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Impact of food distance on snack food intake

Submission date
06/10/2015

Recruitment status
No longer recruiting

Registration date
07/10/2015

Overall study status
Completed

Last Edited
01/12/2017

Condition category
Nutritional, Metabolic, Endocrine

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

Plain English summary of protocol

Background and study aims
Many studies have shown that people from poorer backgrounds tend to eat more unhealthy foods that those who are more privileged. Some think that studies which aim to educate people and change their behaviour may not work as well for people from disadvantaged communities as their ability for self-control (executive function) may be lower. This is a particular concern as it may widen the gap between the dietary habits of these two groups, and so a different type of study may be needed to find the best way to help those from disadvantaged backgrounds to change their diets. Making changes to the environment, such as placing food further away, is thought to change people's behaviour unconsciously. People generally eat more of a food when it is placed within reach, regardless of the type of food or that person's usual habits. Many studies testing this principle tend to test only university staff and students, which is not an accurate representation of the general population. The aim of this study is to find out whether the distance of food changes the amount of food a person eats and to find out whether this is related to a person's executive function.

Who can participate?
Healthy adults who live in Cambridge and surrounding areas.

What does the study involve?
Participants are randomly allocated into two groups. Each group is provided with snack foods in a bowl during a 10 minute "relaxation break" which is placed either 20cm or 70cm away from them. After the 10 minute break, the weight of the snack bowls is measured to find out how much the participants from each group have eaten and the number of participants who ate the snacks from each group is recorded. Participants are also asked to complete a questionnaire designed to test their executive function at the start of the study, and a questionnaire to determine their response to the snacks after the study.

What are the possible benefits and risks of participating?
There are no direct benefits for participants; however the study will help to provide information about ways of influencing eating behaviour that can be applied to further research. There are no risks of participating in the study.

Where is the study run from?
University of Cambridge Institute of Public Health (UK)

When is the study starting and how long is it expected to run for?
November 2014 to March 2016

Who is funding the study?
1. Medical Research Council (UK)
2. Department of Health Policy Research Programme (UK)

Who is the main contact?
Professor Theresa Marteau

Contact information

Type(s)
Scientific

Contact name
Prof Theresa Marteau

Contact details
University of Cambridge
Institute of Public Health
Forvie Site
Cambridge
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CB2 OSR

Additional identifiers

Protocol serial number
N/A

Study information

Scientific Title
Impact of altering proximity on snack food intake in individuals with high and low executive function

Study objectives
1. Consumption of a snack food is less likely when it is placed further from participants
2. The proximity effect is not moderated by executive function

Ethics approval required
Old ethics approval format

Ethics approval(s)
Cambridge Psychology Research Ethics Committee, 16/03/2015, ref: Pre.2015.008

Study design
Single-centre randomised parallel trial

Primary study design
Interventional

Study type(s)
Other

Health condition(s) or problem(s) studied
Unhealthy diet

Interventions
Participants are told they will be taking part in a relaxation study so that the snack food can be placed without making participants aware that the study is about eating behaviour (awareness of the role of food may affect their eating behaviour). Participants are fully debriefed at the end of the session. Participants are randomly allocated into two groups, who are provided with snack foods which are place different distances away:
Group 1: Snack food is placed at 20cm from the participant
Group 2: Snack food is placed at 70cm from the participant
Before the snack food is brought into the room, participants complete tasks to measure executive function. After the snacks are removed from the room, participants complete questions relating to the snacks used in the study, such as ratings of effort to take the snacks and how tempting the snacks appeared.

Intervention Type
Behavioural

Primary outcome(s)
The proportion of participants who consume any snack food, measured as any difference in bowl weight from before to after the participant is exposed to the snacks.

Key secondary outcome(s))
1. The mean amount of snack food consumed, measured as the difference in bowl weight from before to after the participant is exposed to the snacks
2. Executive function, measured using the Stroop task (Stroop, 1935) before exposure to the snack food
3. Ratings of perceived effort to obtain the snacks and salience of the snacks, collected using a questionnaire following exposure to the snack food

Completion date
31/03/2016

Eligibility

Key inclusion criteria
1. Adults aged over 18 years
2. In the Cambridge area and surrounding areas (Stevenage, Peterborough)

Participant type(s)
Healthy volunteer

Healthy volunteers allowed

No

Age group
Adult

Lower age limit
18 years

Sex
All

Key exclusion criteria
Any food allergies or intolerances

Date of first enrolment
01/04/2015

Date of final enrolment
20/05/2015

Locations

Countries of recruitment
United Kingdom

Study participating centre
The Behaviour and Health Research Unit
University of Cambridge Institute of Public Health
Forvie Site
Robinson Way
Cambridge
United Kingdom
CB2 OSR

Sponsor information

Organisation
University of Cambridge (UK)

ROR
https://ror.org/013meh722

Funder(s)

Funder type
Research council

Funder Name
Medical Research Council

Alternative Name(s)
Medical Research Council (United Kingdom), UK Medical Research Council, MRC

Funding Body Type
Government organisation

Funding Body Subtype
National government

Location
United Kingdom

Funder Name
Department of Health Policy Research Programme

Results and Publications

Individual participant data (IPD) sharing plan
The current 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

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	01/02/2018		Yes	No
Protocol article	protocol	13/06/2016		Yes	No
Basic results		07/06/2017	08/06/2017	No	No
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes