

# A preschool intervention to improve child and family health behaviours

<b>Submission date</b> 13/02/2017	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered
		<input type="checkbox"/> Protocol
<b>Registration date</b> 16/02/2017	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan
		<input checked="" type="checkbox"/> Results
<b>Last Edited</b> 20/10/2017	<b>Condition category</b> Mental and Behavioural Disorders	<input type="checkbox"/> Individual participant data

## Plain English summary of protocol

### Background and study aims

One in five children starting school in England is now overweight or obese. Currently, there is a lack of programs with the aim of preventing obesity in preschool-age children in the UK. Previous research has revealed some positive results in changing some health behaviours related to obesity, such as diet and physical activity. However, overall numbers of obesity continue to rise in some age groups and social backgrounds. It has been suggested that preschool settings such as nursery schools may provide opportunities for promoting healthy lifestyles and also to develop and test behaviour-change programs. 'The Study of Kids in Preschool' (SKIP) is a behaviour-change preschool program aimed at improving families eating and encourage families to be more active. The aim of this study is to test whether the nursery staff and parents of preschool children are willing to complete the data collection measures and an intervention to improve health behaviours such as diet and physical activity.

### Who can participate?

Families with a preschool child (3-5 years) who attend participating school.

### What does the study involve?

Schools are randomly allocated to either receiving the programme or being placed on the waiting list. At the beginning of the programme, parents provide information about their child's activity level, eating habits, height and weight. Children are given cameras to take pictures of what they eat and drink every day for four days. The programme involves five monthly sessions as well as an introduction for parents. These sessions try to increase physical activity by teaching about healthy eating, healthy behaviours and healthy activity. Parents are given monthly newsletters that include information about healthy eating and ideas on how to get their kids to be more active. Parents also set monthly goals with the school staff in order to continue to make healthy choices with their children at home. At the end of the programme, children are given cameras again to take pictures of what they eat and drink for four days. Schools on the waiting list continue as normal during the study and are given the opportunity to participate in the program six months after the programme has ended.

### What are the possible benefits and risks of participating?

Participants may benefit from possibly making changes to the family diet and activity and

promoting healthy living. There is a risk that participants may feel pressured to complete the monthly tasks or feeling judged if they were not able to.

Where is the study run from?

Four primary schools located in the North-East of England (UK)

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

February 2010 to July 2012

Who is funding the study?

Fuse, the Centre for Translational Research in Public Health (UK)

Who is the main contact?

Lorraine McSweeney

lorraine.mcsweeney@ncl.ac.uk

## Contact information

**Type(s)**

Scientific

**Contact name**

Dr Lorraine McSweeney

**ORCID ID**

<http://orcid.org/0000-0003-1044-6201>

**Contact details**

Human Nutrition Research Centre

William Leech Building

Newcastle University

Framlington Place

Newcastle upon Tyne

United Kingdom

NE2 4HH

## Additional identifiers

**EudraCT/CTIS number**

**IRAS number**

**ClinicalTrials.gov number**

**Secondary identifying numbers**

PhD02

## Study information

**Scientific Title**

A feasibility study with process evaluation of a preschool intervention to improve child and family lifestyle behaviours

### **Study objectives**

Preschool settings may provide valuable opportunities to access children and their families not only for promoting healthy lifestyles, but also to develop and evaluate behaviour-change interventions.

### **Ethics approval required**

Old ethics approval format

### **Ethics approval(s)**

Newcastle University Faculty of Medical Science Ethics Committee, 09/06/2011, ref: 00303\_1

### **Study design**

Cluster randomised feasibility trial

### **Primary study design**

Interventional

### **Secondary study design**

Cluster randomised trial

### **Study setting(s)**

School

### **Study type(s)**

Other

### **Participant information sheet**

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

### **Health condition(s) or problem(s) studied**

Lifestyle behaviour change

### **Interventions**

Four local government preschool centres associated with primary schools in the North East of England consent to participate and are randomised to either the intervention or wait list control groups. In order to reduce selection bias the preschools were allocated to intervention or wait list control by a computerised programme by the Newcastle University Clinical Trials Unit.

Intervention group: Families who agree to take part are asked to provide information about their child's diet (how often their child watched TV/DVDs, how active their child was and whether the family took part in activities such as walking, swimming etc). This information is recorded in a diary completed by the parents over 4 days before the start of the project and at the end to see if there were any changes. The child's height and weight are also recorded. To include children in the gathering of information about their diet, they are given disposable cameras and asked to take photographs of everything they ate and drank for four days at the beginning and end of the project. This also provided more information about the child's diet.

