Clinical Trial Protocol
Iranian Registry of Clinical Trials

08 Nov 2026

Impact of a short-term period of intensive aerobic exercise training and green tea consumption on body composition and inflammatory parameters in sedentary young men

Protocol summary

Study aim
Impact of a short-term period of intensive aerobic exercise training and green tea consumption on body composition and inflammatory parameters in sedentary young men

Design
Randomized clinical trail with control group, with 38 participants

Settings and conduct
The present research is a semi-experimental study on sedentary young men in gilan University of Medical Sciences which will participate in exercise training three days a week for 4 weeks. Aerobic training is at 55 to 85% of maximum heart rate. Blood sampling is performed before and after four weeks of training.

Participants/Inclusion and exclusion criteria
Inclusion criteria: Sedentary young men, Not having having exercise training Inclusion criteria: Patients with psychiatric and nervous disorders who are being treated with sedative medicine Patients with orthopedic, verbal and auditory problems

Intervention groups
Intervention group 1: Exercise training: Fourth weeks of aerobic exercises with 3 sessions per week will be done. Aerobic exercise including running on treadmill with an intensity of 55 to 85% of maximum heart rate will be conducted. Intervention group 2: green tea group: eight weeks, three time training combine with daily consumption of 3 pills of green tea containing 441 mg of polyphenol. Intervention group 3: Aerobic training combine with green tea consumption: Eight weeks, three time training (Similar to aerobic training group) combine with daily consumption of 3 pills of green tea containing 441 mg of polyphenol. Control group: Without intervention

Main outcome variables
Creatine phosphokinase (CPK), lactate dehydrogenase (LDH), Body composition

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20150531022498N28**
Registration date: **2018-11-11, 1397/08/20**
Registration timing: **retrospective**

Last update: **2018-11-11, 1397/08/20**
Update count: **0**

Registration date
2018-11-11, 1397/08/20

Registrant information

Name
Ramin Shabani

Name of organization / entity
Islamic Azad University

Country
Iran (Islamic Republic of)

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+98 13 3375 2715

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shabani@iaurasht.ac.ir

Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2016-05-20, 1395/02/31

Expected recruitment end date
2016-07-21, 1395/04/31

Actual recruitment start date
2016-05-20, 1395/02/31

Actual recruitment end date

2016-07-21, 1395/04/31

Trial completion date

2016-07-21, 1395/04/31

Scientific title

Impact of a short-term period of intensive aerobic exercise training and green tea consumption on body composition and inflammatory parameters in sedentary young men

Public title

Impact of aerobic exercise training and green tea consumption in sedentary young men

Purpose

Supportive

Inclusion/Exclusion criteria

Inclusion criteria:

Not having exercise training sedentary young men

Exclusion criteria:

Patients with psychiatric and nervous disorders who are being treated with sedative medicine Patients with orthopedic, verbal and auditory problems

Age

From **18 years** old to **20 years** old

Gender

Male

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **38**

Randomization (investigator's opinion)

Randomized

Randomization description

Subjects were divided into 4 groups using the simple random method. This sampling will be done based on the colorful balls inside the box that are randomly taken by the subjects.

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 Rasht Azad University

Street address

Islamic Azad University Rasht Branch, Taleshan Bridge, Rasht

City

Rasht

Province

Guilan

Postal code

4147654919

Approval date

2016-04-18, 1395/01/30

Ethics committee reference number

IR.IAU.RASHT.REC.1395.40

Health conditions studied

1

Description of health condition studied

sedentary

ICD-10 code

ICD-10 code description

Primary outcomes

1

Description

Creatine phosphokinase (CPK)

Timepoint

Before and after four weeks

Method of measurement

By Bionik kit

2

Description

lactate dehydrogenase (LDH)

Timepoint

Before and after four weeks

Method of measurement

By Bionik kit

Secondary outcomes

1

Description

Body composition

Timepoint

Before and after four weeks

Method of measurement

Using by measurement of weight, body mass index (BMI), fat percent, fat free mass and waist and hip circumference

Intervention groups

1

Description

Intervention group 1: Exercise training: Fourth weeks of aerobic exercises with 3 sessions per week will be done. Aerobic exercise including running on treadmill with an

intensity of 55 to 85% of maximum heart rate and for 30 minutes will be conducted.

Category

Prevention

2

Description

Intervention group 2: green tea group: eight weeks, daily consumption of 3 pills of green tea containing 441 mg of polyphenol.

Category

Prevention

3

Description

Intervention group 3: Aerobic training combine with green tea consumption: Eight weeks, three time training. Aerobic exercise including running on treadmill with an intensity of 55 to 85% of maximum heart rate and for 30 minutes combine with daily consumption of 3 pills of green tea containing 441 mg of polyphenol.

Category

Prevention

4

Description

Control group: Without intervention

Category

N/A

Recruitment centers

1

Recruitment center

Name of recruitment center

Gilan University of Medical Sciences

Full name of responsible person

Doctor Shahrokh Yousefzadeh-Chabok

Street address

Tehran Road, Guilan University of Medical Sciences, Rasht

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Islamic Azad University

Full name of responsible person

Ali Delpasand

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Grant name

Grant code / Reference number

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

Yes

Title of funding source

Islamic Azad University

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

Meysam pourmohamadi

Position

student

Latest degree

Master

Other areas of specialty/work

Exercise physiology

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Person responsible for scientific inquiries

Contact

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Position
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Latest degree
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Person responsible for updating data

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Latest degree
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Other areas of specialty/work
Exercise physiology

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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 decision has been made yet.

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