

Clinical Trial Protocol

Iranian Registry of Clinical Trials

26 Jun 2026

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

Protocol summary

Study aim

The aim of this study is comparing the response of acute myonectin, insulin resistance and FFA to a sessions of high intensity training with and without sucrose intake in obese and overweight postmenopausal women

Design

The study is an open label randomized clinical trial 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 technician 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

Myonectin, insulin resistance and FFA

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20180822040849N12**
Registration date: **2019-07-13, 1398/04/22**
Registration timing: **prospective**

Last update: **2019-07-13, 1398/04/22**

Update count: **0**

Registration date

2019-07-13, 1398/04/22

Registrant information

Name

akram jafari

Name of organization / entity

Islamic azad university shahrekord branch

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Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2019-07-23, 1398/05/01

Expected recruitment end date

2019-07-25, 1398/05/03

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 on myonectin level in overweight postmenopausal women

Public title

Effect of high intensity interval training with and without sucrose intake on women's myonectin

Purpose

Basic science

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 university 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.1398.010

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

Myonectin

Timepoint

Before, immediately after and two hour after exercise

Method of measurement

Blood sampling

2

Description

Insulin resistance

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 sucrose. 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

Type of organization providing the funding

Academic

Recruitment centers1**Recruitment center****Name of recruitment center**

Islamic Azad University Shahrekord Branch

Full name of responsible person

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Sponsors / Funding sources1**Sponsor****Name of organization / entity**

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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****Person responsible for general inquiries****Contact****Name of organization / entity**

Islamic Azad University

Full name of responsible person

Akram Jafari

Position

Assistante Professor

Latest degree

Ph.D.

Other areas of specialty/work

Sport physiology

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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