

School gardening and diet

Submission date 01/12/2009	Recruitment status No longer recruiting	<input type="checkbox"/> Prospectively registered <input checked="" type="checkbox"/> Protocol
Registration date 29/01/2010	Overall study status Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
Last Edited 19/03/2014	Condition category Nutritional, Metabolic, Endocrine	<input type="checkbox"/> Individual participant data

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s)

Scientific

Contact name

Prof Janet Cade

Contact details

Centre for Epidemiology and Biostatistics
Nutritional Epidemiology Group
Room 8.001 Worsley Building
University of Leeds
Leeds
United Kingdom
LS2 9JT
+44 (0)113 343 6946
j.e.cade@leeds.ac.uk

Additional identifiers

Protocol serial number

0000601794

Study information

Scientific Title

Does the Royal Horticultural Society Campaign for School Gardening increase intake of fruit and vegetables in children? A cluster randomised controlled trial

Acronym

DIG - Diet/Growing

Study objectives

Does a programme of practical, structured gardening education have an impact on the diet of children in Key Stage 2 (KS2 - aged 8 to 9 years)?

Ethics approval required

Old ethics approval format

Ethics approval(s)

Application pending to University of Leeds Research Ethics Committee as of 02/12/2009.

Study design

Cluster randomised controlled trial

Primary study design

Interventional

Study type(s)

Quality of life

Health condition(s) or problem(s) studied

Improving children's diet

Interventions

The intervention package is the RHS Campaign for School Gardening. There are two main levels at which schools can be involved - more intensive and less intensive:

More intensive intervention:

Involves support from the RHS Regional Schools Advisor (RA). The role of the RA is to help schools develop a successful garden, work directly with teachers and pupils to give them support and practical advice. They are also charged with trying to help schools overcome particular barriers to developing gardening within schools. RA have the expertise and experience to tie in gardening and growing activities with the National Curriculum and to run staff training sessions for teachers.

Less intensive intervention:

Schools do not have direct support from the Regional Advisor but do have access to training from teachers in the partner (more intensive) schools in twilight teacher training sessions. They will be able to have e-mail contact with the RA and access to the RHS resources on the Internet as well as potential for a one-off training event at the school. This less intensive education package will be available for schools in trial 1 and trial 2.

The comparison schools in trial 2 will not be provided with additional support regarding growing fruit and vegetables. However, it is recognised that most schools will be engaging in some activity around this topic. Baseline evaluation of the schools will assess the level of active engagement with growing by these schools.

The nature of the intervention allows schools to tailor their engagement with the intervention according to their needs. We will monitor which activities are undertaken by the schools during

the growing year and assess, through process measures, how compliant schools have been with the different aspects of the intervention undertaken. Schools in the study will be encouraged to keep a diary of the activities they undertake as part of the intervention and complete a questionnaire detailing these activities. The process measures will allow us to identify aspects of the Campaign which have influenced the effectiveness of the activities.

Our previous work with school interventions has shown a high level of follow up at 75%, meaning that likely loss to follow up will be in the region of 3 - 4 schools and 150 - 200 children. This has been taken into account in our recruitment strategy.

Intervention Type

Other

Phase

Not Applicable

Primary outcome(s)

Daily portions of fruit and vegetable eaten, measured between January 2010 and April 2010 and again between September 2011 and December 2011.

Key secondary outcome(s)

1. Intake of key nutrients (measured between January 2010 and April 2010 and again between September 2011 and December 2011):

1.1. Total energy intake (MJ/day)

1.2. Fat intake (g/day)

1.3. Salt intake (g/day)

1.4. Intake of sugars (g/day)

1.5. Carotene intake (mg/day)

1.6. Vitamin C intake (mg/day)

2. Behavioural: Children's attitude to fruit and vegetable consumption - using a validated psychological questionnaire. Measured between January 2010 and April 2010 and again between September 2011 and December 2011.

3. School level: Involvement of schools in promoting consumption of fruit and vegetables (number of lessons devoted to school gardening and growing or learning about fruit and vegetables, school food policy, resources, involvement in other national/local food related initiatives)

4. Involvement by schools of parents in promoting consumption of fruit and vegetables among pupils

5. Process measures concerning the practicality of the intervention, timing, delivery, used and not used elements of the intervention, measured between January 2010 and July 2011.

Completion date

30/09/2012

Eligibility

Key inclusion criteria

Both trials:

1. Primary maintained schools in the London government region with classes in key stage 2

(years 3 - 6)

2. A minimum year group size of 15 pupils

3. Pupils aged 8 - 9 years, either sex

Trial 1:

1. Meet all of the above criteria

2. Have signed up to take part in the RHS Campaign for School Gardening

3. Have undertaken the benchmarking process

Trial 2:

1. Meet all of the above criteria (for both trials)

2. Have not signed up to take part in the RHS Campaign for School Gardening by the time of randomisation of schools in trial 1

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Child

Lower age limit

8 years

Upper age limit

9 years

Sex

All

Key exclusion criteria

Both trials:

1. Independent schools

2. Special schools

3. Schools without all 4 year groups (3 - 6)

4. Small schools with less than 15 pupils/year group

5. Schools that have previously participated in externally supported school growing projects

Date of first enrolment

01/10/2009

Date of final enrolment

30/09/2012

Locations

Countries of recruitment

United Kingdom

England

Study participating centre
Centre for Epidemiology and Biostatistics
Leeds
United Kingdom
LS2 9JT

Sponsor information

Organisation
National Institute for Health Research (NIHR) (UK)

ROR
<https://ror.org/0187kwz08>

Funder(s)

Funder type
Government

Funder Name
National Institute for Health Research (NIHR) (UK) - Public Health Research (PHR) Programme
(ref: 0000601794)

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary
Not provided at time of registration

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	01/04/2013		Yes	No
Protocol article	protocol	26/04/2012		Yes	No
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes

[Study website](#)

Study website

11/11/2025 11/11/2025 No

Yes