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Enhanced calorie labelling to improve employees' diets in workplace cafeterias

Submission date
21/02/2018

Recruitment status
No longer recruiting

Registration date
23/02/2018

Overall study status
Completed

Last Edited
10/11/2020

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
Current estimates suggest that about one-third of a working adult's daily energy intake is consumed whilst at work, making the workplace a potentially important setting for dietary interventions. For this reason, many companies are keen to encourage healthy eating in the workplace through the range of products they offer, the way they present items and the way they choose to label health-related information. The environment has a distinct effect on food and drink choices, more so than people may recognise. There is a lot of interest in how so-called 'nudge' techniques can be used to change environments and prompt individuals to make healthier choices. However, so far there has been little research to study the impact of this type of intervention to improve employees' diets in the workplace. The aim of this study is to explore the impact of calorie labelling on food purchased in worksite cafeterias. A recent study examined the impact of calorie labelling on food purchased across six worksite cafeterias. No overall effect of calorie labelling was found on food purchased across the six sites. However, the calorie labelling reduced total calories purchased in one of the six sites, with an estimated 6.6% reduction. This effect diminished over time. There are several possible explanations for the mixed pattern of results observed across the six sites in the initial study. These include the nature of the intervention and the precision of the data collected. The aim of this study is to address these potential explanations in a replication and extension of the first study conducted in three different worksite cafeterias.

Who can participate?
Three English worksites from companies that are members of the Institute of Grocery Distribution with more than 300 employees

What does the study involve?
Participating sites introduce the intervention at two-week intervals in a carefully planned but random order. This intervention involves adding labels to foods which include the energy (calorie) content at the edge of the shelf, on the packet or other prominent position. For the six weeks before the intervention is introduced and then over the course of the intervention, information about the food sold in each of the workplace sites is collected in order to find out if the intervention has changed the way that people buy food.

What are the possible benefits and risks of participating?
There are no direct benefits or risks involved for those participating

Where is the study run from?
The study is run from the Behaviour and Health Research Unit at the University of Cambridge and takes place at three English worksites from companies that are members of the Institute of Grocery Distribution (UK).

When is the study starting and how long is it expected to run for?
September 2017 to September 2018

Who is funding the study?
1. Institute of Grocery Distribution (UK)
2. Department of Health Policy Research Program (UK)

Who is the main contact?
Prof. Theresa Marteau

Contact information

Type(s)
Scientific

Contact name
Prof Theresa Marteau

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Additional identifiers

Study information

Scientific Title
Calorie labelling and energy purchased in worksite cafeterias: a revised replication study

Study objectives
The aim of this study is to evaluate the impact on energy purchased by adding labels that clearly show the energy (calorie) content on items purchased from worksite cafeterias.

Ethics approval required
Old ethics approval format

Ethics approval(s)
Cambridge Psychology Research Ethics Committee, 29/04/2016, ref: PRE.2016.035

Primary study design
Interventional

Study design
Randomised stepped wedge design

Study type(s)
Prevention

Health condition(s) or problem(s) studied
Excess energy intake

Interventions
Within the three worksites (with a minimum of 300 employees) the time at which the intervention is introduced will be determined by randomisation to control for time trends while maximising sample size. Sites will be randomised to a phase of the stepped wedge design by means of random permutations using random variates of the uniform distribution. There will be a six week pre-intervention period when normal service will continue while information is collected on the energy content of food available and on the sales each day. The sites will then undergo an intervention period lasting from six - ten weeks (depending on randomisation sequence within the stepped wedge design). Continued measures of the energy content of food available and the sales data throughout the intervention period will be used to model any changes from baseline levels. Follow-up after the intervention period ends is not planned.

The intervention comprises labelling all cafeteria products for which calorie information is available with their energy content (e.g., “250 CALORIES”). Following the evaluation of the impact of the calorie labelling intervention in a previous study of ours, the aim is to enhance the presentation of calorie information in this replication and extension study. An initial scoping exercise provided some design features that could potentially enhance the understanding of the labels (on products, menus and shelf edging). Following this scoping exercise different label formats were pilot tested with the aim of enhancing the labels’ impact.

The enhanced labelling intervention will comprise of:
1. Writing the calorie content, e.g. ‘120 CALORIES’, in bold, uppercase ‘Verdana’ (or similar) font, with a minimum font size of 14
2. Incorporating white space around the calorie content wording, in order to maximise contrast and therefore increase clarity

The present study also involves closer monitoring of the sales data captured by the sites by the Research Assistant (including approximately 30 compliance visits at the worksites during the intervention period).

Intervention Type
Behavioural

Primary outcome(s)

Total energy (kcal) purchased daily from intervention items, controlling for the total transactions as measured from daily sales records (recorded throughout the baseline and intervention periods). Data on the energy content of food and drink items will be supplied by the three participating sites, and data on sales will be obtained from the sites' till records.

Key secondary outcome(s)
Number of items purchased daily from (a) intervention items, and (b) non-intervention items, controlling for the total transactions as measured from daily sales records (recorded throughout the baseline and intervention periods)

Other measures:
Covariates to be recorded and considered in analyses: worksite demographic characteristics; day of week; and weather conditions (daily average temperature) (all to be recorded throughout the baseline and intervention periods)

Completion date
30/09/2018

Eligibility

Key inclusion criteria
1. English worksites from companies that are members of the Institute for Grocery Distribution (IGD)
2. More than 300 employees
3. Ability to provide daily data on sales of individual items and their energy content

Participant type(s)
Other

Healthy volunteers allowed
No

Age group
Adult

Sex
All

Total final enrolment
2947

Key exclusion criteria
Sites not meeting the inclusion criteria

Date of first enrolment
06/03/2018

Date of final enrolment
24/07/2018

Locations

Countries of recruitment
United Kingdom

England

Study participating centre
Behaviour and Health Research Unit
Behaviour and Health Research Unit
University of Cambridge
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Sponsor information

Organisation
University of Cambridge

ROR
https://ror.org/013meh722

Funder(s)

Funder type
Government

Funder Name
Institute of Grocery Distribution (IGD)

Funder Name
Department of Health Policy Research Program

Results and Publications

Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study are not expected to be made available because they are commercially sensitive and provided by the worksites on condition that they are not shared beyond the research team

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	01/10/2019	10/11/2020	Yes	No