

Clinical Trial Protocol

Iranian Registry of Clinical Trials

09 Jul 2026

The effect of different doses of garlic supplementation on coagulation factors and blood pressure after an acute endurance exercise in young active men

Protocol summary

Study aim

The effect of using of different doses of garlic supplementation on coagulation factors and blood pressure after an acute endurance exercise in young active men

Design

Clinical trial including three intervention groups of garlic supplement with three doses of 500, 750 and 1000 mg and acute endurance training and one placebo group

Settings and conduct

Fifteen healthy endurance runner young men from Tabriz sport clubs (age 27.0 ± 7.9 years; weight 73.9 ± 6.4 kg, height 175.3 ± 4.33 cm) voluntarily participated in study. During 4 sessions, subjects took different garlic doses (500.750 and 1000mg) and placebo in separate days. In each session, four-hour after taking the supplement or placebo, subjects performed 30min of running on treadmill with 65-85% of target heart rate. Blood samples were taken before supplementation and placebo, before and immediately after exercise. There is no blinding

Participants/Inclusion and exclusion criteria

Entrance and exit criteria include be health, non-smoking, no history of cardiovascular disease, hypertension, lower inferiority, sleep disorders, Do not use drug, supplements and caffeine at least 48 hours before the tests.

Intervention groups

500 mg garlic supplement and an acute endurance exercise 750 mg garlic supplement and an acute endurance exercise 1000 mg garlic supplement and an acute endurance exercise

Main outcome variables

Factor VIII Fibrinogen Phromboplastin time Prothrombin time Systolic and diastolic blood pressure

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20181114041655N4**

Registration date: **2019-08-16, 1398/05/25**

Registration timing: **retrospective**

Last update: **2019-08-16, 1398/05/25**

Update count: **0**

Registration date

2019-08-16, 1398/05/25

Registrant information

Name

Ameneh Pourrahim Ghouroghchi

Name of organization / entity

Mohaghegh-e-Ardabili University

Country

Iran (Islamic Republic of)

Phone

+98 45 3150 5647

Email address

a.pourrahim@uma.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2019-07-23, 1398/05/01

Expected recruitment end date

2019-08-06, 1398/05/15

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of different doses of garlic supplementation on coagulation factors and blood pressure after an acute endurance exercise in young active men

Public title

The effect of doses of garlic supplementation on coagulation and blood pressure after an acute endurance exercise in young active men

Purpose

Education/Guidance

Inclusion/Exclusion criteria

Inclusion criteria:

Being Health Being active

Exclusion criteria:

Smoking History of cardiovascular disease, hypertension, lower leg injury, sleep disorders Drug, supplement and caffeine intake at least 48 hours before the test

Age

From **25 years** old to **29 years** old

Gender

Male

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **15**

Randomization (investigator's opinion)

N/A

Randomization description

Blinding (investigator's opinion)

Not blinded

Blinding description

Placebo

Used

Assignment

Single

Other design features

NO

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics committee of Ardabil University of Medical Sciences

Street address

Ardabil university of medical science, University avenue, Ardabil

City

Ardabi

Province

Ardabil

Postal code

5618985991

Approval date

2019-07-21, 1398/04/30

Ethics committee reference number

IR.ARUMS.REC.1398.188

Health conditions studied

1

Description of health condition studied

ICD-10 code

ICD-10 code description

Primary outcomes

1

Description

Factor VIII

Timepoint

Before supplementation, before and immediately after exercise.

Method of measurement

Use the French Stage Kit by Coagulation Method and Using the Deficient Plasma

2

Description

Fibrinogen

Timepoint

Before supplementation, before and immediately after exercise.

Method of measurement

Using Quantitative Fibrinogen Kit (Mahsa Yaran Iran) by Quantitative Method

3

Description

Systolic and diastolic blood pressure

Timepoint

Before supplementation, before and immediately after exercise.

Method of measurement

Emsig Model Digital Barometer Manufacturing Made in Japan

4

Description

Thromboplastin time

Timepoint

Before supplementation, before and immediately after exercise.

Method of measurement

using a French Stage Kit with an ACI 7000 device, using a coagulometric method

5

Description

Prothrombin time

Timepoint

Before supplementation, before and immediately after exercise.

Method of measurement

using a French Stage Kit with an ACI 7000 device, using a coagulometric method

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: Group 500 mg of garlic supplementation and acute endurance activity

Category

N/A

2

Description

Intervention group: Group 750 mg of garlic supplementation and acute endurance activity

Category

N/A

3

Description

Intervention group: Group 1000 mg of garlic supplementation and acute endurance activity

Category

N/A

4

Description

Intervention group: Placebo group and acute endurance activity

Category

N/A

Recruitment centers

1

Recruitment center

Name of recruitment center

Tabriz Sport Club

Full name of responsible person

Ameneh Pourrahim Ghouroghchi

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Mohagheh Ardabili University, University blv.

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Research Assistant-The university of Mohagheh Ardabili

Full name of responsible person

Azim Omidvar

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Email

Azim_omidvar@yahoo.com

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Research Assistant-The university of Mohagheh Ardabili

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 Mohagheh Ardabili

Full name of responsible person

Ameneh Pourrahim Ghouroghchi

Position

Assistant Professor

Latest degree

Ph.D.

Other areas of specialty/work

Sport Physiology

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

The university of Mohaghegh

Full name of responsible person

Ameneh pourrahim ghouroghchi

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Assistant Professor

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Person responsible for updating data**Contact****Name of organization / entity**

The university of Mohaghegh Ardabili

Full name of responsible person

Ameneh Pourrahim Ghouroghchi

Position

Assistant professor

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

The effect of different doses of garlic supplementation on coagulation factors and blood pressure after an acute endurance exercise in young active men

When the data will become available and for how long

2020 summer

To whom data/document is available

All

Under which criteria data/document could be used

with refernce

From where data/document is obtainable

Internet

What processes are involved for a request to access data/document

Search

Comments

NO