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

Submission date 08/01/2021	Recruitment status Recruiting	[X] Prospectively registered [X] Protocol
Registration date	Overall study status	Statistical analysis plan
13/01/2021	Ongoing	[X] Results
Last Edited 09/09/2025	Condition category Other	Individual participant data
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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 a.daley@lboro.ac.uk

Contact information

Type(s)

Scientific

Contact name

Prof Amanda Daley

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Additional identifiers

EudraCT/CTIS number

Nil known

IRAS number

285836

ClinicalTrials.gov number

Nil known

Secondary identifying numbers

CPMS 46654, 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

Study design

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

Primary study design

Interventional

Secondary study design

Randomised controlled trial

Study setting(s)

Home

Study type(s)

Prevention

Participant information sheet

No participant information sheet available

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 measure

The feasibility of a subsequent phase III randomised controlled trial (RCT) according to prespecified 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.

Secondary outcome measures

- 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

Overall study start date

01/08/2018

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

Age group

Adult

Lower age limit

18 Years

Sex

Both

Target number of participants

Planned Sample Size: 80; UK Sample Size: 80

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

England

United Kingdom

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

Sponsor details

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Holt Street
Birmingham Science Park
Aston
Birmingham
England
United Kingdom
B7 4BN
+44 (0)1214666000
BCHNT.ResearchInnovation@nhs.net

Sponsor type

Hospital/treatment centre

Website

http://www.bhamcommunity.nhs.uk/

Funder(s)

Funder type

Government

Funder Name

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

Results and Publications

Publication and dissemination plan

Planned publication in a high-impact peer-reviewed journal. Additional files are not available.

Intention to publish date

31/03/2025

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?
<u>Protocol article</u>	Qualitative results	17/03/2023	20/03/2023	Yes	No
HRA research summary			28/06/2023	No	No
Other publications		22/10/2024	29/10/2024	Yes	No
Results article		24/02/2025	25/02/2025	Yes	No