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

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
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

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
City
Ahvaz
Province
Khouzestan
Postal code
6134937333
Phone
+98 61 3334 8324
Email

mehdi.boustani@iau.ac.ir

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Islamic Azad University
Full name of responsible person
Aslan Igdernezhad
Street address
Farhangshahr, Kargar Blvd., Islamic Azad University, Ahvaz Branch
City
Ahvaz
Province
Khouzestan
Postal code
6134937333
Phone
+98 61 3334 8324
Email
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 tofhghikhah
Position
master student
Latest degree
Master
Other areas of specialty/work
Physiology
Street address
Farhangshahr, Kargar Blvd., Islamic Azad University, Ahvaz Branch
City
Ahvaz
Province
Khouzestan
Postal code
6134937333
Phone
+98 61 3334 8324
Email
hossein.tofhghikhah@iau.ir

Person responsible for scientific inquiries

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
Physiology
Street address
Farhangshahr, Kargar Blvd., Islamic Azad University, Ahvaz Branch
City
ahvaz
Province
Khouzestan
Postal code
6134937333
Phone
+98 61 3334 8324
Email
mehdi.boustani@iau.ac.ir

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
Physiology
Street address
Farhangshahr, Kargar Blvd., Islamic Azad University, Ahvaz Branch
City
Ahvaz
Province
Khouzestan
Postal code
6134937333
Phone
+98 61 3334 8324
Email
mehdi.boustani@iau.ac.ir

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