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

Gepubliceerd: 28-05-2015 Laatst bijgewerkt: 18-08-2022

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...

Ethische beoordeling	Positief advies
Status	Werving gestopt
Type aandoening	-
Onderzoekstype	Interventie onderzoek

Samenvatting

ID

NL-OMON22911

Bron
NTR

Aandoening

eating behaviour; eating rate; food intake

Ondersteuning

Primaire sponsor: Radboud University Nijmegen; Behavioural Science Institute

Roel Hermans (RU Nijmegen)
Sander Hermsen (HU Utrecht)
Jeana Frost (VU Amsterdam)
Overige ondersteuning: NWO: Food Cognition & Behaviour
SlowControl

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

- Total amount consumed (in grams)
- Average eating speed (number of servings per minute)
- Over speed ratio

Toelichting onderzoek

Achtergrond van het onderzoek

This study tests the effect of vibrotactile feedback on eating rate. More specifically, we examine whether vibrotactile feedback delivered through the augmented fork decelerates eating rate during a single meal consumed in a controlled laboratory setting. We employ an experimental between-participants design with two conditions. Depending on condition, participants will eat a meal using the augmented fork with vibrotactile feedback (experimental condition) or using the same fork without feedback (control condition). We will test whether people in the experimental condition eat less / slower than those in the control condition.

Doel van het onderzoek

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 lab.

Onderzoeksopzet

All primary outcomes will be measured at one time point, during/ after the meal. On weekdays between 11.30 and 15.00h.

Secondary outcomes will also be measured at one time point. Except for satiey, this will be measure on 2 timepoints (before and after the meal).

Onderzoeksproduct en/of interventie

We test the effect of vibrotactile feedback on eating rate. More specifically, we examine whether vibrotactile feedback delivered through the augmented fork decelerates eating rate during a single meal consumed in a controlled laboratory setting. We employ an experimental between-participants design with two conditions. Depending on condition, participants will eat a meal using the augmented fork with vibrotactile feedback (experimental condition) or using the same fork without feedback (control condition). In the experimental condition, the fork alerts participants with the help of gentle vibrations when they are eating too fast. In the control condition, participants will use the same fork but will not be given any feedback on their eating rate. Participants will eat their meal alone in order to exclude potential social influence effects on intake or eating rate. Further, to rule out demand characteristics, participants in both conditions will be told that the fork will track their eating rate and that slow eating rate is beneficial for their health. In addition, in the experimental condition participants will be told that the fork will vibrate when they are eating too fast. Each participant will be served a standardized amount of a pasta dish (800g), from which they can help themselves. Each session will last approximately 45 minutes.

Contactpersonen

Publiek

Roel Hermans
[default]
The Netherlands
024-3615787

Wetenschappelijk

Roel Hermans
[default]
The Netherlands
024-3615787

Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

Both males and females, between 18 and 65 years old, fast eaters, BMI 18 > and < 35

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

< 18 years, BMI < 18 and > 35

Onderzoeksopzet

Opzet

Type:	Interventie onderzoek
Onderzoeksmodel:	Parallel
Toewijzing:	Gerandomiseerd
Blindering:	Open / niet geblindeerd
Controle:	Geneesmiddel

Deelname

Nederland

Status:	Werving gestopt
(Verwachte) startdatum:	13-05-2015
Aantal proefpersonen:	128
Type:	Werkelijke startdatum

Ethische beoordeling

Positief advies

Datum:	28-05-2015
Soort:	Eerste indiening

Registraties

Opgevolgd door onderstaande (mogelijk meer actuele) registratie

Geen registraties gevonden.

Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

In overige registers

Register	ID
NTR-new	NL5105
NTR-old	NTR5237
Ander register	NWO: Food Cognition & Behaviour : 057-14-010 / 2015/00386/NIHC

Resultaten

Samenvatting resultaten
Nog niet van toepassing