Clinical Trial Protocol
Iranian Registry of Clinical Trials

19 Sep 2026

The effect of 2 ,4 and 6 month periods of resistance training and detraining on appetite-regulating hormones in obese men

Protocol summary

Study aim

Reviews of weight loss and appetite changes resulting from regular sports exercises

Design

The present study is a randomized clinical trial and the subjects are assigned in the pretest-posttest design with the control group.Subjects randomly are divided into two groups including resistance training group (n=15, perform 7 resistance exercises, 4 sets, 8 repetitions with 80% of one repetition maximum) and the control group (n=15, without any regular exercise training). experimental (training) group will perform 6- months exercise training protocol, 3 sessions per week, each session 1 hour.

Settings and conduct

This study is the semi- experimental and will be conducted in the city of javanrud. The experimental group will perform training in Imam Khomeini cloub and blood sampling from each of the two groups will perform in the Hazrat Rasoul hospital laboratories in javanrud city .

Participants/Inclusion and exclusion criteria

Entry requirements include:18>Age>50- Obesity (a body mass index above 30 kg/m2)-Having an informed consent for participation in the study Conditions of non-entry:Gender(Women can not be selected as an example) - having illness and taking drugs and supplements - drug and alcohol addiction - having regular exercise in past 6 months

Intervention groups

In this study, resistance training group (n=15, perform 7 resistance exercises, 4 sets, 8 repetitions with 80% of one repetition maximum and the control group (n=15, without any regular exercise training). training group will perform 6- month exercise training protocol, 3 sessions per week, each session 1 hour.

Main outcome variables

Dependent variable :Weight, BMI ,appetite related hormones change includs: Acylated Ghrelin , PYY, Orexin and Insulin

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20180708040392N1**
Registration date: **2018-08-07, 1397/05/16**
Registration timing: **prospective**

Last update: **2018-08-07, 1397/05/16**
Update count: **0**

Registration date

2018-08-07, 1397/05/16

Registrant information

Name

Naser Rostamzadeh

Name of organization / entity

The University of Kurdestan

Country

Iran (Islamic Republic of)

Phone

+98 87 3371 1530

Email address

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Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2018-08-23, 1397/06/01

Expected recruitment end date

2019-03-06, 1397/12/15

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date
empty

Scientific title
The effect of 2 ,4 and 6 month periods of resistance training and detraining on appetite-regulating hormones in obese men

Public title
The effect of resistance training and detraining on appetite-regulating hormones

Purpose
Basic scienece

Inclusion/Exclusion criteria

Inclusion criteria:
18<Age<50 BMI>30 kg/m2 Having an informed consent for participation in the study

Exclusion criteria:
Gender (Women can not be selected as an example) People who have a certain disease and take medication Having a regular sports activity during past 6 months Having drug addiction and smoking

Age
From **18 years** old to **50 years** old

Gender
Male

Phase
N/A

Groups that have been masked
No information

Sample size
Target sample size: **30**

Randomization (investigator's opinion)
Randomized

Randomization description
A simple method to draw an accident:The researcher assigns a number to each of the samples, then they are selected using the random number table or the computer model and randomly assigned to one of the groups

Blinding (investigator's opinion)
Not blinded

Blinding description

Placebo
Not used

Assignment
Other

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee
Ethics committee of Kermanshah University of Medical Sciences

Street address
Kermanshah University of Medical Sciences, Shahid Beheshti Street, Central Room of Kermanshah University of Medical Sciences

City
Kermanshah

Province
Kermanshah

Postal code
6791653379

Approval date
2018-07-03, 1397/04/12

Ethics committee reference number
IR.KUMS.REC.1397.204

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
obesity

Timepoint
Before starting the protocol and again after one session training , 2 months training, 4 months training, 6 months training and 2 week subsequent detraining

Method of measurement
measure of Body Mass Index (BMI)

2

Description
Accylated Ghrelin

Timepoint
Before starting the protocol and again after one session training , 2 months training, 4 months training, 6 months training and 2 week subsequent detraining

Method of measurement
Serum ELISA Kit

3

Description
PYY

Timepoint
Before starting the protocol and again after one session training , 2 months training, 4 months training, 6 months training and 2 week subsequent detraining

Method of measurement
Serum ELISA Kit

4

Description

Orexin

Timepoint

Before starting the protocol and again after one session training , 2 months training, 4 months training, 6 months training and 2 week subsequent detraining

Method of measurement

Serum ELISA Kit

5

Description

Insulin

Timepoint

Before starting the protocol and again after one session training , 2 months training, 4 months training, 6 months training and 2 week subsequent detraining

Method of measurement

Serum ELISA Kit

Secondary outcomes

1

Description

The amount of calorie intake

Timepoint

In six steps include: a pre - test (before starting the intervention) and then a five step post -test (after a one session and 2, 4, 6 months training , and after 2 weeks of detraining

Method of measurement

by remember food intake form

Intervention groups

1

Description

Intervention group: do resistance training for 6 months and 2 weeks subsequnet detraining

Category

Lifestyle

2

Description

Control group: This group does not receive any intervention and only participates in measurements

Category

Lifestyle

Recruitment centers

1

Recruitment center

Name of recruitment center

University of Kurdestan

Full name of responsible person

Naser Rostamzadeh

Street address

No.1, Zibashahr Ave., Baharan Town

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

The University of Kurdestan

Full name of responsible person

Shamseddin Ahmadi

Street address

University of Kurdistan, Pasdaran, Sanandaj

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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

The University of Kurdestan

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

The University of Kurdestan

Full name of responsible person

Naser Rostamzadeh

Position

Student

Latest degree

Ph.D.

Other areas of specialty/work
Sport physiology
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Person responsible for scientific inquiries

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Person responsible for updating data

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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
Part of the data, such as average age, gender,the average of the body mass index and results of the outcome have the possibility of sharing
When the data will become available and for how long
6 months after the print results
To whom data/document is available
Researcher people in Academic and scientific institutions
Under which criteria data/document could be used
Just to compare with similar research using the documentation permitted
From where data/document is obtainable
By email
What processes are involved for a request to access data/document
After you send the request via e-mail, lasts for 2 months
Comments