

# 'Be active, eat right' - Lifestyle, growth and health of children aged 4 to 7

<b>Submission date</b> 11/04/2007	<b>Recruitment status</b> No longer recruiting	<input checked="" type="checkbox"/> Prospectively registered <input checked="" type="checkbox"/> Protocol
<b>Registration date</b> 11/04/2007	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
<b>Last Edited</b> 30/09/2014	<b>Condition category</b> Nutritional, Metabolic, Endocrine	<input type="checkbox"/> Individual participant data

**Plain English summary of protocol**  
Not provided at time of registration

## Contact information

**Type(s)**  
Scientific

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## Additional identifiers

**EudraCT/CTIS number**

**IRAS number**

**ClinicalTrials.gov number**

**Secondary identifying numbers**  
NTR921

# Study information

## Scientific Title

'Be active, eat right' - Lifestyle, growth and health of children aged 4 to 7: Evaluation of an overweight detection protocol ('Signaleringsprotocol Overgewicht') and an overweight prevention protocol ('Overbruggingsplan Overgewicht') in Dutch Youth Health Care among children aged 4 to 7 and their parents in a cluster randomised trial

## Study objectives

Current hypothesis as of 24/07/2008:

1. The detection protocol applied at age 5 (second year of elementary school) predicts the presence of overweight at age 7 (fourth year of elementary school)
2. The prevention protocol applied to parents and their overweight children aged 5 (second year of elementary school) results in a better lifestyle at age 6 (third year of elementary school) and age 7 (fourth year of elementary school) and results in a relatively lower body mass index (BMI) and waist circumference at age 7 compared to overweight children in the control group who receive usual care

Previous hypothesis:

It is hypothesised that the results of the evaluation of the overweight prevention-protocol and the overweight detection-protocol will be that they are effective and efficient protocols for overall use in the Youth-Health-Care (YHC).

On 24/07/2008 the following changes were made to this trial record:

1. The public trial title was changed from "'Be active, eat well', a healthy lifestyle for children at the age of five and six years: evaluation of the Dutch preventive Youth Health Care (YHC) overweight prevention-protocol and overweight detection-protocol among children at the age of five and six years in a cluster randomised trial".
2. The scientific trial title was added.
3. The anticipated trial start date has been updated from 01/09/2007.

## Ethics approval required

Old ethics approval format

## Ethics approval(s)

Medical Ethics Research Committee of Erasmus MC, University Medical Centre Rotterdam, 17/09/2007, ref: MEC-2007-163

## Study design

Randomised active-controlled parallel-group multicentre trial

## Primary study design

Interventional

## Secondary study design

Randomised controlled trial

## Study setting(s)

Other

**Study type(s)**

Quality of life

**Participant information sheet****Health condition(s) or problem(s) studied**

Youth Health Care and prevention of obesity in children

**Interventions**

Current interventions as of 24/07/2008:

The YHC teams in both the intervention and control groups will apply the detection protocol and label children as "normal weight", "overweight" or "obese". The detection protocol entails measuring weight and height of the children, calculating their BMI and comparing it to international sex and age specific BMI cut-off points for overweight and obesity.

The YHC teams in the intervention group will then offer the parents of children with overweight the prevention protocol, which includes a structured three-YHC-visits-programme. The YHC professionals will assess whether the parents are motivated to participate in counselling to promote overweight preventing behaviours, and will make use of a motivational interview approach. The three additional structured lifestyle counselling visits are offered to parents in intervals of one, three and six months. During the visits, energy intake and expenditure diaries are used, which will be completed by the parents. The YHC professional and the parents together will draw up a family-oriented action plan aiming at promotion of physical activity and outdoor playing time, having breakfast daily, less sweet drinks and limitation of television and /or computer time.

The YHC teams in the control group will offer the parents of children with overweight usual care as offered by the YHC teams.

**Previous interventions:**

All YHC-teams will carry out the overweight detection-protocol and applying labels for 'normal weight', 'overweight, but no obesity' and 'overweight'. The YHC-teams in the intervention group will then offer the parents and children with 'overweight, but no obesity' the prevention-protocol, which includes a structured three-YHC-visits-program. The YHC-teams in the control group will offer the parents and children with 'overweight, but no obesity' the 'usual care', which includes the care the YHC-teams offer before implementing the prevention-protocol.

**Contact for scientific queries:**

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**Intervention Type**

Other

## **Phase**

Not Applicable

## **Primary outcome measure**

Current primary outcome measures as of 28/07/2008:

Evaluation of the prevention protocol:

1. Body Mass Index (BMI), measured at baseline (age 5) and 24 months (age 7)
2. Waist circumference, measured at baseline (age 5) and 24 months (age 7)

Evaluation of the detection protocol:

1. Proportion of children labelled as "normal weight", "overweight" and "obesity" according to the detection protocol, measured at baseline (age 5) and 24 months (age 7)

Timepoints of measurement:

Age 5 (second year of elementary school): preventive health check (September 2007 - June 2008)

Age 6 (third year of elementary school): first follow-up measurement (September 2008 - June 2009)

Age 7 (fourth year of elementary school): second follow-up measurement (September 2009 - June 2010)

Previous primary outcome measures:

Evaluation Prevention-protocol:

Change in body fat and relative change in Body Mass Index (BMI) two years after the 'PGO'\* among children at the age of five or six years, in children with 'overweight but no obesity' in the Intervention group relative to the Control group.

