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Project Spraoi: a strategy to improve nutrition and physical activity in schoolchildren

Submission date
17/11/2013

Recruitment status
No longer recruiting

Registration date
17/02/2014

Overall study status
Completed

Last Edited
01/10/2026

Condition category
Nutritional, Metabolic, Endocrine

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

Plain English summary of protocol

Background and study aims
Project Spraoi, based in Cork, is of vital importance to Ireland, as there are currently no initiatives that target at the same time physical activity, healthy eating and sedentary time amongst schoolchildren. Over half of Irish primary school age children do not achieve the recommended level of 60 minutes of physical activity per day and only 18% (16% boys; 20% girls) report eating vegetables twice or more daily. Such behaviours are unlikely to change as these children mature and, consequently, will contribute to rising health costs. According to the Department of Health, obesity alone indirectly costs the nation 0.4 billion per year. Project Spraoi is a 24-month whole-school health promotion intervention. It is derived from New Zealand's Project Energize and is adapted to an Irish setting. The programme includes provision of staff into schools to structure activity programmes that are aligned with the curriculum; and seeking opportunities to enhance nutritional intake. This study aims to determine whether Project Spraoi has had any positive impact on physical activity, nutritional knowledge/behaviours and long-term health parameters including body composition and blood pressure.

Who can participate
The project is designed for primary schools but also extends to childrens homes. Participants will be 5-6 year old and 10-11 year old children attending primary schools in Cork city and county.

What does the study involve?
The participating schools are randomly allocated to one of two groups: the intervention group or the control group. At the intervention group schools trained Energizers work with teachers to implement physical activity and nutrition initiatives. The control group schools continue their usual school curriculum. Children are evaluated, which involves taking measurements (blood pressure, heart rate, height, weight, waist circumference, body fat, physical activity and fitness) at the beginning of the study and two years later. Parents/guardians are also asked to give consent and complete a written questionnaire.

What are the possible benefits and risks of participating?
Benefits include improvements in physical activity levels, nutritional behaviours and markers of health in schoolchildren. There are no risks of participating.

Where is the study run from?
Cork Institute of Technology and schools in in Cork city and county (Ireland)

When is the study starting and how long is it expected to run for?
October 2013 to June 2016

Who is funding the study?
Cork Institute of Technology (Ireland)

Who is the main contact?
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Contact information

Type(s)
Scientific

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Additional identifiers

Study information

Scientific Title
Project Spraoi: a strategy to improve nutrition and physical activity in schoolchildren - a randomised controlled trial

Study objectives
It is hypothesised that improvements in:
1. Fitness, physical activity, nutritional knowledge/behaviour
2. Key long-term health parameters including body mass and blood pressure
will be found in children attending intervention schools, compared to those attending control schools.

Ethics approval required
Old ethics approval format

Ethics approval(s)
The Cork Institute of Technology Ethics Committee, October 2013

Primary study design
Interventional

Study design
Randomised controlled trial

Study type(s)
Quality of life

Health condition(s) or problem(s) studied
Health promotion intervention for children attending primary schools in Cork city and county

Interventions
Schools are randomised to two groups:
1. Intervention group: Trained Energizers work with intervention schools to support teachers implement physical activity and nutrition initiatives.
2. Control group: Control schools do not receive any input from Energizers and continue their usual school curriculum.

Intervention Type
Other

Primary outcome(s)
1. Physical activity level and intensity measured via 7 day accelerometry (Actigraph)
2. Nutritional knowledge and behaviour measured via questionnaire

Outcomes measured at baseline and 24 months (+/- 1-2 month/s)

Key secondary outcome(s)
1. Height measured using a Seca 213, portable stadiometer (Seca, Birmingham, UK)
2. Weight measured using a portable Tanita WB-110MA electronic scale (Tanita Corporation, Japan)
3. Body composition (percentage body fat, total lean and fat mass) measured using the Impedimed DF50, bioimpedence monitor (Queensland, Australia) (updated 13/09/2017: data not collected due to technical issues)
4. Waist circumference measured with anthropometric measuring tape
5. Blood pressure and pulse measured by Auto Blood Pressure Monitor T8, Omron Corporation, Tokyo, Japan
6. Aerobic fitness measured by a fitness test - 550 metre run
7. Household questionnaire completed by parent/guardian

Outcomes measured at baseline and 24 months (+/- 1-2 month/s). In addition, height and weight measures at 6, 12 and 18 months +/- 2 weeks will be taken amongst the youngest (5-6 years old at baseline) age group.

Completion date
30/06/2016

Eligibility

Key inclusion criteria
1. School children aged 5-11
2. Written and informed consent and parental/guardian consent
3. Attending participating school

Participant type(s)
Other

Healthy volunteers allowed
No

Age group
Child

Lower age limit
5 Years

Upper age limit
11 Years

Sex
All

Total final enrolment
0

Key exclusion criteria
On ethical grounds, there will be no exclusion criteria for participants but potential confounders will be assessed when undertaking measurements, in direct consultation with class teachers /principals

Date of first enrolment
01/10/2013

Date of final enrolment
01/09/2015

Locations

Countries of recruitment
Ireland

Study participating centre

Cork Institute of Technology
Cork
Ireland
NA

Sponsor information

Organisation
Cork Institute of Technology (Ireland)

Funder(s)

Funder type
University/education

Funder Name
Cork Institute of Technology (Ireland)

Alternative Name(s)
Institiuid Teicneolaiochta Chorcal, CIT

Funding Body Type
Private sector organisation

Funding Body Subtype
Universities (academic only)

Location
Ireland

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary
Not expected to be made available

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article		14/08/2021	01/10/2026	Yes	No
Protocol article		01/08/2016		Yes	No

Basic results	13/09/2017	27/09/2017	No	No