

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

<b>Submission date</b> 17/11/2013	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered <input checked="" type="checkbox"/> Protocol
<b>Registration date</b> 17/02/2014	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
<b>Last Edited</b> 27/09/2017	<b>Condition category</b> Nutritional, Metabolic, Endocrine	<input type="checkbox"/> 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?

Dr Tara Coppinger

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## Contact information

### Type(s)

Scientific

### Contact name

Dr Tara Coppinger

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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

**Phase**

Not Applicable

**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, bioimpedance 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

**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 Chorcaí, CIT

**Funding Body Type**  
Private sector organisation

**Funding Body Subtype**  
Universities (academic only)

**Location**  
Ireland

## Results and Publications

**Individual participant data (IPD) sharing plan**  
The datasets generated during and/or analysed during the current study are not expected to be made available due to participant confidentiality.

**IPD sharing plan summary**  
Not expected to be made available

**Study outputs**

<b>Output type</b>	<b>Details</b>	<b>Date created</b>	<b>Date added</b>	<b>Peer reviewed?</b>	<b>Patient-facing?</b>
<a href="#">Protocol article</a>	protocol	01/08/2016		Yes	No
<a href="#">Basic results</a>		13/09/2017	27/09/2017	No	No