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Front of pack food Labelling: Impact on Consumer Choice

Submission date
16/04/2014

Recruitment status
No longer recruiting

Registration date
23/05/2014

Overall study status
Completed

Last Edited
09/04/2019

Condition category
Nutritional, Metabolic, Endocrine

[X] Prospectively registered
[_] Protocol
[_] Statistical analysis plan
[X] Results
[_] Individual participant data

Plain English summary of protocol

Background and study aims
Front of pack food labelling is becoming increasingly common on packaged foods in the UK. The UK government has recommended that the front of pack labelling scheme includes traffic light labelling so called because of the distinctive red, amber and green colours. Traffic light labelling shows the levels of total fat, saturated fat, sugar and salt in food products in an 'at a glance' format, in order to help shoppers in buying healthier foods. We know, however, that front of pack labels currently have little influence on what shoppers' decide to buy. This study investigates whether an interactive web application (the intervention), designed to change behaviour though 'behaviour change theory', leads to healthier food purchases. The application offers, for example, interactive information on traffic light labelling, personalised feedback on each participants shopping behaviour and strategies for using front of pack labels to make healthier food purchases. The aim of the study is to measure important aspects of the study design - such as how quickly shoppers can be recruited for the study. This will help to design a bigger study of whether the intervention works at a later date.

Who can participate?
UK residents aged 18 or older, a regular user of the participating supermarket loyalty card, the primary shopper for the household, frequent purchasers of ready meals and/or pizzas, and are not planning to leave the UK for a period of three weeks or more during the study period.

What does the study involve?
Electronic loyalty card purchase data is collected for all foods purchased by participants during the study period, and in the six months before the study starts. This store card data is used to measure whether the intervention has influenced food purchases. Participants are randomly allocated into two groups: a control group and an intervention group. The intervention group is given access to the intervention (delivered by email) for 6 weeks. Both the control and intervention groups are asked to fill in three questionnaires during the study: at enrolment, three weeks into the study and at the end of the study. The questionnaire is designed to measure psychosocial variables associated with use of front of pack food labels. After the study is completed, phone interviews are conducted with some of the participants to find out what did and didn't work with the study.

What are the possible benefits and risks of participating?
Participants are rewarded for their time with £10 gift vouchers for completing the second and third questionnaires and for taking part in the phone interviews. Participants may benefit from the study by making healthier food purchases.There are no risks of participating in this study.

Where is the study run from?
The study is being run by researchers from the University of Oxford and the University of Surrey, with collaboration from the University of Auckland, Queen's University Belfast and Dublin City University.

When is the study starting and how long is it expected to run for?
May 2015 to December 2015

Who is funding the study?
The National Prevention Research Initiative (UK)

Who is the main contact?
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Contact information

Type(s)
Scientific

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Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers
N/A

Study information

Scientific Title
Front of pack food labelling: Impact on consumer choice - a randomised controlled trial

Acronym
FLICC

Study objectives
The underlying hypotheses that will be tested in the full trial are that an intervention designed to help people use traffic light labels to buy healthier ready meals and pizzas will:
1. Increase the healthiness of purchased ready meals and pizzas
2. Not affect the total amount of foods purchased
3. Not change purchasing behaviour outside of the targeted food category (ready meals and pizzas)
4. Operate by increasing behavioural intention and self-efficacy of traffic light label use

In this pilot trial the objectives are:
1. To obtain reliable estimates regarding recruitment, retention and data completion
2. To produce estimates of the potential effect size (mean and standard deviation [SD]) of the intervention on purchases of ready meals and pizzas (primary outcome)
3. To produce estimates of the potential effect size (mean and SD) of the intervention on purchases of all foods, purchases of fruit and vegetables, and psychosocial variables associated with label use (secondary outcomes)
4. To conduct a process evaluation consisting of semi-structured interviews and web analytics to explore the acceptability of the trial to both participants and the participating supermarket chain, to explore unintended consequences of the intervention, and explore the take up of different elements of the intervention

