

Effects of a smartphone intervention targeting fruit and vegetable consumption

Submission date 04/02/2015	Recruitment status No longer recruiting	<input type="checkbox"/> Prospectively registered
		<input type="checkbox"/> Protocol
Registration date 12/02/2015	Overall study status Completed	<input type="checkbox"/> Statistical analysis plan
		<input checked="" type="checkbox"/> Results
Last Edited 13/06/2016	Condition category Nutritional, Metabolic, Endocrine	<input type="checkbox"/> Individual participant data

Plain English summary of protocol

Background and study aims

High percentages of people do not adhere to the recommendations to eat enough fruit and vegetables. The aim in this study is to apply tailored auditory and textual persuasive health communication to increase fruit and vegetable intake.

Who can participate?

Dutch adults, who own a smartphone (Android) and do not always eat two pieces of fruit and 200 grams of vegetables per day

What does the study involve?

After downloading the smartphone application in Google Play, participants can complete baseline questions about their own health. All questions and stimuli are presented in the smartphone application. Respondents will be randomly allocated to a tailored (textual or auditory) message and additional evaluation measures (intervention group) or measurements at the start and beginning of the study, and they will not have access to the general content of the smartphone application (control group). Additionally, the intervention group will have access to the general smartphone application content (consisting of recipes and additional information). They can also expect reminders during the 6 months of the study to log in again and they will be asked to answer some new questions and read or listen to new information that is added every month to the application. After 6 months, participants will receive an email reminder for the final questionnaire.

What are the possible benefits and risks of participating?

Participants will gain an insight into their fruit and vegetable intake, and, in future, persuasive health messages might increase fruit and vegetable intake within a smartphone application. There are no known risks to participants taking part in this study.

Where is the study run from?

Netherlands: University of Groningen and the Netherlands Nutrition Centre

When is the study starting and how long is it expected to run for?

October 2013 to June 2014

Who is funding the study?
Netherlands Organisation for Health Research and Development

Who is the main contact?
Ms Sarah Elbert
Professor Arie Dijkstra

Contact information

Type(s)
Scientific

Contact name
Ms Sarah Elbert

ORCID ID
<http://orcid.org/0000-0001-9722-8076>

Contact details
Faculty Behavioral and Social Sciences
Department of Social Psychology
Grote Kruisstraat 2/1
Groningen
Netherlands
9712 TS

Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers
N/A

Study information

Scientific Title
Effects of a smartphone intervention targeting fruit and vegetable consumption among Dutch adults: a randomised controlled trial

Study objectives
1. A tailored health intervention may be more effective than a control in which no health information is given
2. To test the possible difference in effects between the more classic textual mode of communication and the auditory mode of communication (reading versus listening)

Ethics approval required

Old ethics approval format

Ethics approval(s)

Ethical committee of the Faculty of Behavioral and Social Sciences, 05/09/2013, ref: 13012-N

Study design

Interventional randomised controlled study

Primary study design

Interventional

Secondary study design

Randomised controlled trial

Study setting(s)

Internet/virtual

Study type(s)

Other

Participant information sheet

Not available in web format, please use contact details to request a participant information sheet

Health condition(s) or problem(s) studied

Fruit and vegetable intake in the general population

Interventions

1. Text-based and audio-based tailored health information based on psychological factors that are known to predict fruit and vegetable intake
2. Control (no health information)

Respondents will complete baseline and post-test measures at 6-month follow-up (between-participants design).

Intervention Type

Other

Primary outcome measure

Self-reported fruit and vegetable intake at 6-month follow-up, measured with a detailed and validated food frequency questionnaire

Secondary outcome measures

After the frequency questionnaire on fruit and vegetable intake at 6-month follow-up, questions will be added to evaluate the information and smartphone application as a whole on a range of measures:

1. Personal applicability
2. Novelty
3. Credibility
4. Extent to which it is perceived as intense
5. Usefulness

- 6. Comprehensibility
- 7. Visual attractiveness

Overall study start date

01/10/2013

Completion date

15/06/2014

Eligibility

Key inclusion criteria

1. Age 16 years or older
2. Living in the Netherlands
3. Owning an Android device (smartphone or tablet, Android version 2.2 or more) with an installed version of Adobe Air (if necessary, they were automatically directed to Google Play to install it safely)
4. Not yet consuming two pieces of fruit and 200 grams of vegetables per day

Participant type(s)

Healthy volunteer

Age group

Adult

Sex

Both

Target number of participants

300+ participants

Key exclusion criteria

Intolerance to fruit

Date of first enrolment

01/10/2013

Date of final enrolment

30/11/2013

Locations

Countries of recruitment

Netherlands

Study participating centre

Netherlands Nutrition Centre

Den Haag

Netherlands
2517 KL

Study participating centre

University of Groningen

Faculty of Behavioral and Social Sciences
Groningen
Netherlands
9712 TS

Sponsor information

Organisation

University of Groningen (Netherlands)

Sponsor details

Faculty of Behavioral and Social Sciences
Department of Social Health Psychology
Grote Kruisstraat 2/1
Groningen
Netherlands
9712 TS

Sponsor type

University/education

ROR

<https://ror.org/012p63287>

Funder(s)

Funder type

Research organisation

Funder Name

Netherlands Organisation for Health Research and Development

Alternative Name(s)

Netherlands Organisation for Health Research and Development

Funding Body Type

Private sector organisation

Funding Body Subtype

Other non-profit organizations

Location

Netherlands

Results and Publications

Publication and dissemination plan

1. The results will be published in a peer-reviewed journal in the domain of health and internet research (to be selected).
2. The efficacy of the smartphone intervention will be central.
3. The application might be adapted based on the findings and disseminated among the general public at a later stage.

Intention to publish date

31/10/2015

Individual participant data (IPD) sharing plan**IPD sharing plan summary**

Available on request

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	10/06/2016		Yes	No