Clinical Trial Protocol
Iranian Registry of Clinical Trials

28 Jun 2026

Effect of a high intensity interval training with and without sucrose intake in fat and overweight postmenopausal women

Protocol summary

Study aim
The aim of this study is comparing the response of acute irisin, insulin and glucose to a sessions of high intensity training with and wthout sucrose intake in obese and overweight postmenopausal women

Design
The study is an open label randomized clinical trail with control group. 20 overweight and obese women (45-55 years, Body mass index 25-35) will be selected through purposive sampling and will randomly be divided into two intervention and control groups

Settings and conduct
The present field study is semi-experimental which will be done in a gym. A professional coach will train the subjects and a lab technetium will take their blood samples.

Participants/Inclusion and exclusion criteria
Inclusion criteria:45-55 years old postmenopausal women, BMI 25-35 Exclusion criteria: metabolic records

Intervention groups
Intervention group: Intervention includes a high intensity interval training with sucrose intake. Control group: control subjects will be asked to do high intensity interval training without sucrose intake.

Main outcome variables
Irisin; glucose, insulin

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20180822040849N11**
Registration date: **2019-07-01, 1398/04/10**
Registration timing: **prospective**

Last update: **2019-07-01, 1398/04/10**
Update count: **0**

Registration date
2019-07-01, 1398/04/10

Registrant information
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Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2019-07-23, 1398/05/01

Expected recruitment end date
2019-08-25, 1398/06/03

Actual recruitment start date
empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title
Effect of a high intensity interval training with and without sucrose intake in fat and overweight postmenopausal women

Public title
Effect of high intensity interval training with and without sucrose intake on women's irisin

Purpose
Basic scienece

Inclusion/Exclusion criteria
Inclusion criteria:

45-55 years old women BMI 25-35 Non athletes

Exclusion criteria:

metabolic sickness record special diet medicine intake

Age

From **45 years** old to **55 years** old

Gender

Female

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **20**

Randomization (investigator's opinion)

Randomized

Randomization description

Simple randomization: First each subject will be randomly placed in each group (A or B) by tossing a coin. It means that each side of the coin determines the assignment of each subject. Then each group will be named as control or experiment group by tossing a coin.

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 Univercity Shahrekord Branch

Street address

Rahmatieh

City

Shahrekord

Province

Chahar-Mahal-va-Bakhtiari

Postal code

8813733441

Approval date

2019-03-11, 1397/12/20

Ethics committee reference number

IR.IAU.SHK.REC.1398.009

Health conditions studied

1

Description of health condition studied

exercise

ICD-10 code

Z73

ICD-10 code description

Problems related to life management difficulty

Primary outcomes

1

Description

Irisin

Timepoint

Before, immediately after and two hour after exercise

Method of measurement

Blood sampling

2

Description

Insulin

Timepoint

Before, immediately after and two hour after exercise

Method of measurement

Blood sampling

3

Description

Glucose

Timepoint

Before, immediately after and two hour after exercise

Method of measurement

Blood sampling

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: intervention group are the subjects who perform HIIT exercises and intake surcose. training session will take 30 minutes which will include 5 min warm up, 20 min HIIT training and 5 min cool down. each HIIT section contains 30 second fast running with maximal intensity followed by 60 second slow walking. intervention group drink 80 gr sucrose per 1 kg of their body weight immediately after training,

Category

N/A

2

Description

Control group: control group are the subjects who perform HIIT exercises and intake water. training session will take 30 minutes which will include 5 min warm up, 20 min HIIT training and 5 min cool down. each HIIT section contains 30 second fast running with maximal intensity followed by 60 second slow walking. control group drink water immediately after training.

Category
N/A

Recruitment centers

1

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Sponsors / Funding sources

1

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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
Islamic Azad University
Proportion provided by this source
100
Public or private sector
Private
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
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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
All data
When the data will become available and for how long
6 months after data publication
To whom data/document is available
Academic staff
Under which criteria data/document could be used
Every analyses is fine for future research
From where data/document is obtainable
Scientific papers
What processes are involved for a request to access data/document
By search in scientific web sites
Comments