

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

11 Sep 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

###### Country

Iran (Islamic Republic of)

###### Phone

+98 86 1277 7400

###### 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

##### Street address

Iran, Arak, Arak University

##### City

Arak

## Sponsors / Funding sources

### 1

#### Sponsor

##### Name of organization / entity

Arak University

##### Full name of responsible person

Abbas Saremi

##### Street address

Arak university, Arak, Iran.

##### City

Arak

#### 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

**Name of organization / entity**  
Arak University  
**Full name of responsible person**  
Abbas Saremi  
**Position**  
Assistant Professor  
**Other areas of specialty/work**  
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## Person responsible for scientific inquiries

### Contact

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## Person responsible for updating data

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#### Position

Assistant Professor

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#### Web page address

## 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*