Biomarker evaluation of different types of Internet-based interactive computer-tailored nutrition education on fat consumption

| Submission date | Recruitment status No longer recruiting | Prospectively registered | | |
|-------------------|---|--|--|--|
| 04/04/2006 | | ☐ Protocol | | |
| Registration date | Overall study status | Statistical analysis plan | | |
| 04/04/2006 | Completed | [X] Results | | |
| Last Edited | Condition category | [] Individual participant data | | |
| 06/01/2021 | Other | | | |

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s)

Scientific

Contact name

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Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

NTR623

Study information

Scientific Title

Biomarker evaluation of different types of Internet-based interactive computer-tailored nutrition education on fat consumption

Study objectives

Computer-tailored health education has been found to be a promising intervention technique to improve a variety of health related behaviours, such as physical activity and dietary behaviours. To be able to improve efficacy, efficiency and applicability of computer-tailored interventions, more in-depth investigations are needed into the most effective delivery forms (print versus interactive), the feedback elements that contribute to efficacy, and whether intervention effects can also be demonstrated using biomarkers as an outcome measure.

The aim of the present study was three-fold:

- 1. To investigate whether provision of interactive computer-tailored information versus in print format differ in efficacy
- 2. To identify the minimally required feedback elements of a computer-tailored intervention
- 3. To evaluate the intervention effects using biomarkers as an outcome measure in addition to self-reported behaviour

These research questions were studied in relation to a computer-tailored intervention aimed at fat intake. Fat intake is an important behavioural risk factor and computer-tailored interventions have been found most effective in reducing fat intake. The study was conducted among healthy adults recruited from nine companies and two communities in the area of Rotterdam.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Ethics approval received from the local medical ethics committee

Study design

Randomised, single blind, active controlled, parallel group trial

Primary study design

Interventional

Secondary study design

Randomised controlled trial

Study setting(s)

Not specified

Study type(s)

Prevention

Participant information sheet

Health condition(s) or problem(s) studied

No condition, healthy person

Interventions

The study contains four experimental conditions and one control group:

- 1. Computer-tailored personal feedback on fat consumption in print form
- 2. Computer-tailored personal and normative feedback on fat consumption in print form
- 3. Computer-tailored personal, normative and action feedback on fat consumption in print form
- 4. Computer-tailored personal, normative and action feedback on fat consumption in web-based form (CD-ROM)
- 5. Generic information on fat consumption in print form (control group)

All the intervention materials were provided once.

Intervention Type

Other

Phase

Not Specified

Primary outcome measure

- 1. Total fat and saturated fat consumption measured with a validated food frequency questionnaire developed by Wageningen University
- 2. Blood lipids (total cholesterol, high density lipoprotein [HDL], low density lipoprotein [LDL], triglycerides) sampling and analysing conducted by a certified laboratory (Star Rotterdam)

Secondary outcome measures

- 1. Intention to change
- 2. Process measures

Overall study start date

24/03/2003

Completion date

21/04/2005

Eligibility

Key inclusion criteria

- 1. Age 18 65 years
- 2. No prescribed diet from dietician or physician
- 3. No treatment for hyper-cholesterolaemia
- 4. Sufficient understanding of the Dutch language

Participant type(s)

Patient

Age group

Adult

Lower age limit

18 Years

Sex

Both

Target number of participants

841

Key exclusion criteria

Does not comply with the above inclusion criteria

Date of first enrolment

24/03/2003

Date of final enrolment

21/04/2005

Locations

Countries of recruitment

Netherlands

Study participating centre

Erasmus Medical Center

Rotterdam Netherlands 3000 CA

Sponsor information

Organisation

Erasmus University Medical Center

Sponsor details

Department of Public Health PO Box 2040 Rotterdam Netherlands 3000 CA

Sponsor type

Hospital/treatment centre

Website

http://www.erasmusmc.nl/

ROR

https://ror.org/018906e22

Funder(s)

Funder type

Research organisation

Funder Name

ZonMw

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

Not provided at time of registration

Intention to publish date

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not provided at time of registration

Study outputs

| Output type | Details | Date created | Date added | Peer reviewed? | Patient-facing? |
|-----------------|---------|--------------|------------|----------------|-----------------|
| Results article | results | 29/04/2008 | 06/01/2021 | Yes | No |