Time-point measurements:

PGO: September 2007 - June 2008

Repetition of measurements: September 2009 - June 2010

Evaluation Detection-protocol:

Predictive value of the labels 'normal weight', 'overweight but not obesity', and 'obesity' at the 'PGO' among children at the age of five or six years, according to the Detection-protocol for the presence of these labels at the age of about seven years, in the absence of weight-management interventions.

Time-point measurements:

PGO: September 2007 - June 2008

Repetition of detection: September 2009 - June 2010

\*The 'PGO' is a contact moment at the Municipal Health Service (GGD'en) where a specialised physician carries out a preventive health check on all children in the second year of elementary school.

## **Secondary outcome measures**

Current secondary outcome measures as of 28/07/2008:

Evaluation of the prevention protocol:

1. Levels of the four target overweight-reducing and overweight-inducing behaviours, i.e. being physically active, eating breakfast daily, drinking sweet beverages and watching TV or playing on

- a computer, measured at baseline (age 5), 12 months (age 6) and 24 months (age 7)
2. Health-related quality of life, measured at baseline (age 5), 12 months (age 6) and 24 months (age 7)
  3. Attitudes of parents regarding the four target behaviours mentioned above (see 1), measured at baseline (age 5), 12 months (age 6) and 24 months (age 7)
  4. Absence or presence of indicators of negative side effects, i.e. worry, stigmatisation, lowered self-esteem and development of relative underweight, measured at baseline (age 5) and 24 months (age 7)

Evaluation of the detection protocol:

1. Sensitivity and specificity of the labels "normal weight", "overweight" and "obesity" according to the detection protocol, measured at baseline (age 5) and 24 months (age 7)

Timepoints of measurement:

Age 5 (second year of elementary school): preventive health check (September 2007 - June 2008)

Age 6 (third year of elementary school): first follow-up measurement (September 2008 - June 2009)

Age 7 (fourth year of elementary school): second follow-up measurement (September 2009 - June 2010)

Previous secondary outcome measures:

1. Waist circumference

Time-point measurements:

PGO: September 2007 - June 2008

Repetition of measurements: September 2009 - June 2010

2. Levels of five target overweight reducing and inducing behaviours
3. Health-related quality of life
4. Attitudes of parents regarding the specific health behaviours
5. Absence/presence of indicators of negative side effects (worry, stigmatisation, lowered self-esteem, and development of relative underweight)

Time-point measurements:

PGO: September 2007 - June 2008

First follow-up measurement: September 2008 - June 2009

Second follow-up measurement: September 2009 - June 2010

**Overall study start date**

18/09/2007

**Completion date**

01/09/2010

## **Eligibility**

**Key inclusion criteria**

Current inclusion criteria as of 24/07/2008:

The study population consists of all children and their parents who will be invited for a preventive health check by the 44 participating YHC teams of the 9 participating Municipal Health Services in the Netherlands, during the second year of elementary school during school year 2007/2008.

Previous inclusion criteria:

All children in the second year of elementary school who are invited by the municipal health services to visit the YHC-team will be included in the study.

**Participant type(s)**

Patient

**Age group**

Child

**Sex**

Both

**Target number of participants**

7,200

**Key exclusion criteria**

Current exclusion criteria as of 30/07/2008:

For the prevention protocol and the questionnaires used in the study, parents without basic Dutch language skills will be excluded.

Previous exclusion criteria:

In the study questionnaires and counselling will be used. Therefore it is necessary that parents are able to understand and communicate in Dutch. Furthermore it is possible that in some cases of children and parents who visit the YHC-teams, weight and potential overweight are not high priority factors and other factors are more important to discuss and pay attention to.

**Date of first enrolment**

18/09/2007

**Date of final enrolment**

01/09/2010

**Locations**

**Countries of recruitment**

Netherlands

**Study participating centre**

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**Sponsor information**

**Organisation**

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**Sponsor type**

Hospital/treatment centre

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**ROR**

<https://ror.org/018906e22>

**Funder(s)****Funder type**

Research organisation

**Funder Name**

The Netherlands Organisation for Health Research and Development (ZonMw) (Netherlands)

**Results and Publications****Publication and dissemination plan**

Not provided at time of registration

**Intention to publish date****Individual participant data (IPD) sharing plan****IPD sharing plan summary**

Not provided at time of registration

**Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Protocol article</a>	protocol	08/06/2009		Yes	No

<a href="#">Results article</a>	results	31/05/2013	Yes	No
<a href="#">Results article</a>	results	21/01/2014	Yes	No