The participating schools receive the intervention titled the Study of Kids in Preschool' (SKIP) which consists of five monthly modules plus an introductory session for parents. The five monthly preschool-based sessions target the child and aim at increasing physical activity, knowledge of and prompting of healthy eating. Active Behaviour Change Techniques delivered by the preschool staff provide information on modelling and demonstrating behaviour, prompting practice and providing instruction on how to perform the behaviour.

Parents are given monthly newsletters by preschool staff. These newsletters provide dietary and physical activity information and tips for home-based tasks to increase physical activity and healthy eating and decrease screen time. Active Behaviour Change Techniques distributed via the newsletters are self-monitoring of behaviour, goal setting, action planning and coping planning.

Parents are asked to meet with preschool staff members once a month to set goals, monitor and review family health behaviour using written materials provided within the newsletters. The families are encouraged to share ideas, achievements, photographs and drawings of activities on a communal preschool information board. Home-based tasks include family cooking and tasting, 'No TV day' and increasing family 'active time' challenges.

Control group: Schools are placed on a wait-list and continue as usual for the duration of the study and are given the opportunity to participate six months after the study.

## **Intervention Type**

Behavioural

## **Primary outcome measure**

Feasibility of trial procedures and acceptability of the proposed intervention are measured through:

1. Recruitment rates (the number of eligible participants who consent to participate in the study) at baseline
2. Completion rates of data collection tasks by parents such as completion of food diaries including recording of child accelerometer/pedometer use, recording time of child TV viewing and recording of family active time at baseline and 6 months
3. Lost to follow-up (parents) measured by the number of parents who consent to participate that remain in the study until the end of follow-up at 6 months
4. Adherence to the proposed activities by preschools and parents (i.e. number of worksheets, feedback forms and questionnaires received from nursery staff and parents during the duration of the study) at 6 months
5. Number of pictures taken by children/families of meals consumed at baseline and 6 months

## **Secondary outcome measures**

Children:

1. Height and weight are measured using a Leicester portable height measure with the head in the Frankfort plane, and Tanita scales TBF-300MA at baseline and 6 months
2. Physical activity is measured by either Actigraph GT1M accelerometer or ST-101 pedometer at baseline and 6 months
3. Portion size and eating environment (home, school, restaurant, with family alone etc.) are assessed by photographs taken with a digital camera provided to children and food diaries at baseline and 6 months

Parents:

1. Child eating behaviours are assessed using four day food diaries collected at baseline and 6 months
2. Sedentary behaviours are assessed by recording the time in hours/minutes children spend watching TV/DVDs and engaging in active behaviours in daily diaries at baseline and 6 months

Observational measures:

Child food intake when at preschool (2 week days) is recorded using a food checklist at baseline and 6 months

**Overall study start date**

08/02/2010

**Completion date**

16/07/2012

## Eligibility

**Key inclusion criteria**

Families with a preschool child (3-5 years) who attend a local government preschool centre

**Participant type(s)**

Other

**Age group**

Mixed

**Sex**

Both

**Target number of participants**

Four clusters - a convenience sample of parents was recruited

**Key exclusion criteria**

Does not meet inclusion criteria

**Date of first enrolment**

11/10/2011

**Date of final enrolment**

25/11/2011

## Locations

**Countries of recruitment**

England

United Kingdom

**Study participating centre****Falla Park Primary School**

Falla Park Road

Felling

Gateshead

United Kingdom

NE10 9HP

**Study participating centre****Corpus Christi Primary School**

Dunsmuir Grove

Gateshead

United Kingdom

NE8 4QL

**Study participating centre****Brighton Avenue Primary School**

Brighton Road

Gateshead

United Kingdom

NE8 1XS

**Study participating centre****Bridgewater Community Primary School**

Bridgewater

Delaval Road

Benwell

Newcastle upon Tyne

United Kingdom

NE15 6NL

## **Sponsor information**

**Organisation**

Newcastle University

**Sponsor details**

Richardson Road

Newcastle upon Tyne

England

United Kingdom

NE2 4AX  
+44 (0)191 208 7296  
fuse@newcastle.ac.uk

**Sponsor type**

University/education

**ROR**

<https://ror.org/01kj2bm70>

## Funder(s)

**Funder type**

Research organisation

**Funder Name**

Fuse, the Centre for Translational Research in Public Health

## Results and Publications

**Publication and dissemination plan**

Planned publication in a high impact peer reviewed journal.

**Intention to publish date**

31/03/2017

**Individual participant data (IPD) sharing plan**

The datasets generated during and/or analysed during the current study are/will be available upon request from [lorraine.mcsweeney@ncl.ac.uk](mailto:lorraine.mcsweeney@ncl.ac.uk)

**IPD sharing plan summary**

Available on request

**Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Results article</a>	results	11/03/2017		Yes	No