

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

06 Jul 2026

### Comparison of the effect of 8 weeks aerobic exercise and supplementation of green coffee on serum myonectin, methionine-like and insulin resistance in obese women

#### Protocol summary

##### Study aim

Purpose of this research is to compare the effects of aerobic exercises and green coffee consumption as a supplement on METTEORIN - LIKE and Myonectin level and Insulin resistance of obese women in Isfahan.

##### Design

Clinical work. Simple random Four groups of control /green coffee / intralum / combined with 40 patients were selected for two months

##### Settings and conduct

Anthropometric indices including height, weight, body fat percentage and body mass index were measured with minimum dress and no shoe. The weight of the subjects was measured with a German scale of 0.1 kg precision and their height was measured by tape measure with accuracy of 0.5 cm. The body mass index (BMI) was calculated by dividing the body weight (kg) by height (square meter). The percentage of subjects' fat was measured using the SAEHAN-SH 5020 calipers made in the UK using subcutaneous fat and using the method Three points (three-headed arm, abdomen, and supra) were calculated on the right side of the body after placement in the general equation of Pollack Jackson and to determine the percentage of fat in women

##### Participants/Inclusion and exclusion criteria

Requirement to enter healthy participants and not to use coffee and physical activity up to six months ago.

##### Intervention groups

Intervention group 1: Interval Training Intervention group 2: Green coffee consumption Intervention group 3: Interval training and green coffee consumption Control group: No intervention

##### Main outcome variables

serum myonectin, methionine-like

#### General information

##### Reason for update

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT20170510033909N5**

Registration date: **2019-07-30, 1398/05/08**

Registration timing: **retrospective**

Last update: **2019-07-30, 1398/05/08**

Update count: **0**

##### Registration date

2019-07-30, 1398/05/08

##### Registrant information

##### Name

فرزانه تقیان

##### Name of organization / entity

دانشگاه آزاد اسلامی. واحد اصفهان

##### Country

Iran (Islamic Republic of)

##### Phone

+98 913 308 0241

##### Email address

f.taghian@khuif.ac.ir

##### Recruitment status

**Recruitment complete**

##### Funding source

##### Expected recruitment start date

2018-12-22, 1397/10/01

##### Expected recruitment end date

2019-01-20, 1397/10/30

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

### Scientific title

Comparison of the effect of 8 weeks aerobic exercise and supplementation of green coffee on serum myonectin, methionine-like and insulin resistance in obese women

### Public title

Investigating the effect of exercise and green coffee on reducing obesity

### Purpose

Supportive

### Inclusion/Exclusion criteria

#### Inclusion criteria:

Age range of 30 to 35 years BMI> 30

#### Exclusion criteria:

Take an intervention to lose weight in the last year  
Lack of participation in athletic exercises for at least the last six months  
Lack of structural and abnormalities  
No history of any Fractures and surgery in the last 1 year  
Lack of cardiovascular, renal, hormonal and liver disease  
Lack of menopause

### Age

From **30 years** old to **35 years** old

### Gender

Female

### Phase

3

### Groups that have been masked

*No information*

### Sample size

Target sample size: **60**

### Randomization (investigator's opinion)

Randomized

### Randomization description

Simple randomization , Random number table . To use random numbers, the researcher first predefines the reader for reading table numbers (for example, up, down, left, or right), the second is to consider numbers for different groups (for example, pair numbers for intervention A and individual numbers for Intervention B, another way of taking numbers from 2400 to intervene A, and numbers 25-49 for intervention B, are numbers 74-50 for group C and numbers 99-75 for group D), then put on one of the numbers and In one direction, it has been predefined and recorded numbers and allocated to different groups.

### Blinding (investigator's opinion)

Not blinded

### Blinding description

#### Placebo

Not used

### Assignment

Factorial

### Other design features

## Secondary Ids

empty

## Ethics committees

### 1

#### Ethics committee

##### Name of ethics committee

Ethics committee of najafabad University

##### Street address

Islamic Azad University-Najaf Abad Branch, Isfahan, Najaf Abad, University Blvd.

