

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

<b>Submission date</b> 21/01/2020	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered <input checked="" type="checkbox"/> Protocol
<b>Registration date</b> 27/01/2020	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
<b>Last Edited</b> 28/02/2023	<b>Condition category</b> Nutritional, Metabolic, Endocrine	<input type="checkbox"/> Individual participant data <input type="checkbox"/> 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?  
Miss F.E. Takens  
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## Contact information

**Type(s)**  
Scientific

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## Additional identifiers

**EudraCT/CTIS number**  
Nil known

**IRAS number**

**ClinicalTrials.gov number**  
Nil known

**Secondary identifying numbers**  
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

## **Secondary study design**

Non randomised study

## **Study setting(s)**

School

## **Study type(s)**

Prevention

## **Participant information sheet**

Not available in web format, please use contact details to request participant information sheet

## **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 enrolls 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 measure**

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

### **Secondary outcome measures**

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

### **Overall study start date**

01/07/2016

### **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

**Age group**

Mixed

**Sex**

Both

**Target number of participants**

Target number of primary schools is 10. When 10 primary schools with each 25 students on average per grade participate, the total sample is 2000 children.

**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

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**Sponsor information****Organisation**

Public Health Service of Amsterdam, Sarphati Amsterdam

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### **Sponsor type**

Government

### **Website**

www.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**

### **Publication and dissemination plan**

The researchers intend to publish four scientific articles on this evaluation study and will present their findings at conferences, and feed back the information to the policy and professional practices of the Amsterdam Healthy Weight Programme and the dept. of Epidemiology, Health Promotion and Healthcare Innovation (EGZ) due to their relationship to the Jump-in programme.

### **Intention to publish date**

01/10/2022

### **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?
<a href="#">Protocol article</a>		11/02/2020	28/02/2023	Yes	No