

Clinical Trial Protocol

Iranian Registry of Clinical Trials

23 Sep 2026

The effect of eight weeks of high-intensity interval training (HIIT) on plasma levels of amylin and neuropeptide Y in inactive obese men

Protocol summary

Study aim

The aim of the present study was to investigate the effect of eight weeks of high-intensity interval training (HIIT) on plasma levels of amylin and neuropeptide Y in inactive obese men.

Design

Quasi-experimental with pre-test and post-test design with control group

Settings and conduct

The present study is conducted in the field and laboratory at Islamic Azad University, Ahvaz Branch.

Participants/Inclusion and exclusion criteria

Age range 50 to 60 years Body mass index above 30 kg/m² Male gender No disease No specific medication No history of regular exercise in the past six months

Intervention groups

Intervention group 1: Perform high-intensity interval training for eight weeks

Main outcome variables

plasma levels of amylin and neuropeptide Y

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 61 2242 6144

Email address

hosseintofighikhah@gmail.com

Recruitment status

recruiting

Funding source

Expected recruitment start date

2026-09-10, 1405/06/19

Expected recruitment end date

2026-11-10, 1405/08/19

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of eight weeks of high-intensity interval training (HIIT) on plasma levels of amylin and neuropeptide Y in inactive obese men

Public title

Effect of exercise on obesity

Purpose

Health service research

Inclusion/Exclusion criteria

Inclusion criteria:

Age range 50 to 60 years Body mass index above 30 kg/m² Male gender Free of disease No specific medication No history of regular exercise in the past six months

Exclusion criteria:

Age

From 50 years old to 60 years old

Gender

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: IRCT20260825070796N1

Registration date: 2026-09-05, 1405/06/14

Registration timing: prospective

Last update: 2026-09-05, 1405/06/14

Update count: 0

Registration date

2026-09-05, 1405/06/14

Registrant information

Name

hossein tofighi khah

Male

Phase
N/A

Groups that have been masked

- Participant
- Outcome assessor

Sample size
Target sample size: **30**

Randomization (investigator's opinion)
Randomized

Randomization description
A total of 30 subjects who met the study entry criteria were selected through convenience sampling, then divided into two intervention groups by simple random sampling. Each subject was assigned codes, then individuals were randomly assigned to two groups.

Blinding (investigator's opinion)
Double blinded

Blinding description
Due to the nature of the intervention, blinding of the researcher and subjects was not possible. However, the blood sample analyzer was blinded to the group assignment and the samples were analyzed in a coded manner.

Placebo
Not used

Assignment
Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics Committee of Islamic Azad University, Ahvaz Branch

Street address

Farhangshahr, Kargar Blvd., Islamic Azad University, Ahvaz Branch

City

Ahvaz

Province

Khouzestan

Postal code

6134937333

Approval date

2026-05-22, 1405/03/01

Ethics committee reference number

IR.IAU.AHVAZ.REC.1405.174

Health conditions studied

1

Description of health condition studied

obesity

ICD-10 code

E66

ICD-10 code description

Overweight and obesity

Primary outcomes

1

Description

plasma levels of amylin and neuropeptide Y

Timepoint

pre and post test

Method of measurement

Laboratory with ELISA kit

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group 1: Perform high-intensity interval training for eight weeks

Category

Other

2

Description

Control group: Do not participate in any intervention.

Category

Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Islamic Azad University, Ahvaz Branch

Full name of responsible person

mehdi boustani

Street address

Farhangshahr, Kargar Blvd., Islamic Azad University, Ahvaz Branch

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Islamic Azad University

Full name of responsible person

Aslan Igdernezhad

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aslan.igder1400@iau.ir

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

Yes

Title of funding source

Islamic Azad University

Proportion provided by this source

100

Public or private sector

Public

Domestic or foreign origin

Domestic

Category of foreign source of funding

empty

Country of origin**Type of organization providing the funding**

Academic

Person responsible for general inquiries

Contact**Name of organization / entity**

Islamic Azad University

Full name of responsible person

hossein tofghikhah

Position

master student

Latest degree

Master

Other areas of specialty/work

Physiology

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Person responsible for scientific inquiries

Contact**Name of organization / entity**

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Full name of responsible person

mehdi boustani

Position

Associate professor

Latest degree

Ph.D.

Other areas of specialty/work

Physiology

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Person responsible for updating data

Contact**Name of organization / entity**

Islamic Azad University

Full name of responsible person

mehdi boustani

Position

Associate professor

Latest degree

Ph.D.

Other areas of specialty/work

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Sharing plan

Deidentified Individual Participant Data Set (IPD)

Yes - There is a plan to make this available

Study Protocol

Yes - There is a plan to make this available

Statistical Analysis Plan

Yes - There is a plan to make this available

Informed Consent Form

Yes - There is a plan to make this available

Clinical Study Report

Yes - There is a plan to make this available

Analytic Code

Yes - There is a plan to make this available

Data Dictionary

Yes - There is a plan to make this available

Title and more details about the data/document

Information and results are presented in the text of the thesis and article.

When the data will become available and for how long

6 months after the student's defense

To whom data/document is available

all of persons

Under which criteria data/document could be used

Use of the results is permitted with reference to the source.

From where data/document is obtainable

Journal or journals where the research results are published.

What processes are involved for a request to access data/document

The usual process of publishing articles in scientific journals

Comments