Clinical Trial Protocol
Iranian Registry of Clinical Trials

16 Sep 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

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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
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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