

# Why does the number of bites affects satiation? A possible role for cognition''.

No registrations found.

<b>Ethical review</b>	Positive opinion
<b>Status</b>	Pending
<b>Health condition type</b>	-
<b>Study type</b>	Interventional

## Summary

### ID

NL-OMON29110

### Source

NTR

### Brief title

MovieStudie

### Health condition

Obesity, overweight.

## Sponsors and support

**Primary sponsor:** Wageningen University

**Source(s) of monetary or material Support:** STW/NWO

## Intervention

## Outcome measures

### Primary outcome

Ad libitum intake. This is registrated by specially designed software.

### Secondary outcome

Estimated amount consumed by the subjects.

# Study description

## Background summary

Rationale:

We showed recently that the number of bites (NB) is important in satiation. A relative higher NB (three bites of 5 g vs. one bite of 15 g) resulted in ~22% lower food intake. It is not clear why NB affects satiation. It is possible that a relatively higher NB make people believe that they consume more, which triggers a faster satiation. If this would be the case, than cognition and memory may be important for the effect of NB on satiation. Distraction during consumption impairs memory and cognition, therefore, the state of attention may play a role in the effect of NB on satiation.

Objective:

The objective of this study to investigate the role of attention on the effect of NB on ad libitum intake.

Study design:

A 3x2 cross-over intervention study. A low NB condition (LNB), a high NB condition (HNB) and a free NB condition (Free) will be presented in an attentive and distractive state. Bites and intervals are administered and controlled by a pump.

Study population:

Fifty-five, normal weight, non-smoking male subjects between 18 and 35 years old.

Main study parameter:

Ad libitum intake of tomato soup in grams.

## Study objective

Distraction during consumption leads to a smaller effect of the number of bites on the amount of food intake.

## Study design

Six times ad libitum intake during lunch.

## Intervention

1. Distraction vs. attention to food intake; distraction will be through watching a movie;
2. Consumption with low number of bites vs. high number of bites per food unit vs. free consumption.

Participants will get a tube in their mouth through which soup is served. In one condition the frequency is regulated, but they can decide on the number of bites. In the free condition they can also regulate the frequency.

## Contacts

### Public

Bomenweg 2  
Dieuwerke Bolhuis  
Wageningen 6703 HD  
The Netherlands

### Scientific

Bomenweg 2  
Dieuwerke Bolhuis  
Wageningen 6703 HD  
The Netherlands

## Eligibility criteria

### Inclusion criteria

1. Male and female;
2. Age between 18 to 45 years;
3. BMI between 18.5 and 25 kg/m<sup>2</sup>;
4. Healthy (as judged by the participant).

## Exclusion criteria

1. Smoking (>1 cigarette a day);
2. Current participation in other research from the division of human nutrition (WUR);
3. Pleasantness score of tomato soup < 5, on a 9 point hedonic scale;
4. Thyroid disease;
5. Lack of appetite for any (unknown) reason;
6. Swallowing/eating problems;
7. Energy restricted diet within the last two months;
8. Weight gain or loss of 5 kg or more during the last year;
9. Stomach or bowel disease;
10. Diabetes;
11. Endocrine disorders (other than diabetes and thyroid disease);
12. Hypersensitivity or allergy to some of the ingredients of the test product;
13. Restraint eating (men: score > 2.89; on the Dutch eating behaviour questionnaire).

## Study design

### Design

Study type:	Interventional
Intervention model:	Crossover
Allocation:	Randomized controlled trial
Masking:	Single blinded (masking used)
Control:	N/A , unknown

### Recruitment

NL

Recruitment status:	Pending
Start date (anticipated):	31-10-2011
Enrollment:	55
Type:	Anticipated

## Ethics review

Positive opinion	
Date:	03-10-2011
Application type:	First submission

## Study registrations

### Followed up by the following (possibly more current) registration

ID: 35817  
Bron: ToetsingOnline  
Titel:

### Other (possibly less up-to-date) registrations in this register

No registrations found.

### In other registers

Register	ID
NTR-new	NL2944
NTR-old	NTR3091
CCMO	NL36277.081.11
ISRCTN	ISRCTN wordt niet meer aangevraagd.
OMON	NL-OMON35817

## Study results

### Summary results

N/A