##### City

Isfahan,Najafabad

##### Province

Isfahan

##### Postal code

81838-95153

#### Approval date

2017-12-31, 1396/10/10

#### Ethics committee reference number

IR.IAU.NAJAFABAD.REC.1396.26

## 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

Myonectin

#### Timepoint

At the beginning and end of the study after 8 weeks

#### Method of measurement

Serum concentration of Mayonectin by ELISA method using the Hangzhou Sbiofarm manufacturing kit in China

### 2

#### Description

Methionine-like

#### Timepoint

At the beginning and end of the study after 8 weeks

#### Method of measurement

Serum concentration of Mayonectin by ELISA method using the Hangzhou Sbiofarm manufacturing kit in China

## Secondary outcomes

### 1

#### Description

Serum insulin concentration

#### Timepoint

Before and after intervention

#### Method of measurement

Serum insulin concentration by ELISA method and use of special kit, Monobind Inc., USA) (75 µg / ml micro-unit per ml, intra-group variation coefficient of 6.3%),

8183895183

#### Phone

+98 31 3233 0018

#### Email

F\_taghian@yahoo.com

## Intervention groups

### 1

#### Description

Intervention group: First intervention group: Interval exercise, which includes three sessions per week each session for an eight-week session

#### Category

Treatment - Other

### 2

#### Description

Intervention group 2 : Green coffee consumption , Participants in the group received green coffee supplement for 8 weeks and received 400 mg daily as 2 capsules of 200 mg.

#### Category

Rehabilitation

### 3

#### Description

Intervention group 3: Interval exercises and green coffee consumption Interval exercise, which included three sessions per week for one session for 8 weeks and a green tea supplement for 8 weeks and 400 mg daily for 2 capsules of 200 mg

#### Category

Rehabilitation

### 4

#### Description

Control group: Without intervention, they were only tracked

#### Category

N/A

## Recruitment centers

### 1

#### Recruitment center

##### Name of recruitment center

Clinic of Diet Therapy , Isfahan Clinic Hospital

##### Full name of responsible person

Hajar Bahador

##### Street address

Isfahan Hospital ,Ordibehesht Ave SheikhBahaei St

##### City

Isfahan

##### Province

Isfahan

##### Postal code

## Sponsors / Funding sources

### 1

#### Sponsor

##### Name of organization / entity

Islamic Azad University, Isfahan Branch (Khorasgan),  
Research Deputy

##### Full name of responsible person

Majid Toghyani

##### Street address

Khorasgan University, Arghavanie St, Isfahan

##### City

Isfahan

##### Province

Isfahan

##### Postal code

81551-39998

##### Phone

+98 31 3500 2352

##### Email

f\_taghian@yahoo.com

#### Grant name

#### Grant code / Reference number

#### Is the source of funding the same sponsor organization/entity?

Yes

#### Title of funding source

Islamic Azad University, Isfahan Branch (Khorasgan),  
Research Deputy

#### 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

Farzaneh taghian

##### Position

Associate professor

##### Latest degree

Specialist

##### Other areas of specialty/work

Sport Medicine

##### Street address

NO3, Baharan Ave, Ostad Shahriar St, Robot St

**City**

Isfahan

**Province**

Isfahan

**Postal code**

8183895153

**Phone**

+98 31335002352

**Email**

F\_taghian@yahoo.com

**Person responsible for scientific inquiries**

**Contact**

**Name of organization / entity**

The University of Khorasgan, Esfahan

**Full name of responsible person**

Farzaneh taghian

**Position**

Associate professor

**Latest degree**

Ph.D.

**Other areas of specialty/work**

Sport Medicine

**Street address**

Khorasgan University, Arghavanie St, Esfahan

**City**

Isfahan

**Province**

Isfahan

**Postal code**

8183895183

**Phone**

+98 31335002352

**Email**

F\_taghian@yahoo.com

**Person responsible for updating data**

**Contact**

**Name of organization / entity**

Islamic Azad University, Khorasgan branch

**Full name of responsible person**

Farzaneh taghian

**Position**

Associate professor

**Latest degree**

Ph.D.

**Other areas of specialty/work**

Sport Medicine

**Street address**

Khorasgan University , Arghavanie St, Isfahan

**City**

Isfahan

**Province**

Isfahan

**Postal code**

8155139998

**Phone**

+98 31 3500 2352

**Email**

F\_taghian@yahoo.com

**Sharing plan**

**Deidentified Individual Participant Data Set (IPD)**

No - There is not a plan to make this available

**Justification/reason for indecision/not sharing IPD**

No more information

**Study Protocol**

No - There is not a plan to make this available

**Statistical Analysis Plan**

No - There is not a plan to make this available

**Informed Consent Form**

No - There is not a plan to make this available

**Clinical Study Report**

No - There is not a plan to make this available

**Analytic Code**

No - There is not a plan to make this available

**Data Dictionary**

No - There is not a plan to make this available