

Clinical Trial Protocol

Iranian Registry of Clinical Trials

18 Jun 2026

Effect of aerobic training on pulmonary function and systemic inflammation in obese/overweight men

Protocol summary

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Summary

The objective of this study is to assess the effect of aerobic training on pulmonary function and systemic inflammation in obese/overweight men. Twenty obese/overweight men will participate in the study. The subjects will be randomly assigned to aerobic intervention or control group. The intervention group will participate in a 12-week aerobic training (three times a week, 60 min/session). The intensity of the exercise program is condition level 12-16 according to the rate of perceived exertion (RPE) [moderate intensity]. Pulmonary function [spirometry] and C-reactive protein (ELISA method) will be measured prior to and after the intervention.

Recruitment status

Recruitment complete

Funding source

Arak University

Expected recruitment start date

2010-09-11, 1389/06/20

Expected recruitment end date

2010-10-12, 1389/07/20

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT138904263387N2**

Registration date: **2010-07-17, 1389/04/26**

Registration timing: **prospective**

Last update:

Update count: **0**

Registration date

2010-07-17, 1389/04/26

Registrant information

Name

Abbas Saremi

Name of organization / entity

Arak University of Medical Sciences

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Iran (Islamic Republic of)

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Email address

Scientific title

Effect of aerobic training on pulmonary function and systemic inflammation in obese/overweight men

Public title

Effect of aerobic training on pulmonary function and systemic inflammation in obese/overweight men

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: having a stable weight for at least 3 months prior to the study, age more than 20 years, body mass index more than 25, signing informed consent
Exclusion criteria: Smoking, presence of cardio-pulmonary disease or any other major illness, taking medications that could have affect laboratory test re

Age

From **20 years** old to **60 years** old

Gender

Male

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: 20

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**

Arak university

Street address

Arak university, Arak, Iran.

City

Arak

Postal code

009886138156

Approval date

2011-05-11, 1390/02/21

Ethics committee reference number

19213/89/3

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

obesity

ICD-10 code

E66.9

ICD-10 code description

Obesity, unspecified

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

C-reactive protein

Timepoint

before and after 3 months aerobic training

Method of measurement

By ELISA in blood

2**Description**

Pulmonary function

Timepoint

Before and after 3 months aerobic training

Method of measurement

By spirometer

Secondary outcomes

empty

Intervention groups**1****Description**

Aerobic training supervised by an exercise physiologist, 50-60 min/d, 3d/wk, for 12 weeks. The training program started at 40-45% of observed maximal heart rate (HRmax) and gradually increased to 80-85% of maximal heart rate by week 12. Aerobic training included treadmill walking/running.

Category

Lifestyle

2**Description**

The control group will maintain their lifestyle as usual.

Category

Lifestyle

Recruitment centers**1****Recruitment center****Name of recruitment center**

Arak University

Full name of responsible person

Abbas Saremi

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Iran, Arak, Arak University

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Sponsors / Funding sources**1****Sponsor****Name of organization / entity**

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Arak university, Arak, Iran.

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Grant name**Grant code / Reference number**

Is the source of funding the same sponsor organization/entity?

Yes
Title of funding source
Arak University
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

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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