

# Thin Bizzy: a multimodal lifestyle intervention for children with attention deficit hyperactivity disorder and overweight

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| <b>Submission date</b><br>02/09/2015   | <b>Recruitment status</b><br>No longer recruiting             | <input type="checkbox"/> Prospectively registered    |
|  |   | <input type="checkbox"/> Protocol                    |
| <b>Registration date</b><br>05/10/2015 | <b>Overall study status</b><br>Completed                      | <input type="checkbox"/> Statistical analysis plan   |
|  |   | <input type="checkbox"/> Results                     |
| <b>Last Edited</b><br>05/10/2015       | <b>Condition category</b><br>Mental and Behavioural Disorders | <input type="checkbox"/> Individual participant data |
|  |   | <input type="checkbox"/> Record updated in last year |

## Plain English summary of protocol

### Background and study aims

Attention deficit hyperactivity disorder (ADHD) is a group of behavioural symptoms that include poor concentration, hyperactivity and impulsiveness. A multimodal lifestyle intervention (Thin Bizzy) may help overweight children with ADHD to lose weight. The main aim of this study is to examine the effectiveness of this treatment in addition to treatment as usual.

### Who can participate?

Overweight children with ADHD will be randomly selected among registered mental health care institutions, private psychology practices and paediatric practices across The Netherlands.

### What does the study involve?

Children are randomly allocated to either receive the lifestyle intervention immediately (from week 0 to week 12) or to receive the treatment later (week 13 to week 24), both in addition to treatment as usual (medication or psychological treatment). Children receiving the lifestyle intervention will play sports three times a week and receive lifestyle training once a week under supervision of a Thin Bizzy coach. Assessments are carried out at the start of the study, during the intervention, after the intervention and at 3 months follow-up.

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

This study provides overweight children with ADHD the opportunity to join this lifestyle intervention to reduce BMI and ADHD symptoms, and improve their quality of life. Risks of participation in this study are limited as children receive training under supervision. Possible side effects are mild side effects that can be expected from exercising in the gym.

### Where is the study run from?

This study has been set up by Yulius Academie (Netherlands).

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

January 2013 to December 2015.

Who is funding the study?  
Not provided at time of registration.

Who is the main contact?  
D. Smits, MSc  
d.smits@yulius.nl

## Contact information

**Type(s)**  
Scientific

**Contact name**  
Dr Athanasios Maras

**Contact details**  
Dennenhout 1  
Barendrecht  
Netherlands  
2994 GC

## Additional identifiers

**Protocol serial number**  
N/A

## Study information

**Scientific Title**  
Thin Bizzy: a multimodal lifestyle intervention for children with attention deficit hyperactivity disorder and overweight - a randomized controlled pilot study

**Study objectives**  
The effectiveness of a multimodal lifestyle intervention called 'Thin Bizzy' is assessed in this study. The main aim of the trial is to optimize daily functioning of children with attention deficit hyperactivity disorder (ADHD) and comorbid overweight by means of losing weight and enhancing their quality of life.

Does this multimodal lifestyle intervention reduce body mass index (BMI) and enhance quality of life in children with ADHD and comorbid overweight from 10 to 16 years of age? The expectation is that children will show a significant reduction in BMI after participating in this study compared to a control condition. Another expectation is that children will display less symptoms of ADHD and better self-efficiency and quality of life after participating in the intervention group.

**Ethics approval required**  
Old ethics approval format

**Ethics approval(s)**  
Medisch Ethische Toetsings Commissie TWOR, 03/07/2013, ref: MEC-2013\_11, general reference number: NL44114.101.13

**Study design**

12-week immediate versus delayed intervention randomised controlled trial

**Primary study design**

Interventional

**Study type(s)**

Treatment

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

Attention deficit hyperactivity disorder (ADHD) and overweight/obesity

**Interventions**

The intervention in this study is a multimodal lifestyle intervention called Thin Bizzy consisting of lifestyle coaching and sports coaching. This treatment is offered as an additional intervention to treatment as usual.

