

# Do social norms play a role in explaining the impact on food selection of increasing the proportion of healthier food available?

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<b>Registration date</b> 31/01/2020	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
<b>Last Edited</b> 07/01/2021	<b>Condition category</b> Other	<input type="checkbox"/> Individual participant data <input type="checkbox"/> Record updated in last year

## Plain English summary of protocol

### Background and study aims

Increasing the relative availability of healthier and more plant-based foods increases the likelihood that they are selected. The mechanisms by which this intervention has its effect are little explored. The aim of the two studies described here is to provide the first exploration of the role of perceived popularity – as a marker of descriptive social norms – as a possible mechanism underlying the effects of availability interventions.

### Who can participate?

Adults over the age of 18

### What does the study involve?

This study has two components that will be conducted at the same time, an online study and a lab study. Participants will be able to take part in one or the other.

**Online Study:** The study will be conducted online. Participants are shown eight images, each with a mix of healthier and less-healthy food or drink options on cafeteria shelves, and asked to indicate the percentage of sales they think would be of the healthier (over the less-healthy) options. These images will show either 75% healthier, 50% healthier, or 25% healthier options. The shelves in the images will either be full (i.e. have same number of units of products in each row), or emptier (i.e. have a varied number of units of products in each row, with maximum number of units equal to that in fuller shelf condition). Participants will be randomised to see one of these six options (3 availability x 2 shelf fullness). The data from the study will be used to assess whether altering the relative availability of healthier food alters the perceived popularity of these healthier foods.

**Lab Study:** Participants will be invited to take part in another study. After completion of this main study, and prior to debriefing, participants will be presented with a tray of food options and asked to select a snack, ostensibly as a thank you for their participation. Participants will be randomised to a particular arrangement of snacks on the tray. Trays will have either a 1:2 healthier:less-healthy snack ratio or 2:1 healthier:less-healthy snack ratio. Trays will also either

be set out so that the tray appears full - suggesting greater consumption by others for options which have more units remaining – or so the tray appears emptier - suggesting greater consumption by others for options which have fewer units remaining. Participants' selection of a healthier (over less-healthy) snack will be recorded. This study will assess the impact of manipulating perceptions of the popularity of healthier (over less-healthy) options on food selection.

What are the possible benefits and risks of participating?

Participants in the online study will be paid standard market research panel rates for participating in this study, and in the lab study will be paid for the main study they have been recruited to. There are no known risks of participating in either study.

Where is the study run from?

Behaviour and Health Research Unit, University of Cambridge (UK)

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

February 2020 to August 2020

Who is funding the study?

Wellcome Trust (UK)

Who is the main contact?

Dr Rachel Pechey

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(updated 07/01/2021, previously: [rachel.pechey@medschl.cam.ac.uk](mailto:rachel.pechey@medschl.cam.ac.uk))

## Contact information

### Type(s)

Scientific

### Contact name

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## Additional identifiers

**EudraCT/CTIS number**

Nil known

**IRAS number****ClinicalTrials.gov number**

Nil known

**Secondary identifying numbers**

Pre.2019.100

## **Study information**

**Scientific Title**

Increasing the relative availability of healthier vs. less-healthy food: Exploring the role of social norms

**Study objectives**

Online Study:

1. Increased availability of healthier (less-healthy) foods increases the perceived popularity of healthier (less-healthy) foods – when shelves are full
2. When shelves are emptier, decreased availability of healthier (less-healthy) foods decreases the perceived popularity of healthier (less-healthy) foods
3. Increased perceived popularity of healthier (less-healthy) foods increases selection of healthier (less-healthy) foods
4. Manipulating availability at the product-level will have a smaller impact than manipulating availability at the category-level

Lab Study:

Increased availability of healthier (less-healthy) foods increases selection of healthier (less-healthy) foods when in line with perceived popularity (i.e. when offered a full tray), but this impact is countered when perceived popularity acts against increased availability (i.e. when tray is emptier)

**Ethics approval required**

Old ethics approval format

**Ethics approval(s)**

Approved 14/01/2020, Cambridge Psychology Research Ethics Committee (The Administrator of the Cambridge Psychology Research Ethics Committee, School of the Biological Sciences, 17 Mill Lane, Cambridge, UK; +44 (0)1223 76689; Cheryl.Torbett@admin.cam.ac.uk), ref: Pre.2019.100

**Study design**

Interventional randomized controlled trial

**Primary study design**

Interventional

**Secondary study design**

Randomised controlled 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**

Unhealthy diet

## **Interventions**

The online and lab parts of the study will be conducted simultaneously.

