Cost-effectiveness of package 3 versus package 2 of the BeweegKuur in the prevention and treatment of overweight

Submission date	Recruitment status	Prospectively registered	
23/12/2010	No longer recruiting	☐ Protocol	
Registration date 10/02/2011	Overall study status Completed	Statistical analysis plan	
		[X] Results	
Last Edited	Condition category	☐ Individual participant data	
31/01/2018	Nutritional. Metabolic. Endocrine		

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s)

Scientific

Contact name

Dr Hans H.C.M. Savelberg

Contact details

Maastricht University Dept of Human Movement Science PO Box 616 Maastricht Netherlands 6200 MD

Additional identifiers

Protocol serial number 50-51100-98-001

Study information

Scientific Title

Cost-effectiveness of package 3 (a supervised physical training and nutrition program) versus package 2 of the BeweegKuur a combined lifestyle intervention in the prevention and treatment of overweight

Study objectives

The more structured and more intense supervised intervention offered in package 3 is more effective and cost-effective in assisting people with overweight and obesity to adopt a healthier lifestyle than package 2 of the BeweegKuur.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Medical Ethics Committee of Maastricht University Medical Centre, 09/07/2010, ref: 31990.068.10

Study design

Single-blind multicentre cluster randomised controlled trial

Primary study design

Interventional

Study type(s)

Prevention

Health condition(s) or problem(s) studied

Overweight and obesity

Interventions

Experimental program is package 3 of the BeweegKuur consisting of a physical activity and dietary program. Control program is package 2 of the BeweegKuur consisting of a physical activity and dietary program.

The physical activity program takes place in the standard, local activity facilities or (temporarily) with support of a physical therapist. The characteristics of the physical activity program depend on the BeweegKuur package followed. Package 2 and 3 differ in the amount of supervision /support provided by the physical therapist. In package 2 participants receive three sessions in which barriers for being physically active are identified and participants are supported to cope with these barriers in a plan to become physical active autonomously. The physical therapist will stimulate self-initiated activities and/or visiting local movement facilities. The physical activity program of package 3 starts with intensive support from the physical therapist. Participants will exercise under supervision of the physical therapist for 12 weeks. Goal is outflow to local facilities or independent activities following these 12 weeks, if this goal is not reached, the supervision period can be extended once with 4 weeks.

The dietary program consists of (a combination of) individual tailored advice of a nutritionist and group meetings at the nutritionist with other participants. The dietary advice is based on several Dutch guidelines (dietary guidelines diabetes [NDF, 2006], guidelines good diet [Health Council, 2006], guidlines obesity diagnosis and treatment in adults and children [CBO, 2008]). The content of the dietary advice is independent from the physical activity program.

The duration of the BeweegKuur intervention is one year for both packages. Independent of the package, the participants have five meetings with their Life Style Advisor (LSA).

Intervention Type

Behavioural

Primary outcome(s)

Moderate to vigorous physical activity (MVPA) in minutes per week. This is measured by means of:

- 1. Activity monitor at baseline, and at one year and two years after the start of the intervention
- 2. Self administered questionnaire International Physical Activity Questionnaire (IPAQ) at baseline, six months, twelve months, 18 months and 24 months

Key secondary outcome(s))

- 1. Dietary habits (short version of the ENVET) at baseline, six months, twelve months, 18 months and 24 months
- 2. Quality of life (EQ6-D), medication, side effects, direct and indirect costs, at baseline and every three months from baseline until 2 years of follow-up
- 3. Health risk, e.g. waist circumference (cm), body composition (body mass in kg, fat and fat free mass in %), diastolic blood pressure (DPB) (mmHg), systolic blood pressure (SBP) (mmHg), resting heart rate, blood values, i.e. fasting glucose (mmol/L), HbA1c (% or mmol/L), total cholesterol (mmol/L), HDL (mmol/L), triglycerides (mmol/L) and creatinin (micromol/L) and physical fitness (Astrand test, Valk neuropathy test, Timed Up and Go Test) at baseline, at one year and two years after start of the program

Completion date

31/07/2013

Eligibility

Key inclusion criteria

- 1. Adults with a weight-related health risk
- 2. Have an inactive lifestyle (Dutch norm Healthy Exercise: 30 minutes moderate physical activity for at least 5 days per week)
- 3. Motivated for behavioral change
- 4. Willing to participate after having read the informed consent information
- 5. Body mass index (BMI) between 25 30 kg/m2 combined with a large waist circumference (men greater than 102 cm, women greater than 88 cm) with comorbidity (cardiovascular disease and/or diabetes mellitus II, arthrosis and sleep apnoea)
- 6. BMI between 30 35 kg/m2 combined with a normal or large waist circumference with comorbidity
- 7. BMI between 35 40 kg/m2 combined with a normal or large waist circumference with risk factors for cardiovascular disease or diabetes mellitus II and without other comorbidity

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Sex

All

Key exclusion criteria

- 1. BMI less than 25 kg/m2
- 2. BMI of 25 30 kg/m2 combined with normal waist circumference
- 3. BMI of 35 40 kg/m2 combined with comorbidity (cardiovascular disease and/or diabetes mellitus II, arthrosis and sleep apnoea)
- 4. BMI of greater than 40 kg/m2
- 5. Impairments that prevent from participating in the BeweegKuur (according to the GP)

Date of first enrolment

01/08/2010

Date of final enrolment

31/07/2013

Locations

Countries of recruitment

Netherlands

Study participating centre Maastricht University Maastricht

Netherlands 6200 MD

Sponsor information

Organisation

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

ROR

https://ror.org/01yaj9a77

Funder(s)

Funder type

Research organisation

Funder Name

ZonMw (ref: 50-51100-98-001)

Alternative Name(s)

Netherlands Organisation for Health Research and Development

Funding Body Type

Private sector organisation

Funding Body Subtype

Other non-profit organizations

Location

Netherlands

Funder Name

Nutrition and Toxicology Research Institute Maastricht (NUTRIM) (Netherlands)

Results and Publications

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?
Results article	results	17/03/2015	Yes	No
Results article	results	01/12/2016	Yes	No
Participant information sheet	Participant information sheet	11/11/2025 11/11/2025	No	Yes