School gardening and diet

Submission date	Recruitment status No longer recruiting	Prospectively registered		
01/12/2009		[X] Protocol		
Registration date 29/01/2010	Overall study status Completed Condition category	Statistical analysis plan		
		[X] Results		
Last Edited		[] Individual participant data		
19/03/2014	Nutritional, Metabolic, Endocrine			

Plain English summary of protocol

Not provided at time of registration

Study website

http://www.phr.nihr.ac.uk/funded_projects/09_3001_19.asp

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

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

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

Secondary study design

Randomised controlled trial

Study setting(s)

Other

Study type(s)

Quality of life

Participant information sheet

Not available in web format, please use the contact details below to request a patient information sheet

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 measure

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

Secondary outcome measures

- 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 (q/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.

Overall study start date

01/10/2009

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

Age group

Child

Lower age limit

8 Years

Upper age limit

9 Years

Sex

Both

Target number of participants

58 schools (2900 pupils)

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

England

United Kingdom

Study participating centre Centre for Epidemiology and Biostatistics

Leeds United Kingdom LS2 9JT

Sponsor information

Organisation

National Institute for Health Research (NIHR) (UK)

Sponsor details

Room 132 Richmond House 79 Whitehall London United Kingdom SW1A 2NL geh1@soton.ac.uk

Sponsor type

Government

Website

http://www.phr.nihr.ac.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

Publication and dissemination plan

Not provided at time of registration

Intention to publish date

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?
<u>Protocol article</u>	protocol	26/04/2012		Yes	No
Results article	results	01/04/2013		Yes	No