Ethics approval required
Old ethics approval format

Ethics approval(s)
Central University Research Ethics Committee of the University of Oxford, 03/07/2014, ref: SSD /CUREC1/14-008

Study design
Two-arm parallel randomised controlled trial

Primary study design
Interventional

Secondary study design
Randomised parallel trial

Study setting(s)
Other

Study type(s)
Prevention

Participant information sheet
Not available in web format, please use the contact details to request a patient information sheet

Health condition(s) or problem(s) studied
Nutrition

Interventions
Electronic loyalty card purchase data will be used for all foods purchased by participants during the study period and in the 6 months before the study starts. This store card data will be used to measure whether the intervention has influenced food purchases. Participants will be randomised into two groups: a control group and an intervention group. The intervention group will be given access to the intervention (delivered by email) for a 6-week period.

This intervention aims to help people make intra-category decisions (i.e., to compare ready meal A and ready meal B) and by focussing only on the use of the traffic light element of the nutrition label aims to reduce the amount of systematic processing required. By acknowledging the complexity involved with changing food behaviour, and recognising the need for multiple mechanisms to support behaviour change in a food domain, the proposed intervention will promote intention to use labels and self-efficacy by delivering a more heuristic approach to intra-category choice in the context of traffic light label colours. The intervention, delivered by a web application, will take the participant through a series of interactive sections, which are designed to address critical stages of the behaviour change process. These sections include:

1. Generic information about traffic light labels and the risks of eating a diet high in fat, saturated fat, sugar and salt
2. Personalised feedback on the traffic light profile of the previous 6 months' food purchases
3. Interactive information about the traffic light profile of ready meals and pizzas available from the participating supermarket
4. Setting of outcome goals and behaviour goals
5. A short video modelling the intended behaviour
6. An experiential task allowing participants to increase their self-efficacy in using traffic light labels
7. Action planning
8. Feedback on performance, delivered at the end of the study

The web address will be emailed to participants in the intervention group at the beginning of the intervention period. The web application will be open for the 6 weeks of the intervention period, and participants can visit the application as many times as they choose.

All participants will be sent a reminder email at two stages during the intervention period. The control group will be reminded to use their loyalty card whenever they are shopping within the participating supermarket. The intervention group will be reminded that they can use the intervention at any point during the intervention period. Similar reminder emails will be sent during the follow-up period.

Both the control and intervention groups will be asked to fill in three questionnaires during the study: at enrolment, 3 weeks into the study and at the end of the study. The questionnaire is designed to measure psychosocial variables associated with use of front of pack food labels.

A process evaluation will be conducted after completion of the data collection. Qualitative data will be collected from approximately five telephone interviews with representatives of the participating supermarket and ten interviews with participants from both arms. The telephone interviews will be semi-structured, and will probe for information about the mechanism of delivery of the intervention, data collection, data transfer, acceptability of the interventions, and feasibility of rolling out the study design to a full trial.

A combination of Piwik analytics (http://piwik.org/) or a similar package, and custom-built analytics tools will be used, which will allow the trialists to link visits to the intervention website to unique participant ID codes. The analytics package will be used to measure the following variables for each participant:

1. The number of visits to the intervention website
2. The number of visits to each webpage within the intervention
3. The average length of time spent visiting the website
4. Completion of the intervention (i.e., whether all of the sections of the intervention are visited across all visits)
5. Responses to the experiential task (i.e., whether the participant gets the correct or incorrect answer in the experiential task)
6. The internet browser and operating system used by the participant (this will allow us to identify the proportion of participants visiting the intervention on a smartphone or handheld device)
7. Pathway used by participant (i.e., how they navigated the website)
8. The time and date of each visit

These data will be used to analyse how the participants engaged with the different elements of the intervention, and to identify potential areas of improvement, both in terms of content and structure.

