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Snacktivity intervention to promote physical activity and reduce future risk of disease in the population

Submission date
08/01/2021

Recruitment status
No longer recruiting

Registration date
13/01/2021

Overall study status
Completed

Last Edited
09/09/2025

Condition category
Other

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

Plain English summary of protocol

Background and study aims:
There is strong evidence that being active and sitting less is important for health. Guidance states that adults should, over a week, complete at least 150 minutes of moderate to vigorous-intensity physical activity (30 minutes per/day) in periods of 10 minutes or more. However, few people manage this which puts their health at risk. This is concerning and new ways are needed to help people to be active daily. The reason why so few people are meeting the current physical activity guidance may be because they have to make big changes to their lifestyle, which can be too difficult. An alternative is an idea we have called Snacktivity. Rather than encouraging people to do 30 minutes of physical activity each day in one go, or in 10-minute periods, snacktivity focuses on encouraging people to do small physical activity 'snacks', throughout the day so they achieve 150 minutes of activity per/week. The aim of this study is to assess the feasibility and acceptability of the Snacktivity intervention.

Who can participate?
80 inactive adults who are eligible to receive an NHS Health Check from general practices (East and West Midlands), and from services offered by Birmingham Community Healthcare NHS Foundation Trust (BCHC)

What does the study involve?
Participants will be randomly allocated to receive standard advice about physical activity (large changes) or encouragement to achieve their physical activity by Snacktivity (small changes). The researchers will promote Snacktivity in the intervention group by giving participants a physical activity tracker to help monitor their Snacktivity and overall physical activity, and access to an App called SnackApp that prompts people to participate in Snacktivity. The researchers will measure physical activity at the start of the study and 12 weeks later.

A physical activity 'snack' typically lasts between 2 to 5-mins. This could be walk-talk conversations, walking coffee breaks, using stairs rather than the lift, pacing whilst using the telephone, or parking the car a little further away and walking to a destination. An important benefit of Snacktivity over current physical activity guidance is that Snacktivity encourages

breaking up sitting time throughout the day. Snacktivity may also help develop people's confidence to try to become regularly physically active, and small changes are easier for people to initiate and then maintain, than large changes.

What are the possible benefits and risks of participating?
It is hoped that the intervention will encourage participants to be more physically active which may improve their health. The researchers do not expect any risks from taking part in this study.

Where is the study run from?
1. Loughborough University (UK)
2. University of Birmingham Clinical Trials Unit (UK)
3. University of Leicester (UK)

When is the study starting and how long is it expected to run for?
August 2018 to October 2026

Who is funding the study?
National Institute for Health Research (NIHR) (UK)

Who is the main contact?
Prof. Amanda Daley
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Contact information

Type(s)
Scientific

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Additional identifiers

Integrated Research Application System (IRAS)
285836

Central Portfolio Management System (CPMS)
46654

Protocol serial number
IRAS ID 285836

Study information

Scientific Title
Snacktivity to promote physical activity and reduce future risk of disease in the population (work package 3 – feasibility trial)

Study objectives
The aim of work package 3 is to undertake a randomised feasibility trial with nested qualitative interviews to assess the feasibility and acceptability of the Snacktivity intervention.

Ethics approval required
Old ethics approval format

Ethics approval(s)
Approved 15/01/2021, West Midlands – Edgbaston Research Ethics Committee (3rd Floor Barlow House, Minshull Street, Manchester, M1 3DZ, UK; +44 (0)20 7104 8112, +44 (0)207 104 8019, +44 (0)2071048089; edgbaston.rec@hra.nhs.uk), REC ref: 20/WM/0315

Primary study design
Interventional

Study design
Randomized; Interventional; Design type: Treatment, Education or Self-Management, Device, Other

Study type(s)
Prevention

Health condition(s) or problem(s) studied

Physical activity

Interventions
Current interventions as of 02/03/2021:
Participants will be randomised to receive standard advice about physical activity (large changes) or encouragement to achieve their physical activity by Snacktivity (small changes). The researchers will promote Snacktivity in the intervention group by giving participants a physical activity tracker to help monitor their Snacktivity and overall physical activity, and access to an App called SnackApp that prompts people to participate in Snacktivity. The researchers will measure physical activity at the start of the study and 12 weeks later.

A physical activity 'snack' typically lasts between 2 to 5 min. This could be walk-talk conversations, walking coffee breaks, using stairs rather than the lift, pacing whilst using the telephone, or parking the car a little further away and walking to a destination. An important benefit of Snacktivity over current physical activity guidance is that Snacktivity encourages breaking up sitting time throughout the day. Snacktivity may also help develop people's confidence to try to become regularly physically active, and small changes are easier for people to initiate and then maintain, than large changes.

