Food labelling and online shopping study

Submission date	Recruitment status	[X] Prospectively registered
11/02/2020	No longer recruiting	Protocol
Registration date	Overall study status	Statistical analysis plan
17/02/2020	Completed	Results
Last Edited	Condition category	Individual participant data
06/01/2022	Other	Record updated in last year

Plain English summary of protocol

Background and study aims

This study uses a bespoke experimental online supermarket shopping (OLS) platform, developed by the University of Oxford, which emulates a real online supermarket for research purposes relating to food purchasing interventions. It contains a food database downloaded from a real UK grocery retailer with ~21,000 products. Product information (ingredients and nutrient information) was supplemented by manual linkages with food labels with data provided by Kantar and the MRC Human Nutrition Research food and nutrient database. Environmental impact indicators were calculated using data from Poore and Nemecek (2018). Products in the Woods Supermarket food database were given individualised ecolabels that reflect their environmental impacts across four separate environmental indicators (greenhouse gas emissions, land use, water use, and biodiversity loss).

Who can participate?

Adults aged ≥18 years who are able to read and speak English and have access to the internet.

What does the study involve?

Participants will be asked to shop for products to complete a shopping task of approximately 10 items. Participants will be asked to click the link on the Prolific Academic website (prolific.co) which will bring them through to the supermarket shopping platform to begin the task. The shopping task is estimated to take 30 minutes to complete. Participants will only be asked to complete the shopping task once.

What are the possible benefits and risks of participating?

The researchers do not anticipate unintended or adverse effects due to the intervention. Some of the product names listed on the supermarket shopping platform will be created by the researchers for the purpose of this study, and as such will not be "real" products that participants could later find in the store.

Where is the study run from?

Nuffield Department of Primary Care Health Sciences, University of Oxford (UK)

When is the study starting and how long is it expected to run for? February 2020 to May 2020

Who is funding the study? Wellcome Trust (UK)

Who is the main contact?

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Contact information

Type(s)

Scientific

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Additional identifiers

Clinical Trials Information System (CTIS)

Nil known

ClinicalTrials.gov (NCT)

Nil known

Protocol serial number

Nil known

Study information

Scientific Title

Testing the effect of environmental labelling on food selection in an experimental online supermarket

Acronym

ELFS

Study objectives

This study aims to test the effectiveness of a multi-indicator environmental sustainability logo and a single composite score logo on consumers' selection of food products, in a representative sample of UK adults. The researchers will use an experimental online supermarket platform to make preliminary estimates of the impact of these labels. The researchers will also assess the effects of the intervention on the overall nutrient composition and price of the shopping basket.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Approved 30/09/2019, Medical Sciences Interdivisional Research Ethics Committee of the University of Oxford (MS IDREC Manager, Research Services, University of Oxford, Wellington Square, Oxford, OX1 2JD, UK; +44 (0)1865 616577; ethics@medsci.ox.ac.uk), ref: R65010/RE001

Study design

2 x 2 factorial randomized controlled trial

Primary study design

Interventional

Study type(s)

Other

Health condition(s) or problem(s) studied

Reducing meat and dairy purchasing among adult volunteers

Interventions

Participants will be individually randomised in a 1:1:1:1 ratio to one of the intervention conditions or the control condition. The research team will be blinded to the computergenerated randomisation sequence, but due to the nature of the intervention the participants will not be blinded to the allocation. Members of the research team responsible to generate the sample size calculation, will be blinded to participants' allocation.

Participants will be randomly allocated to one of the following groups when shopping online: A. Complex Logo intervention: Offering products with a multi-indicator environmental logo Products will be displayed alongside a complex multi-indicator environmental sustainability logo. The logo will be tailored for each food product on the supermarket platform to reflect the food's environmental impact across multiple environmental indicators.

B. Simple Logo intervention: Offering products with a single total environmental impact score Products will be displayed alongside a logo displaying their total environmental impact score, collapsed across the multiple environmental indicators.

C. Both: Offering products with both simple and complex logos This group will receive both interventions as described above.

D. Control: Offering products without any environmental logo Participants will see the default version of the website with no environmental sustainability logo or total environmental score label.

Participants will be asked to shop for products to complete a shopping task of approximately 10 items. Initial testing of the platform showed that the reliability was greater with a list-based task compared to free choice. The food items included in the list have been chosen so that they offer opportunities to purchase items within categories that have a high environmental impact: meat (e.g. beef), dairy (e.g. milk/cheese), berries, chocolate; but are also within broader food categories where lower environmental impact options are also available.

Food shopping list for the participants in the study:

- 1. A savoury snack for right now
- 2. Milk for everyday use
- 3. A ready meal (except for pizza)
- 4. Cheese to use in a sandwich or light meal
- 5. Pizza (fresh or frozen)
- 6. A bar of chocolate
- 7. Nuts for snacking on
- 8. Meat, fish, or vegetarian alternative protein for main meal
- 9. Rice to accompany the main meal
- 10. Fresh berries for dessert

Participants will be asked to click the link on the Prolific Academic website (prolific.co) which will bring them through to the supermarket shopping platform to begin the task. The shopping task is estimated to take 30 minutes to complete. Participants will only be asked to complete the shopping task once.

Participants will be provided with instructions as follows:

"We would like you to do some online grocery shopping on a supermarket website. This is not a real supermarket, and you will not be asked to spend your own money.

We will give you a shopping list and ask you to buy all the items on the list. You do not need to buy additional items to serve with these foods or items from your usual shopping list.

When doing your shopping, try to imagine you are doing your own grocery shopping and choose foods that you would be willing to eat."

Intervention Type

Behavioural

Primary outcome(s)

Total environmental impact score (an average of the four environmental indicator scores) of the final shopping basket measured using the software

Key secondary outcome(s))

- 1. Impact score of each of the four environmental indicators in the final basket (%)
- 2. Saturated fat content (as a % of total energy) of the shopping basket
- 3. Overall cost of the final shopping basket (£) weighted for the size of the basket (g)

Completion date

31/05/2020

Eligibility

Key inclusion criteria

- 1. UK adults, aged ≥18 years
- 2. Able to speak and read English
- 3. Willing and able to give informed consent for participation in the study
- 4. Having access to and familiarity with a computer and Internet

Participant type(s)

Healthy volunteer

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 years

Sex

All

Total final enrolment

1132

Key exclusion criteria

The participant may not enter the study if they report following a vegetarian or vegan diet. This is because some of the products on the shopping list will not be suitable for vegetarians or vegans. Participants need to be able to shop for foods they would be willing to eat.

Date of first enrolment

18/02/2020

Date of final enrolment

28/02/2020

Locations

Countries of recruitment

United Kingdom

England

Study participating centre University of Oxford

Nuffield Department of Primary Care Health Sciences Radcliffe Primary Care Building Radcliffe Observatory Quarter Woodstock Rd Oxford United Kingdom OX2 6GG

Sponsor information

Organisation

University of Oxford

ROR

https://ror.org/052gg0110

Funder(s)

Funder type

Not defined

Funder Name

Wellcome Trust

Alternative Name(s)

Funding Body Type

Private sector organisation

Funding Body Subtype

International organizations

Location

United Kingdom

Results and Publications

Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study will be stored in a non-publically available repository. Direct access will be granted to authorised representatives from the University of Oxford for monitoring and/or audit of the study to ensure compliance with regulations. Unless a collaborator has a specific data sharing agreement in place with the University of Oxford, they will not be granted access to the raw data.

IPD sharing plan summary

Stored in repository

Study outputs

Output type Details Date created Date added Peer reviewed? Patient-facing?

Participant information sheet 11/11/2025 No Yes