Clinical Trial Protocol
Iranian Registry of Clinical Trials

17 Sep 2026

The effect of eight weeks of combined training with Zataria multiflora supplementation on ANGPTL3, ANGPTL4, ANGPTL8, lipid profile and some cardiovascular risk factors in inactive men

Protocol summary

Study aim

Evaluation of the effect of eight weeks of combined training and thyme supplementation on ANGPTL3 ANGPTL4, ANGPTL8, lipid profile and some cardiovascular risk factors in inactive men

Design

This study is a double-blind factorial clinical trial. The target population is 40 inactive men, who are randomly divided into 3 intervention groups and 1 control group. Intervention and control groups receive 500 mg of Zataria multiflora supplement or placebo daily for 8 weeks. Combined exercise program 8 weeks, 3 sessions per week, 30 minutes of aerobic exercise with an intensity of 60 to 70% of maximum heart rate and 30 minutes of resistance training with a maximum intensity of 10 repetitions.

Settings and conduct

Placebo and thyme supplement are placed inside the capsule in exactly the same way.Participants and researchers will not be aware of the type of supplement received.Exercises in the sport club and blood sampling by the sampler the laboratory is done.

Participants/Inclusion and exclusion criteria

Admission: Failure to participate in regular exercise during the last year, no type 2 diabetes, cardiovascular disease and hypertension and disease systemic and malignant, not consuming alcoholic beverages and drugs or supplements food, age range 25 to 37 years, lack of physical restraint in order participate in sports exercises, sign informed consent. Exit: Absence more than one session in the exercise program, allergies to Zataria multiflora supplements.

Intervention groups

After filling in the individual consent form, the subjects are divided into four groups of 10 people: placebo, Zataria multiflora supplement, aerobic exercise, aerobic exercise + Zataria multiflora supplement.

Main outcome variables

Angiopoietin-like protein-3 (ANGPTL3) ; Angiopoietin-like protein 4 (ANGPTL4); Angiopoietin-like protein8 (ANGPTL8) ; Tri glyceride(TG); Total cholesterol; C-Ractive Protein(CRP)

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20211107052994N1**
Registration date: **2021-11-25, 1400/09/04**
Registration timing: **prospective**

Last update: **2021-11-25, 1400/09/04**
Update count: **0**

Registration date

2021-11-25, 1400/09/04

Registrant information

Name
Arash Sadeghi

Name of organization / entity
Islamic azad university science and research

Country
Iran (Islamic Republic of)

Phone
+98 21 4499 7017

Email address
arash12601@yahoo.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2021-11-26, 1400/09/05

Expected recruitment end date

2022-01-05, 1400/10/15

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of eight weeks of combined training with Zataria multiflora supplementation on ANGPTL3, ANGPTL4, ANGPTL8, lipid profile and some cardiovascular risk factors in inactive men

Public title

The effect of combined training with Zataria multiflora supplementation on lipid profile and some cardiovascular risk factors in inactive men

Purpose

Prevention

Inclusion/Exclusion criteria

Inclusion criteria:

No cardiovascular disease and diabetes Not participating in physical activity in the past year No physical and medical restrictions for exercising

Exclusion criteria:

Alcohol and drug use Allergy toZataria multiflora supplements Taking supplements or medications in the last 6 months

Age

From **25 years** old to **37 years** old

Gender

Male

Phase

3

Groups that have been masked

- Participant
- Investigator

Sample size

Target sample size: **40**

Randomization (investigator's opinion)

Not randomized

Randomization description

Blinding (investigator's opinion)

Double blinded

Blinding description

In order to eliminate the error caused by the knowledge of the participants and the researcher to the type of treatment received and its possible effect on the research result,we do the study in two blind directions.Placebo andZataria multiflora supplements are placed inside the capsule in exactly the same way. As a result, participants and researchers are not aware of the type of supplement received.

Placebo

Used

Assignment

Factorial

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics Committee of Islamic Azad University - Research Sciences Unit

Street address

13th floor, headquarters of the Ministry of Health, Treatment and Medical Education, Sima Iran St., Gharb Town

City

Tehran

Province

Tehran

Postal code

1467765681

Approval date

2021-11-04, 1400/08/13

Ethics committee reference number

IR.IAU.SRB.REC.1400.177

Health conditions studied

1

Description of health condition studied

Inactive men

ICD-10 code

ICD-10 code description

Primary outcomes

1

Description

Angiopoietin-like protein 3(ANGPTL3)

Timepoint

First, the end of the study

Method of measurement

Elisa Kit

2

Description

Angiopoietin-like protein 4(ANGPTL4)

