Take it slow: Examining the efficacy of persuasive technology to alter eating rate: STUDY II

No registrations found.

Ethical review	Not applicable
Status	Recruitment stopped
Health condition type	-
Study type	Interventional

Summary

ID

NL-OMON27845

Source
Nationaal Trial Register

Health condition

Eating behaviour, Food intake, Weight status

Sponsors and support

Primary sponsor: Radboud University Nijmegen, Behavioural Science Institute
Source(s) of monetary or material Support: NWO, SlowControl

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. We examine the effectiveness of two types of feedback, real-time vibrotactile and retrospective visual feedback. The main aim of the study is to test whether a four-week training period can help people to adopt a slower eating rate over time.

Study objective

Over 41% of the Dutch population is overweight, a known risk factor for a range of debilitating conditions. Modifying behaviours associated with overweight, such as eating rate, or the speed at which people consume food, could reduce overweight and improve health. Eating rate is a basic determinant of appetite regulation, as people who eat more slowly feel sated earlier and eat less. Unfortunately without assistance, eating rate is difficult to modify due to its highly automatic nature. 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. We examine the effectiveness of two types of feedback, real-time vibrotactile and retrospective visual feedback. The main aim of the study is to test whether a four-week training period can help people to adopt a slower eating rate over time.

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. We examine the effectiveness of two types of feedback, real-time vibrotactile and retrospective visual feedback. The main aim of the study is to test whether a four-week training period can help people to adopt a slower eating rate over time. At the beginning of the study, participants complete a baseline survey and we weigh and measure them. Baseline eating rate is assessed during a 7 consecutive day measurement period. During this period, participants will use the fork without any form of feedback. After establishing a baseline measure of eating rate, we randomly assign participants to an experimental between participants design with four conditions:
1. Augmented fork with vibrotactile feedback
2. Augmented fork with visual retrospective feedback not longer applicable
3. Augmented fork with both vibrotactile feedback and visual retrospective feedback
4. Augmented fork without any form of feedback
Participants in all four conditions are asked to use the fork for a training period of four weeks. After this period, all participants use the fork without any form of feedback another week to establish post-eating rate. Moreover, they complete 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 and weigh across the four conditions.

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Eligibility criteria

Inclusion criteria

Both males and females, between 18 and 65 years old, (self-reported) fast eaters, BMI 25 > and < 35

Exclusion criteria

< 18 years, > 65 years, BMI < 25 and > 35, gastric bypass patients

Study design

Design

Study type:	Interventional
Intervention model:	Parallel
Allocation:	Randomized controlled trial
Masking:	Open (masking not used)
Control:	Active

Recruitment

NL

Recruitment status:	Recruitment stopped
Start date (anticipated):	16-11-2015
Enrollment:	150
Type:	Actual

IPD sharing statement

Plan to share IPD: Undecided

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	NL5432
NTR-old	NTR5566
Other	NIHC NWO: Food Cognition & Behaviour : 057-14-010 / 2015/00386

Study results