Online Study: Mixed design, with 3x2 between-subjects conditions (3 availability conditions x 2 shelf fullness conditions), and one within-subjects condition (manipulation level)

Online Study:

Participants are asked to estimate the percentage of sales – as a measure of perceived popularity – accounted for by healthier (over less-healthy) products displayed in a series of photos. For each set of food and drink options, participants will be randomised to one of six groups to see displays that contain:

Group 1: 75% healthier & 25% less-healthy options, fuller shelves;

Group 2: 50% healthier & 50% less-healthy options, fuller shelves;

Group 3: 25% healthier & 75% less-healthy options, fuller shelves;

Group 4: 75% healthier & 25% less-healthy options, emptier shelves;

Group 5: 50% healthier & 50% less-healthy options, emptier shelves;

Group 6: 25% healthier & 75% less-healthy options, emptier shelves

The primary endpoint is the perceived percentage of sales accounted for by healthier (over less-healthy) options.

Randomisation for the online study will be conducted via the inbuilt randomisation procedures on the Qualtrics platform.

Lab Study: Between-subjects design, with 4 groups (2 availability x 2 tray fullness conditions)

Lab Study:

Participants are offered a snack food at the end of a different study. They are randomly allocated to one of four conditions, which vary in terms of the mix of healthier and less healthy foods offered and the fullness of the tray on which the snacks are offered:

Group 1: 75% healthier & 25% less-healthy options, full tray;

Group 2: 25% healthier & 75% less-healthy options, full tray;

Group 3: 75% healthier & 25% less-healthy options, half-empty tray;

Group 4: 25% healthier & 75% less-healthy options, half-empty tray.

The primary endpoint is the selection of a healthier (over less-healthy) option.

Random numbers will be generated – using Stata - to assign participant numbers to each study condition.

## **Intervention Type**

Behavioural

## **Primary outcome measure**

**Online Study:**

Perceived percentage of sales of healthier (over less-healthy) products measured using the slider questions on the Qualtrics platform

**Lab Study:**

Food selection, measured by observing the selection of food (healthier or less healthy) from the tray during the study

**Secondary outcome measures****Online study:**

Selection of products during the study

**Overall study start date**

01/12/2019

**Completion date**

31/08/2020

## **Eligibility**

**Key inclusion criteria**

1. Adults aged over 18 years
2. Currently residing within the UK

**Participant type(s)**

Healthy volunteer

**Age group**

Adult

**Lower age limit**

18 Years

**Sex**

Both

**Target number of participants**

Online Study: 2,340; Lab Study: 279

**Total final enrolment**

2480

**Key exclusion criteria**

None

**Date of first enrolment**

03/02/2020

**Date of final enrolment**

16/03/2020

# Locations

## Countries of recruitment

England

United Kingdom

## Study participating centre

### University of Cambridge

Behaviour and Health Research Unit

Institute of Public Health

University Forvie Site

Robinson Way

Cambridge

United Kingdom

CB2 0SR

# Sponsor information

## Organisation

University of Cambridge

## Sponsor details

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research\_governance@medschl.cam.ac.uk

## Sponsor type

University/education

## Website

<http://www.cam.ac.uk/>

## ROR

<https://ror.org/013meh722>

# Funder(s)

## Funder type

Charity

**Funder Name**

Wellcome Trust

**Alternative Name(s)**

**Funding Body Type**

Private sector organisation

**Funding Body Subtype**

International organizations

**Location**

United Kingdom

## **Results and Publications**

**Publication and dissemination plan**

1. Planned submission of the main results of this study for publication in a peer-reviewed journal
2. Dissemination of the results to the public, policy makers and other researchers through targeted social media

**Intention to publish date**

31/12/2020

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

The data sharing plans for the current study are unknown and will be made available at a later date.

**IPD sharing plan summary**

Data sharing statement to be made available at a later date