Timepoint

First, the end of the study

Method of measurement

Elisa Kit

3

Description

Angiopoietin-like protein 8(ANGPTL8)

Timepoint

First, the end of the study

Method of measurement
Elisa Kit

4

Description
Total cholesterol
Timepoint
First, the end of the study
Method of measurement
Plasma serum

5

Description
Tri glyceride(TG)
Timepoint
First, the end of the study
Method of measurement
Plasma serum

6

Description
C-Reactive Protein (CRP)
Timepoint
First, the end of the study
Method of measurement
Bionic Kit

Secondary outcomes

empty

Intervention groups

1

Description
Control group: Failure to participate in the combined exercise program, consumption of placebo capsules for 8 weeks with the content of wheat flour made by Gol Daroo company in addition to daily life activities
Category
Placebo

2

Description
Intervention group: Zataria multiflora supplement group (taking Zataria multiflora supplement, not participating in aerobic exercise program) for 8 weeks and daily 500 mg of thyme supplement made by Gol Daroo company after breakfast with 100 ml of water and daily activities of life
Category
Prevention

3

Description
Intervention group: Combined training group + Zataria multiflora supplement (taking Zataria multiflora supplement and simultaneously participating in the combined training program) for 8 weeks and 500 mg of thyme supplement made by Gol Darob Company daily, in addition to the training program, including 8 weeks of combined training, 3 sessions per week. Includes 30 minutes of aerobic exercise with an intensity of 60 to 70% of maximum heart rate and 30 minutes of resistance training with a maximum intensity of 10 repetitions.Before and after each exercise session, warm up for 10 minutes and cool down for 7 minutes.
Category
Prevention

4

Description
Intervention group: Combined exercise group. The training program includes 8 weeks of combined training, 3 sessions per week. 30 minutes of aerobic exercise with an intensity of 60 to 70% of maximum heart rate and 30 minutes of resistance training with a maximum intensity of 10 repetitions are designed. Before and after each exercise session, warm up for 10 minutes and cool down for 7 minutes.
Category
Prevention

Recruitment centers

1

Recruitment center
Name of recruitment center
Iran University of Medical Sciences
Full name of responsible person
Jila Abbaspour
Street address
Iran University of Medical Sciences, next to Milad Tower, Hemmat Highway
City
Tehran
Province
Tehran
Postal code
1449614535
Phone
+98 21 86701
Fax
+98 21 8862 2675
Email
iumspr@iums.ac.ir

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Islamic Azad University
Full name of responsible person
Ruhollah Dehghani Firoozabadi
Street address

Shohada Hesarak Boulevard, University Square, Shahid Sattari Highway

City
Tehran

Province
Tehran

Postal code
1477893855

Phone
+98 21 4735 3501

Fax
+98 21 4486 7212

Email
safari@damavandiau.ac.ir

Grant name

Grant code / Reference number

Is the source of funding the same sponsor organization/entity?
No

Title of funding source
Azad University - Deputy of research and technology

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
Arash Sadeghi

Position
Student

Latest degree
Master

Other areas of specialty/work
Sport Medicine

Street address
No.36 ,negin gharb town, highway ardestani

City
Tehran

Province
Tehran

Postal code
1998684911

Phone
+98 21 4499 7017

Fax

Email
arash12601@yahoo.com

Person responsible for scientific inquiries

Contact

Name of organization / entity
Islamic Azad University

Full name of responsible person
Mandana Gholami

Position
Associate professor

Latest degree
Ph.D.

Other areas of specialty/work
Physiology

Street address
Shohada Hesarak Boulevard, University Square, Shahid Sattari Highway

City
Tehran

Province
Tehran

Postal code
1477893855

Phone
+98 21 4486 5179

Email
gholami_man@yahoo.com

Person responsible for updating data

Contact

Name of organization / entity
Islamic Azad University

Full name of responsible person
Arash Sadeghi

Position
Student

Latest degree
Master

Other areas of specialty/work
Sport Medicine

Street address
No.36, negin gharb town, highway ardestani

City
Tehran

Province
Tehran

Postal code
1998684911

Phone
+98 21 4499 7017

Fax

Email
arash12601@yahoo.com

Sharing plan

Deidentified Individual Participant Data Set (IPD)
Undecided - It is not yet known if there will be a plan to make this available

Study Protocol
Undecided - It is not yet known if there will be a plan to

make this available

Statistical Analysis Plan

Undecided - It is not yet known if there will be a plan to make this available

Informed Consent Form

Undecided - It is not yet known if there will be a plan to make this available

Clinical Study Report

Undecided - It is not yet known if there will be a plan to make this available

Analytic Code

No - There is not a plan to make this available

Data Dictionary

Undecided - It is not yet known if there will be a plan to make this available