

# The use of a 'smart fork' to decelerate eating rate in patients with difficult-to-treat conditions: a single case study

No registrations found.

<b>Ethical review</b>	Not applicable
<b>Status</b>	Pending
<b>Health condition type</b>	-
<b>Study type</b>	Interventional

## Summary

### ID

NL-OMON23957

### Source

Nationaal Trial Register

### Health condition

fast eating rate, brain damage

## Sponsors and support

**Primary sponsor:** none

**Source(s) of monetary or material Support:** none

## Intervention

## Outcome measures

### Primary outcome

- Average eating speed (number of servings per minute)
- Over speed ratio

### Secondary outcome

- average meal duration
- average interval between servings
- Total fork servings
- BMI

Furthermore, potential confounding variables such as palatability, mood, time of day, and meal enjoyment will be assessed. Finally, the DEBQ (Dutch eating behaviour questionnaire) will be assessed.

## Study description

### Background summary

The current study examines whether real-time vibrotactile feedback about eating rate delivered by a persuasive technology can alter eating behaviour in the home setting in one teenage girl with brain damage.

### Study objective

Vibrotactile feedback from a 'smart' fork reduces the eating rate of a teenage girl suffering from brain damage that causes her not to detect hunger or satiation

### Study design

All primary outcomes will be measured at baseline, directly after the four week training period and at follow-up 2 months later. Secondary outcomes will also be measured at three time points; baseline, after training period and 2 month follow-up.

### Intervention

The current study examines whether real-time vibrotactile feedback about eating rate delivered by a persuasive technology can alter eating behaviour in the home setting in one teenage girl with braindamage. The brain damage renders the participant unable to detect hunger nor satiation and causes her to eat at a very fast rate.

The main aim of the study is to test whether a four-week training period can help this person to adopt a slower eating rate over time. At the beginning of the study, participant completes a baseline survey and we weigh and measure them. Baseline eating rate is assessed during a 7 consecutive day measurement period. During this period, participant will use the fork without any form of feedback. After establishing a baseline measure of eating rate, she will use the fork for a training period of four weeks. After this period, participant uses the fork

without any form of feedback another week to establish post-eating rate. Moreover, she completes a survey and are weighed. This measurement is repeated eight weeks later in a two-month follow-up to test for sustainable changes in eating rate.

## Contacts

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## Eligibility criteria

### Inclusion criteria

Single case study (n-of-1); one teenage girl from the Netherlands with accident-related brain damage

### Exclusion criteria

None

## Study design

### Design

Study type:	Interventional
Intervention model:	Factorial
Allocation:	Non controlled trial
Masking:	Open (masking not used)
Control:	N/A , unknown

## Recruitment

NL	
Recruitment status:	Pending
Start date (anticipated):	01-06-2017
Enrollment:	1
Type:	Anticipated

## Ethics review

Not applicable	
Application type:	Not applicable

## 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	NL6277
NTR-old	NTR6451
Other	: Informatie niet aangeleverd door onderzoeker

## Study results