

Fresh Street Food and Health pilot study: A trial to evaluate the impact of a subsidy for fresh fruit and vegetables on a range of interconnected challenges for UK public health nutrition in areas of high deprivation and low fruit and vegetable consumption

Submission date 25/09/2020	Recruitment status No longer recruiting	☐ Prospectively registered ☒ Protocol
Registration date 06/10/2021	Overall study status Completed	☐ Statistical analysis plan ☒ Results
Last Edited 28/02/2025	Condition category Nutritional, Metabolic, Endocrine	☐ Individual participant data

Plain English summary of protocol

Background and study aims

Many communities in the UK are unable to afford, or access, all the food needed to make up a healthy diet. Despite national healthy eating information campaigns (e.g. 5-A-Day), and support for families on low incomes (Healthy Start), only one in five people eat the recommended 5 daily portions of fresh fruit and vegetables.

Researchers want to test a new approach (Fresh Street) to help improve diet and health. The Fresh Street scheme provides vouchers for fresh fruit and vegetables to households. Vouchers worth £5 are delivered to households every week, along with vegetable-based recipes, brief nutritional information, and healthy eating advice. Unique features of the scheme are that vouchers are offered to households (not individuals), all households are eligible (regardless of size or income), vouchers can only be used with local independent fresh fruit and vegetable sellers (not supermarkets), and households are encouraged to share vouchers if they wish. This approach was developed with residents in Barnsley, an area of high deprivation in the north of England. The scheme was then tested in four streets (95 households) for a year to see if it was deliverable and acceptable. The scheme was popular with most (84%) of all eligible households joining the scheme. Most householders reported that the scheme helped them buy and eat more fruit and vegetables and most (89%) of all of the vouchers being used. Many described how it prompted them to think about eating healthily. People frequently talked about their health, and some reported that they had lost weight since joining the scheme. Local fruit and veg shops and stalls reported new customers and that existing customers were buying more.

The aim of this study is to test the effectiveness of this 'place-based' voucher approach on improving local food choices, diet, health and the wider environment.

Who can participate?

Areas of deprivation where diets are low in fresh fruit and veg

What does the study involve?

In the first year of the study the researchers will work closely with local residents, fruit and veg vendors, councillors, authorities and organisations to ensure that the scheme fits well with local priorities and resources (e.g. cook and grow schemes).

Before they start the scheme the researchers will test the methods they want to use to assess the scheme - short questionnaires and conversations (both online and door-step) in order to make sure that the methods they use are acceptable to householders. Throughout the study the researchers will carefully listen to householder's stories and experiences of the scheme and ask them to help make sense of these experiences. They will also talk to local fruit and veg vendors and other local key people involved in health and food. They will also obtain anonymised level health data on GP and hospital visits for each area to see if the scheme has an effect on NHS healthcare use. They will test the scheme for two years in 34 streets (selected at random) and compare what happens in 34 similar streets without the scheme.

What are the possible benefits and risks of participating?

This study will help the researchers to understand the effect of the scheme on the diet and health of households (including families with children) and communities (streets). Throughout the study and after, they will share the knowledge gained with local people and the wider research community.

Where is the study run from?

The study is being run from Queen Mary University of London with the support of Grounded Research - the Community Research Hub in Doncaster.

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

October 2020 to October 2021

Who is funding the study

National Institute for Health Research (NIHR) (UK)

Who is the main contact

Dr Clare Relton

c.relton@qmul.ac.uk

Contact information

Type(s)

Scientific

Contact name

Dr Clare Relton

ORCID ID

<https://orcid.org/0000-0001-8530-5011>

Contact details

58 Turner Street
London

United Kingdom
E1 2AB
+44 (0)207 882 6696
c.relton@qmul.ac.uk

Additional identifiers

Integrated Research Application System (IRAS)
287024

Study information

Scientific Title

Fresh Street: a cluster randomised controlled trial of the benefits of a place-based, household-level subsidy for fresh fruit and vegetables on diet, health and the wider environment

Acronym

Fresh Street

Study objectives

Different components of the Fresh Street intervention will provide the conditions required to increase fruit and vegetable consumption and improve diet quality.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Approved 03/09/2021, Queen Mary University of London Ethics of Research Committee (Research Ethics Facilitators, Room W117, Queen's Building, Queen Mary University of London, Mile End Road, London E1 4NS; +44 (0)20 7882 7915 / 6947; research-ethics@qmul.ac.uk), ref: QMERC20.004

Primary study design

Interventional

Study design

Cluster randomized controlled trial with a parallel process evaluation

Study type(s)

Quality of life

Health condition(s) or problem(s) studied

Diet quality and health

Interventions

Eligible streets will be randomised to either the intervention or control arm. The allocation ratio will be 1:1. Stratified (by site) permuted blocked randomisation with block sizes of m=6 and 4 will be used to ensure a similar number of clusters within each arm. The randomisation will be carried out remotely by the PCTU.

