binge eating

Body weight

## Study description

### Background summary

At the moment, medicament treatment options for obesity are limited. Pharmacotherapy can be chosen when there is less than 5% weight reduction after one year of lifestyle changing. However, the effectiveness of these medication, like orlistat and sibutramine, is moderate with an overall weight reduction of about 5-10% of the total body weight. Besides that, these drugs have significant side effects such as hypertension and insomnia for sibutramine and diarrhea and flatulence for orlistat. Until 2010 sibutramine was marketed and prescribed as an adjunct in the treatment of obesity along with diet and exercise. Since sibutramine has been associated with increased cardiovascular events and strokes the drug is withdrawn from the market.

The effects of baclofen on addiction is still under investigation. The gamma-aminobutyric acid B (GABA-B) agonist baclofen is registered for the treatment of spasms of skeletal muscles, muscle clonus, rigidity and pain caused by disorders such as multiple sclerosis or cerebral palsy. It is also injected intrathecally for the management of severe spasticity. Baclofen was approved by the FDA in November 1977.

Baclofen has already proven effective in substance abuse. In animal models of repeated drug abuse, baclofen reduces self-administration of a variety of drug reinforcers, including cocaine, d-amphetamine, metamphetamine, ethanol, nicotine, and heroin. Clinical trials of baclofen in the treatment of alcohol, cocaine and opiate use disorders have yielded encouraging results. In a randomized, double-blind placebo-controlled trial of baclofen in alcohol dependent patients, baclofen was effective in inducing abstinence from alcohol

as well as reducing alcohol intake, alcohol craving, and state anxiety. Baclofen may be equally efficacious in attenuating binge eating. It has been shown that baclofen reduced fat intake in rats under binge-type condition. In a human non-placebo controlled trial of 7 patients with binge eating disorder baclofen reduced the binge eating episodes with 50% in 5 patients.

Although results of these studies are promising, the effect of baclofen on food craving and weight reduction in obese subjects has insufficiently been studied in randomized trials.

### **Study objective**

To establish the efficacy of 60 mg baclofen compared to placebo in inducing a decrease in food craving, as assessed by a food craving questionnaires (G-FCQ-T) over 6 months in obese subjects.

### **Study design**

Clinical randomised controlled trial

### **Intervention**

Baclofen will be started with an initial doses of 5 mg a day. Every day 5 mg baclofen extra will be added tot the dosage with a final maximum dosage of 20 mg three times a day.

### **Study burden and risks**

The use of baclofen may cause sife effects. De side effects will be minimal and harmless. Patients will be contacted weekly by telephone to inform about the side effects of baclofen.

## **Contacts**

### **Public**

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Louwesweg 6  
1066 EC Amsterdam  
Nederland

### **Scientific**

Slotervaartziekenhuis

Louwesweg 6

1066 EC Amsterdam  
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## Trial sites

### Listed location countries

Netherlands

## Eligibility criteria

### Age

Adults (18-64 years)

Elderly (65 years and older)

### Inclusion criteria

- BMI above 30
- Age 18 years or older
- obtained informed consent
- sufficient command of the dutch language

### Exclusion criteria

- Diagnosis of type 1 or type 2 diabetes
- obesity induced by other endocrinologic disorders
- current or history of treatment with medication that may cause significant weight gain, within 3 months prior to screening

## Study design

### Design

|                     |                |
|---------------------|----------------|
| Study phase:        | 3              |
| Study type:         | Interventional |
| Intervention model: | Parallel       |

|                  |                               |
|------------------|-------------------------------|
| Allocation:      | Randomized controlled trial   |
| Masking:         | Double blinded (masking used) |
| Control:         | Placebo                       |
| Primary purpose: | Treatment                     |

## Recruitment

|                     |                |
|---------------------|----------------|
| NL                  |                |
| Recruitment status: | Will not start |
| Enrollment:         | 40             |
| Type:               | Anticipated    |

## Ethics review

|                    |   |
|--------------------|---|
| Not approved       |   |
| Date:              | 28-02-2012                                      |
| Application type:  | First submission                                |
| Review commission: | METC Slotervaartziekenhuis en Reade (Amsterdam) |

## 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     | NL38499.048.11 |