

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

10 Jun 2026

### The effects of continuous and intermittent aerobic exercise on weight reduction and body fat percentage in women with body mass index>25

#### Protocol summary

##### Summary

This Clinical Trial assess the effects of continuous and intermittent walking with moderate intensity on overweight and obese women with body mass index of >25. Inclusion Criteria: female, age: 20-45-year, sedentary life style, without significant weight reduction in recent 6 month, without history of smoking in recent 6 month. Exclusion criteria: pregnancy, breast feeding, medical problem, drug using. We divide 45 participants in 3 equal groups: 1-control group 2-intermittent aerobic exercise group with three 10-15-minute sessions per day for 5 days per week 3-continuous aerobic exercise group with one 40-minute session per day for 5 days per week. Walking Intensity: 64-76% of Maximal Heart Rate calculated by "220 - age". Daily energy intake was reduced by 500 kcal per day in all groups. This research assesses changes in weight, body fat percentage, blood lipid, blood glucose and blood pressure at the end of trial.

#### General information

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT138807182562N1**

Registration date: **2009-11-10, 1388/08/19**

Registration timing: **registered\_while\_recruiting**

Last update:

Update count: **0**

##### Registration date

2009-11-10, 1388/08/19

##### Registrant information

##### Name

Zahra Alizadeh

##### Name of organization / entity

Sport Medicine Research Center, Tehran University

##### Country

Iran (Islamic Republic of)

##### Phone

00982188630227-00982188630228

##### Email address

z\_alizadeh@razi.tums.ac.ir

##### Recruitment status

**Recruitment complete**

##### Funding source

Endocrine and Metabolism Research Center, Tehran University of medical sciences

##### Expected recruitment start date

2009-08-23, 1388/06/01

##### Expected recruitment end date

2009-11-21, 1388/08/30

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

##### Scientific title

The effects of continuous and intermittent aerobic exercise on weight reduction and body fat percentage in women with body mass index>25

##### Public title

The effects of aerobic exercise on weight reduction in overweight Women

##### Purpose

Treatment

##### Inclusion/Exclusion criteria

Inclusion Criteria: female, age: 20-45-year, sedentary life style, without significant weight reduction in recent 6 month, without history of smoking in recent 6 month  
Exclusion criteria: pregnancy, breast feeding, medical problem, drug using

##### Age

From **20 years** old to **45 years** old

**Gender**

Female

**Phase**

N/A

**Groups that have been masked***No information***Sample size**

Target sample size: 27

**Randomization (investigator's opinion)**

Randomized

**Randomization description****Blinding (investigator's opinion)**

Not blinded

**Blinding description****Placebo**

Not used

**Assignment**

Parallel

**Other design features****Secondary Ids**

empty

**Ethics committees****1****Ethics committee****Name of ethics committee**Endocrinology And Metabolism Research Center -  
Tehran University of medical sciences**Street address**

Shariati Hospital, North Kargar street

**City**

Tehran

**Postal code****Approval date**

2009-08-15, 1388/05/24

**Ethics committee reference number**

E-0054

**Health conditions studied****1****Description of health condition studied**

obesity

**ICD-10 code**

E66

**ICD-10 code description**

Obesity

**Primary outcomes****1****Description**

percentage body fat

**Timepoint**

12 Week

**Method of measurement**

Skin Fold

**2****Description**

weight reduction

**Timepoint**

2 week

**Method of measurement**

balance scale

**Secondary outcomes****1****Description**

change in blood lipid

**Timepoint**

13 week

**Method of measurement**

fasting blood sample

**2****Description**

change in blood glucose

**Timepoint**

13 week

**Method of measurement**

fasting blood sample

**3****Description**

change in blood pressure

**Timepoint**

12 week

**Method of measurement**

sphygmomanometer

**Intervention groups****1****Description**Continuous aerobic exercise group: one 40-minute  
session per day for 5 days per week**Category**

Lifestyle

**2****Description**

Daily energy intake reduction by 500 kcal in all groups

**Category**

Lifestyle

**3****Description**Intermittent aerobic exercise group: three 10-15-minute  
sessions per day for 5 days per week

**Category**  
Lifestyle

## Recruitment centers

1

### Recruitment center

**Name of recruitment center**  
Sport Medicine Clinic, Sport Medicine Research Center, Tehran University of medical sciences  
**Full name of responsible person**  
**Street address**  
**City**

## Sponsors / Funding sources

1

### Sponsor

**Name of organization / entity**  
Endocrinology And Metabolism Research Center, Tehran University of medical sciences  
**Full name of responsible person**  
Patrishia Khashayar  
**Street address**  
Shariati Hospital, North Kargar street  
**City**  
Tehran  
**Grant name**  
**Grant code / Reference number**  
**Is the source of funding the same sponsor organization/entity?**  
Yes  
**Title of funding source**  
Endocrinology And Metabolism Research Center, Tehran University of medical sciences  
**Proportion provided by this source**  
100  
**Public or private sector**  
*empty*  
**Domestic or foreign origin**  
*empty*  
**Category of foreign source of funding**  
*empty*  
**Country of origin**  
**Type of organization providing the funding**  
*empty*

## Person responsible for general inquiries

### Contact

**Name of organization / entity**  
Sport Medicine Research Center  
**Full name of responsible person**  
Zahra Alizadeh  
**Position**  
Doctor

**Other areas of specialty/work**  
**Street address**  
Sport Medicine Clinic, Opposite The Shariati Hospital, Jalal Aal Ahmad Highway  
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Tehran  
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+98 21 8863 0227  
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z\_alizadeh@razi.tums.ac.ir  
**Web page address**

## Person responsible for scientific inquiries

### Contact

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Sport Medicine Research Center  
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Zahra Alizadeh, Ramin Kordi  
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PHD  
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**Web page address**

## Person responsible for updating data

### Contact

## Sharing plan

**Deidentified Individual Participant Data Set (IPD)**  
*empty*  
**Study Protocol**  
*empty*  
**Statistical Analysis Plan**  
*empty*  
**Informed Consent Form**  
*empty*  
**Clinical Study Report**  
*empty*  
**Analytic Code**  
*empty*  
**Data Dictionary**  
*empty*