Previous interventions:
Participants will be randomised to receive standard advice about physical activity (large changes) or encouragement to achieve their physical activity by Snacktivity (small changes). The researchers will promote Snacktivity in the intervention group by giving participants a physical activity tracker to help monitor their Snacktivity and overall physical activity, and access to an App called SnackApp that prompts people to participate in Snacktivity. The researchers will measure physical activity at the start of the study and 12 weeks later.

Intervention Type
Behavioural

Primary outcome(s)
The feasibility of a subsequent phase III randomised controlled trial (RCT) according to pre-specified progression criteria. The researchers are primarily interested in whether:
1. The trial is appealing to participants (assessed by the recruitment rate)
2. The Snacktivity intervention is acceptable (measured by Snacktivity adherence)
They also wish to assess:
3. The recruitment and randomisation processes
4. The extent of any intervention contamination
These are all measured at the end of the trial.

Key secondary outcome(s)
1. Moderate-vigorous physical activity measured using a research-grade wrist-worn accelerometer at baseline and 12-week follow up
2. Light physical activity measured using a research-grade wrist-worn accelerometer at baseline and after 12-week follow up
3. Total physical activity measured using a research-grade wrist-worn accelerometer at baseline and 12-week follow up
4. Sedentary time measured using a research-grade wrist-worn accelerometer at baseline and at 12-week follow up
5. Sleep time measured using a research-grade wrist-worn accelerometer at baseline and at 12-week follow up

Other outcomes include:
1. Self-reported sedentary behaviours measured using the workforce Sitting Questionnaire (WSQ)) and International Physical Activity Questionnaire (IPAQ) at baseline and 12-week follow up
2. Lower limb muscle strength measured using a Takei dynamometer at baseline and 12-week follow up
3. Weight measured using SECA scales at baseline and 12-week follow up
4. Waist circumference measured using a tape measure at baseline and 12-week follow up
5. Blood pressure measured using a blood pressure monitor at baseline and 12-week follow up
6. Depression/anxiety measured using the Hospital Anxiety and Depression Scale at baseline and 12-week follow up

Completion date
31/10/2026

Eligibility

Key inclusion criteria
1. Inactive (i.e. defined as not in employment or doing a sedentary job, AND completing less than 1 h of physical exercise, walking or cycling per week as measured by the General Practice Physical Activity Questionnaire [GPPAQ])
2. Eligible for an NHS Health Check or have an appointment scheduled at one of the selected community health services detailed above
3. Able to provide informed written consent
4. Aged ≥18 years (all routes of recruitment)
5. Own a mobile phone capable of hosting apps (Apple and Android)
6. Agreement for their health care professional (HCP) to be notified of participant involvement in this study

Participant type(s)
Patient

Healthy volunteers allowed
No

Age group
Adult

Lower age limit
18 Years

Sex
All

Total final enrolment
72

Key exclusion criteria
1. Unable to understand English sufficiently to complete the trial assessments
2. Women known to be pregnant or breastfeeding

Date of first enrolment
12/07/2021

Date of final enrolment
30/09/2025

Locations

Countries of recruitment
United Kingdom

England

Study participating centre
Birmingham Community Healthcare NHS Foundation Trust
3 Priestley Wharf
Holt Street
Birmingham Science Park
Aston
Birmingham
United Kingdom
B7 4BN

Study participating centre
Eve Hill Medical Practice
29 Himley Rd
Dudley
United Kingdom
DY1 2QD

Study participating centre
Gate Medical Centre
120 Washwood Heath Rd
Saltley
Birmingham
United Kingdom
B8 1RE

Study participating centre
College Green Medical Practice
Health and Wellbeing Centre
1 Bristol Rd S
Birmingham

United Kingdom
B31 2GH

Study participating centre
Darlaston Family Practice
Darlaston Heath Centre
Pinfold St
Darlaston
United Kingdom
WS10 8SY

Sponsor information

Organisation
Birmingham Community Healthcare NHS Foundation Trust

Funder(s)

Funder type
Government

Funder Name
NIHR Central Commissioning Facility (CCF); Grant Codes: RP-PG-0618-20008

Results and Publications

Individual participant data (IPD) sharing plan
The data from this study and the clinical trial on which this report is based will be available from the first author upon reasonable request: Professor Amanda Daley, a.daley@lboro.ac.uk.
The type of data that will be shared: Anonymised trial data
Dates of availability: From February 2025
Consent for publication was obtained from participants as part of the consent process.

IPD sharing plan summary
Available on request

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article		24/02/2025	25/02/2025	Yes	No
Protocol article		17/03/2023	20/03/2023	Yes	No

HRA research summary			28/06/2023	No	No
Other publications	Qualitative results	22/10/2024	29/10/2024	Yes	No