Children are randomized to one of the following two groups:

1. An immediate treatment group (in which the treatment is available from week 0 to week 12).
2. A delayed treatment group (in which the treatment is available from week 13 to week 24)

In the first 12 weeks, children from the immediate treatment group will be asked to participate, continuing their treatment as usual. The results from this group will be compared to the other group following treatment as usual. After 12 weeks, the intervention will be available for the delayed treatment group. Several sports and lifestyle sessions are planned during the intervention under supervision of a Thin Bizzy coach. Several measures take place before, during and after the intervention. Children will be encouraged to continue this lifestyle after the intervention. They play sports three times a week and receive lifestyle training once a week (one hour both).

**Intervention Type**

Behavioural

**Primary outcome(s)**

Body weight measured using Body Mass Index (BMI) at baseline, after 12 weeks (shortly after the intervention) and at 3 months follow-up (late after the intervention)

**Key secondary outcome(s)**

1. ADHD symptoms measured using the ADHD-vragenlijst (AVL)
2. Quality of life measured using the Impact of Weight on Quality of Life Questionnaire (IWQOL)
3. Self-efficiency measured using a self-constructed questionnaire

These outcome measures will be evaluated at baseline, during the intervention (week 5 and week 9), after 12 weeks (shortly after the intervention) and after 3 months follow-up by different questionnaires filled out by parents and the child. Socio-demographic information will be available through a parent-reported questionnaire at baseline.

**Completion date**

31/12/2015

# Eligibility

## Key inclusion criteria

1. All children included in the study will be from 10 to 16 years of age
2. All children must have an official Diagnostic and Statistical Manual of Mental Disorders (DSM)-IV ADHD diagnosis (all subtypes). The diagnosis must have been previously set by a child and adolescent psychiatrist, healthcare psychologist, clinical psychologist or paediatrician specialised in social paediatrics. Children with common diagnosed comorbid disorders (i.e., dyslexia, oppositional defiant disorder) can participate in the study
3. All children must have a comorbidity with overweight
4. All participants need to be stable on ADHD treatment, both pharmacological and psychological
4. Minimum total intelligence quotient (TIQ) score must greater than or equal to 80
5. Children can only be included after a written informed consent has been signed by both parents or legal guardians, indicating that they understand the purpose of and procedures required for the study and are willing to participate in the study. Twelve year olds must give their own written informed assent in addition to their parents/legal guardians

## Participant type(s)

Patient

## Healthy volunteers allowed

No

## Age group

Child

## Lower age limit

10 years

## Upper age limit

16 years

## Sex

All

## Key exclusion criteria

1. Children with a severe physical (i.e., developmental coordination disorder), neurological (i.e., epilepsy), or cognitive (i.e., mental handicap) disability will be excluded
2. Furthermore, children who are addicted to drugs, alcohol and/or gaming, have conduct disorder (CD) or have severe acute psychiatric disorders, psychotic disorder, major depressive disorder and mania will be excluded
3. Parents/legal guardians without a reasonable understanding of the Dutch language will be excluded

## Date of first enrolment

01/09/2013

## Date of final enrolment

01/06/2014

# Locations

## Countries of recruitment

Netherlands

## Study participating centre

Yulius Academie

Dennenhout 1

Barendrecht

Netherlands

2994 GC

# Sponsor information

## Organisation

Maastad Hospital Rotterdam (Maasstadziekenhuis Rotterdam) (Netherlands)

## ROR

<https://ror.org/01n0rnc91>

# Funder(s)

## Funder type

Other

## Funder Name

ADHD netwerk (Netherlands)

## Funder Name

De Gezonde Regio (Netherlands)

# Results and Publications

## Individual participant data (IPD) sharing plan

## IPD sharing plan summary

Not expected to be made available

**Study outputs**

| Output type                                   | Details                       | Date created | Date added | Peer reviewed? | Patient-facing? |
|---|-------------------------------|--------------|------------|----------------|-----------------|
| <a href="#">Participant information sheet</a> | Participant information sheet | 11/11/2025   | 11/11/2025 | No             | Yes             |