Clinical Trial Protocol
Iranian Registry of Clinical Trials

17 Sep 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 (age27.0±7.9years; weight73.9±6.4kg, height175.3±4.33cm) 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

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Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2019-07-23, 1398/05/01

Expected recruitment end date

2019-08-06, 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
Street address
Mohaghegh Ardabili University, University blv.
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Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Research Assistant-The university of Mohaghegh Ardabili
Full name of responsible person
Azim Omidvar
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Ardabil, University Avenue
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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 Mohaghegh 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 Mohaghegh 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 updating data

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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
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