

Clinical Trial Protocol

Iranian Registry of Clinical Trials

07 Jun 2026

Effect of endurance training and ginger consumption on lipid peroxidation and some indicators of cellular damage in Sedentary people

Protocol summary

Summary

The purpose of this study is to evaluate the effect of endurance training and ginger consumption on lipid peroxidation and some indicators of cellular damage in sedentary people of in a randomized single-blinded clinical trial design. 120 sedentary male students are students of Shahrood University of Technology and according to inclusion criteria such as people between the ages 30-32 year old, healthy, nonsmokers and non-athlete people and exclusion criteria such as athlete people with use of medicine, high blood pressure and diabetes or non-compliance with treatment and after being inform about the aim of present investigation and signed an informed consent form will randomly assign into four intervention groups, intervention group 1, people with use of ginger supplementation powder that ingest 60 ginger supplementation capsules (two capsules contain 500 milligram ginger powder) during one month, intervention group 2, people with use of placebo (two capsules filled with 500 milligram starch during one month), intervention group 3, people with use of ginger and regular endurance training for three days per week during one month, intervention group 4, people with use of placebo and regular endurance training.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2016011221412N4**

Registration date: **2016-06-03, 1395/03/14**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2016-06-03, 1395/03/14

Registrant information

Name

Hamid Kalalian Moghadam

Name of organization / entity

Shahrood University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 23 3239 5054

Email address

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Recruitment status

Recruitment complete

Funding source

investigator

Expected recruitment start date

2014-02-19, 1392/11/30

Expected recruitment end date

2014-06-15, 1393/03/25

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effect of endurance training and ginger consumption on lipid peroxidation and some indicators of cellular damage in Sedentary people

Public title

Effect of endurance training and ginger on lipid peroxidation in Sedentary people

Purpose

Other

Inclusion/Exclusion criteria

Inclusion criteria: male gender between the ages 30-32 year old; healthy, nonsmokers and non-athlete people; with BMI less than 30. Exclusion criteria: athlete people

with normal medicine usage; any history of disease such as respiratory, cardiac; high blood pressure; use of smoking

Age

From **30 years** old to **32 years** old

Gender

Male

Phase

2

Groups that have been masked

No information

Sample size

Target sample size: **120**

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Single blinded

Blinding description

Placebo

Used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics committee of Shahroud University of Medical Sciences

Street address

Shahroud University of Medical Sciences, Haftom Tir Square

City

Shahroud

Postal code

Approval date

2014-06-11, 1393/03/21

Ethics committee reference number

93/8166

Health conditions studied

1

Description of health condition studied

Routine general health check-up of students

ICD-10 code

Z10.8

ICD-10 code description

Routine general health check-up of other defined subpopulations

Primary outcomes

1

Description

Creatine kinase level

Timepoint

After and before one month of continuous treatment

Method of measurement

Blood test by using a Pars Azmoon biochemical kit (Pars Azmoon Co., Tehran, Iran).

2

Description

Malondialdehyde (MDA) level

Timepoint

After and before one month of continuous treatment

Method of measurement

Blood test by using thiobarbituric acid method

3

Description

Lactate Dehydrogenase (LDH)

Timepoint

After and before one month of continuous treatment

Method of measurement

Blood test by using a Pars Azmoon biochemical kit (Pars Azmoon Co., Tehran, Iran).

Secondary outcomes

empty

Intervention groups

1

Description

intervention group 1, 30 healthy male students that ingest two capsules contain 500 milligram ginger powder each day after breakfast and dinner during one month

Category

Other

2

Description

intervention group 2, 30 healthy male students that ingest two capsules contain 500 milligram starch each day after breakfast and dinner during one month

Category

Placebo

3

Description

intervention group 3, 30 healthy male students that ingest two capsules contain 500 milligram ginger powder each day after breakfast and dinner with regular endurance training during one month

Category

Other

4

Description

intervention group 4, 30 healthy male students that ingest two capsules contain 500 milligram starch each day after breakfast and dinner with regular endurance training during one month

Category

Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Imam Hossein Hospital

Full name of responsible person

Dr. Hamid Kalalian Moghadam

Street address

Imam Hossein Hospital, Imam Street

City

Shahroud

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Shahroud University of Medical Sciences, Vice Chancellor for Research

Full name of responsible person

Dr. Hamid Kalalian Moghadam

Street address

Shahroud University of Medical Sciences, Haftom Tir Square, Shahroud

City

Shahroud

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Shahroud University of Medical Sciences, Vice Chancellor for Research

Proportion provided by this source

100

Public or private sector

empty

Domestic or foreign origin

empty

Category of foreign source of funding

empty

Country of origin

Type of organization providing the funding

empty

Person responsible for general inquiries

Contact

Name of organization / entity

Shahroud University of Medical Sciences

Full name of responsible person

Dr. Hamid Kalalian Moghadam

Position

Assistant Professor of Physiology, Shahroud University of Medical Sciences

Other areas of specialty/work

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Sharing plan

Deidentified Individual Participant Data Set (IPD)

empty

Study Protocol

empty

Statistical Analysis Plan

empty

Informed Consent Form

empty

Clinical Study Report

empty

Analytic Code

empty

Data Dictionary

empty