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Evaluation of the school-based Jump-in intervention on dietary habits for children

Submission date
21/01/2020

Recruitment status
No longer recruiting

Registration date
27/01/2020

Overall study status
Completed

Last Edited
28/02/2023

Condition category
Nutritional, Metabolic, Endocrine

[_] Prospectively registered
[X] Protocol
[_] Statistical analysis plan
[_] Results
[_] Individual participant data
[_] Record updated in last year

Plain English summary of protocol

Background and study aims
Only about 40% of children in the Netherlands meet daily fruit and vegetable recommendations and roughly 90% of Dutch children exceed the WHO's daily recommendations of sugar intake, with sweetened beverages and unhealthy snacks being the biggest contributors. Dietary behaviour (e.g. drinking sugar-sweetened beverages) tends to be worse among children from ethnic minority groups.
To stimulate these children's healthy dietary behaviour, the Public Health Service of Amsterdam implemented an intervention on dietary habits in primary schools in disadvantaged neighbourhoods in Amsterdam where obesity rates tend to be higher. This intervention aims to implement a healthy dietary school policy, and is part of the Jump-in programme that stimulates a range of health behaviours. Although shown to be effective in stimulating physical activity and outside recess play, this study is the first to evaluate Jump-in's effects on child dietary habits and its implementation processes.

Who can participate?
Children aged 4-12 years old, parents of children aged 4-12 years old, teachers, school project coordinators and school principals at primary schools in Amsterdam that participate in Jump-in after being invited by the Public Health Service of Amsterdam.

What does the study involve?
The Jump-in intervention is tailored to the needs of primary schools. Therefore the programme has a duration of 1 to 3 years. Children and parents are requested to fill in a questionnaire before the programme and 1 and 2 years after the start of the programme. Effectiveness is assessed by questionnaires for the parents, questionnaires for the children, and by digital images of the food and drinks the children brought to school. Interviews are conducted with health promotion professionals, school principals, school project coordinators, and teachers, and focus group discussions are conducted with parents and children.

What are the possible benefits and risks of participating?
The study involves evaluation of the Jump-in intervention and not the implementation itself (i.e. the intervention has been implemented in primary schools in Amsterdam since 2002). Therefore there are no potential risks or benefits for participants.

Where is the study run from?
Public Health Service (GGD) of Amsterdam, Netherlands

When is the study starting and how long is it expected to run for?
July 2016 to September 2019

Who is funding the study?
City of Amsterdam, Amsterdam, Netherlands (Amsterdam Healthy Weight Approach, Sarphati Amsterdam, Public Health Service (GGD))

Who is the main contact?
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Contact information

Type(s)
Scientific

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Additional identifiers

Clinical Trials Information System (CTIS)
Nil known

ClinicalTrials.gov (NCT)
Nil known

Protocol serial number
Cmg VUmc 2016-1137

Study information

Scientific Title
Mixed methods evaluation of the school-based Jump-in intervention on dietary habits

Study objectives
It is hypothesized that the intervention is effective in stimulating healthy dietary behaviour (i.e. consumption of water or tea without sugar, milk, sweetened beverages, whole-wheat bread,

fruit, vegetables and snacks) and behavioural determinants (i.e. attitude, knowledge, social norm, modelling, physical environment, liking and habit formation) among children.

Ethics approval required
Old ethics approval format

Ethics approval(s)
The implementation of Jump-in in primary schools is part of the usual care of the Public Health Service of Amsterdam and data is collected in accordance with organizational legislation. Prior to data collection, parents receive an information letter about the study and an opt-out option to withdraw their child from participation to the effect evaluation and an opt-in option for the process evaluation.
The use of this data collected by the Public Health Service of Amsterdam was evaluated on 06/09/2016 and amendments were evaluated on 12/01/2017, 10/11/2017 and 18/10/2018 by the Medical Ethical Committee of the Amsterdam UMC (VUmc) (BS7, room H-443, Postbus 7057, 1007 MB Amsterdam, Netherlands; Tel: +31 (0)204445585; Email: metc@vumc.nl). They decided official approval was not required for this study as the Medical Research Involving Human Subject Acts (WMO) did not apply (ref: 2016.415, A2017.007, A2017.421, A2018.078)

