

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

17 Jul 2026

### Effect of twelve weeks resistance training on serum levels of interleukin-18 and high-sensitivity C-reactive protein in obese men

#### Protocol summary

##### Summary

Purpose of present study was to survey the effect of resistance training on serum levels of interleukin-18 and high-sensitivity C-reactive protein in obese men. In a randomized design, eighteen obese men (body mass index more than 30 kilogram/meter squared, 18-38 year), without experience of regular physical activity in one year before beginning of the study, history of cardiovascular diseases, diabetes, and thyroid diseases, drug consumption, being under any diet or medication, addiction to any narcotic substances, smoking, alcoholism, and caffeine were randomly placed at one of two groups: training and control. After 12-hour fasting, height, weight, body mass index, body fat percent, serum levels of interleukin-18 and high-sensitivity C-reactive protein were assessed before and after training. Resistance training protocol consisted of twelve weeks weight training (3 sessions per week, 10 stations, 3 sets 8-12 repetitions in each station, intensity 60-80% of one repetition maximum, rest between sets 1 min and between stations 2 min, duration of main training 60 min per each session).

#### General information

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT2013070210158N1**

Registration date: **2013-08-17, 1392/05/26**

Registration timing: **retrospective**

Last update:

Update count: **0**

##### Registration date

2013-08-17, 1392/05/26

##### Registrant information

Name

Fatah Moradi

##### Name of organization / entity

Islamic Azad University of Saghez

##### Country

Iran (Islamic Republic of)

##### Phone

+98 87 3630 5049

##### Email address

moradi\_fatah@iausaghez.ac.ir

##### Recruitment status

**Recruitment complete**

##### Funding source

Islamic Azad University-Saghez Branch

##### Expected recruitment start date

2009-12-22, 1388/10/01

##### Expected recruitment end date

2010-04-21, 1389/02/01

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

##### Scientific title

Effect of twelve weeks resistance training on serum levels of interleukin-18 and high-sensitivity C-reactive protein in obese men

##### Public title

Effect of training on obesity

##### Purpose

Treatment

##### Inclusion/Exclusion criteria

Inclusion criteria: Male; Obese (body mass index more than 30 kilogram/meter squared); 18-30 year; without experience of regular physical activity in one year before beginning of the study; Exclusion criteria: history of cardiovascular diseases; diabetes; thyroid diseases; drug consumption; being under any diet or medication;

addiction to any narcotic substances; smoking; alcoholism; caffeine.

#### Age

From **18 years** old to **38 years** old

#### Gender

Male

#### Phase

N/A

#### Groups that have been masked

*No information*

#### Sample size

Target sample size: **22**

#### 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

Islamic Azad University-Saghez Branch(Ethical Committee)

##### Street address

Islamic Azad University of Saghez, Daneshgah Town, Saghez

##### City

Saghez

##### Postal code

#### Approval date

2013-07-24, 1392/05/02

#### Ethics committee reference number

11-16-1-4747

## Health conditions studied

### 1

#### Description of health condition studied

Obesity

#### ICD-10 code

E66

#### ICD-10 code description

Obesity

## Primary outcomes

### 1

#### Description

Weight

#### Timepoint

prior to and after period of resistance training

#### Method of measurement

digital weighing machine

### 2

#### Description

Body fat Percent

#### Timepoint

Prior to and afetr period of resistance training

#### Method of measurement

Measuring skinfolds by caliper

## Secondary outcomes

### 1

#### Description

Serum concentration of Interleukin-18

#### Timepoint

Prior to and after period of resistance training

#### Method of measurement

kit Human IL-18 Platinum ELISA

### 2

#### Description

Serum concentration of high-sensitivity C-reactive protein (hsCRP)

#### Timepoint

Prior to and after period of resistance training

#### Method of measurement

kit High Sensivity CRP

## Intervention groups

### 1

#### Description

Resistance training protocol consisted of twelve weeks weight training in training group

#### Category

Treatment - Other

### 2

#### Description

Continuing daily living without doing regular physical activity in control group

#### Category

Treatment - Other

## Recruitment centers

### 1

#### Recruitment center

**Name of recruitment center**

Islamic Azad University-Saghez Branch (one of the sampling centers)

**Full name of responsible person**

Department of physical education and sport sciences)

**Street address****City**

Saghez

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

Islamic Azad University-Saghez Branch

**Full name of responsible person**

Dr. M. Salar Tarkhami

**Street address**

Islamic Azad University of Saghez, Daneshgah Town, Saghez

**City**

Saghez

**Grant name****Grant code / Reference number****Is the source of funding the same sponsor organization/entity?**

Yes

**Title of funding source**

Islamic Azad University-Saghez Branch

**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**

Islamic Azad University-Saghez Branch

**Full name of responsible person**

Soran Heydari

**Position**

Manager of physical education and sport sciences department

**Other areas of specialty/work****Street address**

Islamic Azad University of Saghez, Daneshgah Town, Saghez

**City**

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**Postal code****Phone**

+98 87 4324 4750

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soranheidari@gmail.com

**Web page address****Person responsible for scientific inquiries****Contact****Name of organization / entity**

Islamic Azad University-Saghez Branch

**Full name of responsible person**

Dr. Fatah Moradi

**Position**

Ph. D of Exercise Physiology

**Other areas of specialty/work****Street address**

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moradi\_fatah@yahoo.com

**Web page address****Person responsible for updating data****Contact****Name of organization / entity**

Islamic Azad University-Saghez Branch

**Full name of responsible person**

Dr. Fatah Moradi

**Position****Other areas of specialty/work****Street address****City****Postal code****Phone****Fax****Email**

moradi\_fatah@iausaghez.ac.ir;

moradi\_fatah@yahoo.com

**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*