Intervention Type
Behavioural

Primary outcome measure
Current primary outcome measures as of 24/07/2014:
1. Assessment of recruitment (measured when recruitment closes, 2 weeks after initial recruitment email), retention and data completion rates (measured after week 18, when the trial ends)
2. Healthiness of ready meals and pizzas purchased during the intervention period (measured in weeks 1-6)
3. Healthiness of ready meals and pizzas purchased during the follow-up period (measured in weeks 7-18)

Here healthiness is defined using an algorithm to combine the information provided in the front of pack food labels on the purchased ready meals. Primary outcomes 2 and 3 will be adjusted for age, sex, presence of dependent children, and healthiness of ready meals and pizzas purchased in the 6 months prior to recruitment.

Previous primary outcome measures:
1. Assessment of recruitment (measured when recruitment closes, 2 weeks after initial recruitment email), retention and data completion rates (measured after week 22, when the trial ends)
2. Healthiness of ready meals and pizzas purchased during the intervention period (measured in

weeks 1-6)
3. Healthiness of ready meals and pizzas purchased during the follow-up period (measured in weeks 7-22)

Here healthiness is defined using an algorithm to combine the information provided in the front of pack food labels on the purchased ready meals. Primary outcomes 2 and 3 will be adjusted for age, sex, presence of dependent children, and healthiness of ready meals and pizzas purchased in the 6 months prior to recruitment.

Secondary outcome measures
1. Amount (£) of ready meals and pizzas purchased in intervention (measured in weeks 1-6) /follow-up period (measured in weeks 7-22)
2. Total amount (g) of fat, saturated fat, sugar and salt in ready meals purchased in intervention (measured in weeks 1-6)/follow-up period (measured in weeks 7-22)
3. Amount (£) of all foods purchased in intervention (measured in weeks 1-6)/follow-up period (measured in weeks 7-22)
4. Amount (£) of fruit and vegetables purchased in intervention (measured in weeks 1-6)/follow-up period (measured in weeks 7-22)
5. Psychosocial variables related to front of pack food label use measured in week 7 and week 22

Secondary outcomes 1-4 will be adjusted for age, sex, presence of dependent children and similar variables measured using electronic sales data for the 6 months prior to recruitment. Secondary outcome 5 will be adjusted for age, sex, presence of dependent children and psychosocial variables collected at recruitment.

Overall study start date
11/05/2015

Completion date
23/12/2015

Eligibility

Key inclusion criteria
Participants must:
1. Be resident in the UK
2. Be the holder of a participating supermarket loyalty card
3. Be at least 18 years of age
4. Have used their loyalty card to purchase food at an outlet of the participating supermarket covering at least 8000 square feet at least once in the month preceding recruitment
5. Be the primary shopper for the household
6. Report that they purchased at least 10 ready meals and/or pizzas in the previous 6 months

Participant type(s)
Healthy volunteer

Age group
Adult

Lower age limit
18 Years

Sex
Both

Target number of participants
1300

Total final enrolment
496

Key exclusion criteria
Participants will be excluded if they are planning to leave the UK for a period of 3 weeks or more during the intervention period

Date of first enrolment
11/05/2015

Date of final enrolment
25/05/2015

Locations

Countries of recruitment
England

United Kingdom

Study participating centre
University of Oxford
Oxford
United Kingdom
OX3 7LF

Sponsor information

Organisation
Clinical Trials and Research Governance (UK)

Sponsor details
Joint Research Office
Block 60
Churchill Hospital
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OX3 7LE
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carol.cornelius@admin.ox.ac.uk

Sponsor type
University/education

Website
http://www.admin.ox.ac.uk/researchsupport/contacts/rs/ctrg/

ROR
https://ror.org/052gg0110

Funder(s)

Funder type
Research organisation

Funder Name
National Prevention Research Initiative phase 4 (UK), ref: MR/J000256/1

Results and Publications

Publication and dissemination plan
The full study protocol is currently under review. The trialists intend to publish a single paper in a peer-reviewed journal reporting the primary and secondary outcome measures once the trial is concluded.

Intention to publish date

Individual participant data (IPD) sharing plan

IPD sharing plan summary
Not expected to be made available

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	08/04/2019	09/04/2019	Yes	No