# Winter Weight Watch Study: Efficacy of a brief public health intervention to prevent weight gain during the Christmas holiday period

Submission date 10/08/2016	Recruitment status  No longer recruiting	[X] Prospectively registered
		☐ Protocol
Registration date	Overall study status	[X] Statistical analysis plan
17/08/2016	Completed	[X] Results
Last Edited	Condition category	Individual participant data
12/12/2018	Nutritional, Metabolic, Endocrine	

#### Plain English summary of protocol

Background and study aims

Being obese (very overweight) can increase significantly the risk of serious diseases such as diabetes, heart disease, cancer and stroke. Studies show that many people gain weight over the Christmas period (average gain 0.5-1.0 kg per holiday) which is then not lost again once the holidays are over. This could mean that a person gains an extra 5-10kg over a ten year period. Whilst there is much publicity about holiday weight gain in the press, few studies address this problem. Many people gain weight over the holiday period because they typically eat a lot of high fat, high calorie food, snack a lot, are less physically active, drink more alcohol, eat more snacks, eat for longer periods and have easy access to food. People often feel holiday periods are a time where they can eat what they choose. There is a need therefore to investigate the effectiveness of simple, low-cost strategies to prevent people from gaining weight. The aims of this study are to assess whether a leaflet can prevent weight gain over the Christmas holiday period; to identify who is most likely to gain weight over Christmas; and to explore what causes people to gain weight.

Who can participate?

Healthy adults aged at least 18 with a BMI of 20.0 kg/m2 or more

#### What does the study involve?

Participants are randomly allocated to either the intervention (test) group or the usual care group. Those in the usual care group are given a standard information leaflet about healthy lifestyles. Those in the intervention group are given a leaflet that outlines key facts about gaining weight over Christmas and offers top tips to prevent it. This is not a study about dieting over Christmas, as this is unlikely to be acceptable to the public; rather, it is focused on raising awareness about the potential for holiday weight gain and suggests simple ways in which people can ensure a reasonable balance between calories consumed (eaten) and calories burned. The goal is for participants to gain no more than 0.5 kg. Participants are weighed before and after Christmas. Up to 20 participants from the intervention group are also interviewed about their experiences of the study to gain detailed feedback on the strategies used to maintain their weight over Christmas and any barriers they have experienced.

What are the possible benefits and risks of participating? Potential benefits include prevention of weight gain during Christmas. There are no known risks.

Where is the study run from? University of Birmingham (UK)

When is the study starting and how long is it expected to run for? September 2016 to August 2019

Who is funding the study? University of Birmingham (UK)

Who is the main contact? Frances Mason

# Contact information

#### Type(s)

Public

#### Contact name

Mrs Frances Mason

#### Contact details

Dept. of Primary Care Clinical Sciences College of Medical and Dental Sciences University of Birmingham Birmingham United Kingdom B15 2TT

# Additional identifiers

Protocol serial number

160673

# Study information

#### Scientific Title

Efficacy of a brief public health intervention to prevent weight gain during the Christmas holiday period: randomised controlled trial and nested qualitative study

#### **Acronym**

WWW

#### Study objectives

The research has several aims:

1. To assess whether a brief low cost intervention can prevent weight gain over the Christmas holiday period

- 2. To identify who is most susceptible to weight gain over Christmas
- 3. Explore determinants of weight gain through a secondary analysis of the trial data
- 4. Understand participants' experiences and thoughts about conscious energy restraint and energy expenditure at Christmas through semi structured interviews

#### Ethics approval required

Old ethics approval format

#### Ethics approval(s)

University of Birmingham Science, Technology, Engineering and Mathematics Ethical Review Committee, 28/07/2016, ref: ERN 16 0673

#### Study design

Randomised controlled trial and a qualitative study

#### Primary study design

Interventional

#### Study type(s)

Prevention

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

Obesity and overweight

#### Interventions

Participants will be recruited from community pharmacies, schools (parents) and supermarkets prior to Christmas. They will be randomised to either the intervention or the usual care group.

- 1. Intervention group: receive a leaflet that outlines key facts about Christmas holiday weight gain and offers top tips ('Ten Top Tips' leaflet) to prevent weight gain on holiday. The top ten tips leaflet has already been shown to be effective in community settings and needs minor amendments for use here.
- 2. Control group: receive an information leaflet about healthy lifestyles.

This is not a study about dieting over Christmas, which would be very unlikely to be acceptable to the public; rather, it is focused on raising awareness about the potential for holiday weight gain and will suggest simple ways in which people can ensure reasonable energy balance, given many never lose the weight gained over Christmas.

The behavioural goal will be for participants to gain no more than 0.5kg of their baseline weight. The primary outcome is change in weight. Participants will be weighed before and after Christmas (follow up). 284 participants will provide 80% power to detect 0.75kg (SD=2.0) difference in weight change between the groups.

Up to 20 participants from the intervention group will be interviewed about their experiences of the study to gain detailed feedback on the behavioural/cognitive strategies used to maintain their weight over Christmas and any barriers they may experienced.

#### Intervention Type

Behavioural

#### Primary outcome(s)

Change in weight from baseline (mid-late November) to follow up (mid-January – early February)

#### Key secondary outcome(s))

- 1. Proportion of participants in both groups who have gained  $\leq$  0.5 kg at follow up
- 2. Frequency of self-weighing in the previous two weeks using a single-item measure
- 3. Change in percentage body fat, measured by bioelectrical impedance at baseline and follow up

#### Added 01/11/2018:

4. Difference between groups in cognitive restraint, emotional eating and uncontrolled eating as measured by the three factor eating questionnaire at baseline and follow up

#### Completion date

01/08/2019

# Eligibility

#### Key inclusion criteria

- 1. Aged 18 years or more
- 2. BMI 20.0 kg/m2 or more

#### Participant type(s)

All

#### Healthy volunteers allowed

No

#### Age group

Adult

#### Lower age limit

18 years

#### Sex

Αll

#### Key exclusion criteria

- 1. Unable to understand English sufficiently to provide written informed consent
- 2. Women who are known to be pregnant or intending to become pregnant during the study period
- 3. Women who are breastfeeding

#### Date of first enrolment

01/10/2016

#### Date of final enrolment

14/12/2018

# Locations

#### Countries of recruitment

#### United Kingdom

England

# Study participating centre University of Birmingham

Department of Primary Care Clinical Sciences College of Medical and Dental Sciences Birmingham United Kingdom B15 2TT

# Sponsor information

#### Organisation

University of Birmingham

#### **ROR**

https://ror.org/03angcq70

# Funder(s)

#### Funder type

University/education

#### **Funder Name**

School of Medicine, PhD Studentship award, University of Birmingham

# **Results and Publications**

Individual participant data (IPD) sharing plan

#### IPD sharing plan summary

Available on request

#### Study outputs

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

Results article results 10/12/2018 Yes No

Participant information sheet

<u>Participant information sheet</u> <u>Statistical Analysis Plan</u> 11/11/2025 11/11/2025 No 15/05/2018 15/05/2018 No Yes No