'Fresh Street' is an innovative multi-component intervention, which combines supplier-specific vouchers for fresh fruit and vegetables (FV) with a range of diet and health information offered to all households in a geographical area regardless of type, size, or income. Households in the intervention arm will receive £5 worth of Fresh Street branded paper vouchers redeemable with local independent FV retailers (not supermarkets), a healthy and seasonal vegetable-based recipe, and nutrition and health/diet related information on a weekly basis over 6 months. In this intervention:

1. Vouchers are offered to households (not individuals)
2. All households are eligible, regardless of size, type, or income
3. Vouchers are redeemable only with local independent fruit and vegetable (FV) retailers (not supermarkets)
4. Households are encouraged to share vouchers

Households in the control arm will continue to purchase and consume FV as usual over the 6 month period.

In the first year of the study, the researchers will work closely with local residents, fruit and veg vendors, councillors, authorities and organisations to ensure that the scheme fits well with local priorities and resources (e.g. cook and grow schemes).

Before they start the scheme the researchers will test the methods they want to use to assess the scheme - short questionnaires and conversations (both online and door-step) in order to make sure that the methods they use are acceptable to householders. Throughout the study, the researchers will carefully listen to householder's stories and experiences of the scheme and ask them to help make sense of these experiences. They will also talk to local fruit and veg vendors and other local key people involved in health and food. They will also obtain anonymised level health data on GP and hospital visits for each area to see if the scheme has an effect on NHS healthcare use. They will test the scheme for two years in 34 streets (selected at random) and compare what happens in 34 similar streets without the scheme.

Participating households will be followed up after 4-6 months for the pilot study, and if progression criteria are met and the study progresses to the main trial, participating households will be followed up again after 1 and 2 years

Intervention Type

Other

Primary outcome(s)

Portions of fruit and vegetables (FV) eaten in the previous day measured using Active Lives Survey questions at baseline and 4-6 months for the pilot study, and at 1 year and 2 years if progression criteria are met and the study progresses to the main trial

Key secondary outcome(s)

The following will be measured at baseline and 4-6 months for the pilot study, and at further time points if progression criteria are met and the study progresses to the main trial:

1. Diet Quality measured using the Diet Quality Questionnaire (DQQ)
2. Food Insecurity measured using the Food Insecurity Experience Scale (FIES)
3. Long term health conditions measured using Questions from the Yorkshire Health Study (YHS) Health Questionnaire

Completion date

31/12/2023

Eligibility

Key inclusion criteria

Areas with a high deprivation index (IMD quintiles 4 or 5)

Participant type(s)

Other

Healthy volunteers allowed

No

Age group

All

Sex

All

Total final enrolment

18

Key exclusion criteria

Areas with a low deprivation index (IMD quintiles 1 - 3)

Date of first enrolment

15/09/2021

Date of final enrolment

01/10/2021

Locations

Countries of recruitment

United Kingdom

England

Study participating centre

Community Research Hub

RDaSH NHS Foundation Trust

Almond Tree Court

Woodfield Park

Doncaster

United Kingdom

DN4 8QP

Study participating centre
East Riding County Council
County Hall
Beverley
East Riding of Yorkshire
United Kingdom
HU17 9BA

Sponsor information

Organisation

Queen Mary University of London

ROR

<https://ror.org/026zzn846>

Funder(s)

Funder type

Government

Funder Name

National Institute for Health Research

Alternative Name(s)

National Institute for Health Research, NIHR Research, NIHRresearch, NIHR - National Institute for Health Research, NIHR (The National Institute for Health and Care Research), NIHR

Funding Body Type

Government organisation

Funding Body Subtype

National government

Location

United Kingdom

Results and Publications

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

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article		03/01/2025	27/02/2025	Yes	No
Participant information sheet	Process evaluation interview with control arm version 2.0	23/08/2021	21/09/2021	No	Yes
Participant information sheet	Process evaluation interview with intervention arm version 2.0	23/08/2021	21/09/2021	No	Yes
Protocol file	version 4.0	12/08/2021	21/09/2021	No	No
Study website	Study website	11/11/2025	11/11/2025	No	Yes