Study design
Single-centre interventional quasi-experimental extended selection cohorts design

Primary study design
Interventional

Study type(s)
Prevention

Health condition(s) or problem(s) studied
Dietary behaviour and behavioural determinants

Interventions
The Public Health Service of Amsterdam selected primary schools to participate in Jump-in, and after enrolment, schools were contacted to participate in the current study. Hence, randomization was not possible. A mixed-methods approach is used; to test the effectiveness of the intervention, a quasi-experimental Extended Selection Cohorts design is used, in which intervention and control groups originate from the same schools. The control group is represented by baseline measurements of the same-age groups.

An implementation process of at least 1 school year (max. 3) at schools is facilitated by a team of health promotion professionals who help implement Jump-in, along with other stakeholders such as teachers and the school’s principal.

After a primary school enrols in the Jump-in programme, the health promotion professional organizes meetings with a school principal and a Jump-in coordinator to formulate a tailored plan for the implementation strategy. A school-wide healthy school nutrition policy is implemented at primary schools, which includes that lunchboxes exclusively comprise of fruit and vegetables, whole-wheat bread; drinking water, tea without sugar or milk; and additionally small portion sizes, healthy or non-food treats during special at-school occasions. Additionally, posters and other tools are provided, and workshops are organized about corresponding themes (i.e. water, fruits and vegetables, breakfast and lunch, and treats).

Moreover, Jump-in aims to stimulate physical activity and active school recess play, and is structurally embedded within the Amsterdam Healthy Weight Approach.

The Jump-in intervention is tailored to the needs of primary schools. Therefore the programme has a duration of 1 to 3 years. Children and parents are requested to fill in a questionnaire prior to the implementation of the programme (representing the control group), +- 1 and +-2 years after the start of the implementation (representing intervention groups).

Intervention Type
Behavioural

Primary outcome(s)
Children's at-school dietary behaviour (i.e. consumption of water or tea without sugar, milk, sweetened beverages, whole-wheat bread, fruit, vegetables and snacks) assessed by parent, child and teacher questionnaires, and digital images of food and drinks, at baseline, and 1 and 2 years later

Key secondary outcome(s))
1. Children's at-home dietary behaviour (i.e. consumption of water or tea without sugar, milk, sweetened beverages, whole-wheat bread, fruit, vegetables and snacks) assessed by parent and child questionnaires at baseline, and 1 and 2 years later
2. Behavioural determinants (i.e. attitude, knowledge, social norm, modelling, physical environment, liking and habit formation) assessed by parent and child questionnaires at baseline, and 1 and 2 years later
3. Process outcomes (process indicators, contextual measures, subjective experience measures) assessed by interviews, focus group discussions, document analysis at 1 and/or 2 years later

Completion date
24/09/2019

Eligibility

Key inclusion criteria
Children, parents, teachers, project coordinators and school principals who attend one of the schools that were enrolled in the Jump-in intervention in 2016-2017

Participant type(s)
Mixed

Healthy volunteers allowed
No

Age group
Mixed

Sex
All

Total final enrolment
3475

Key exclusion criteria
Schools are excluded when they already implemented one or more components of the nutrition policy

Date of first enrolment
01/09/2016

Date of final enrolment
01/07/2017

Locations

Countries of recruitment
Netherlands

Study participating centre
Public Health Service (GGD) of Amsterdam
Nieuwe Achtergracht 100
Amsterdam
Netherlands
1018 WT

Sponsor information

Organisation
Public Health Service of Amsterdam, Sarphati Amsterdam

Funder(s)

Funder type
Government

Funder Name
City of Amsterdam, Amsterdam, the Netherlands (Amsterdam Healthy Weight Approach, Sarphati Amsterdam, Public Health Service (GGD))

Results and Publications

Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study are/will be available upon request from F.E. Takens (ftakens@ggd.amsterdam.nl).

IPD sharing plan summary

Available on request

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Protocol article		11/02/2020	28/02/2023	Yes	No