Clinical Trial Protocol
Iranian Registry of Clinical Trials

07 Nov 2026

The effects of aerobic exercise and short-term grape seed extract supplementation on some oxidative stress indiced in men

Protocol summary

Summary

The purpose of the present study is to investigate grape seed extract supplementation and aerobic exercise effect on oxidative damages.Twenty-two untrained men were randomized in a double-blind manner to either an supplement (N = 10; 100mg/12h GSE) or placebo groups (N = 12). After 14 day supplementation period, all subjects were participated in aerobic exercise protocol with 75% VO2max on the treadmill for 30 minutes. Blood samples were obtained prior to supplementation (baseline), after fourteen day supplementation (before exercise), and immediately after the exercise protocol. In this study, Total antioxidant capacity was determined by ABTs method. Malondialdehyde was measured by spectrophotometer. Lactate, creatine kinase and lactate dehydrogenase and lipid profile counts were determined by automatic analyzers.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2013081614371N1**
Registration date: **2015-02-12, 1393/11/23**
Registration timing: **retrospective**

Last update:
Update count: **0**

Registration date

2015-02-12, 1393/11/23

Registrant information

Name

Vahid Sari-Sarraf

Name of organization / entity

University of Tabriz

Country

Iran (Islamic Republic of)

Phone

+98 41 3339 3254

Email address

sarraf@tabrizu.ac.ir

Recruitment status

Recruitment complete

Funding source

University of Tabriz

Expected recruitment start date

2012-01-21, 1390/11/01

Expected recruitment end date

2012-05-21, 1391/03/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effects of aerobic exercise and short-term grape seed extract supplementation on some oxidative stress indiced in men

Public title

The effect of exercise and grape seed extract supplementation

Purpose

Other

Inclusion/Exclusion criteria

Inclusion criteria: Healthy male؛ Non-athlete؛ Non-Smoker؛Informed consent؛ without any inflammatory or oxidative supplement ingestion during 6 months prior to the study, Exclusion criteria: chronic diseases؛ injuries.

Age

From **18 years** old to **22 years** old

Gender

Male

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **22**

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Double blinded

Blinding description

Placebo

Used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Tabriz University of Medical Sciences

Street address

Golgasht St. Daneshgah St. Tabriz, Iran.

City

Tabriz

Postal code

Approval date

2012-07-30, 1391/05/09

Ethics committee reference number

9170

Health conditions studied

1

Description of health condition studied

Oxidative stress

ICD-10 code

Y57.9

ICD-10 code description

Drug or medicament, unspecified

Primary outcomes

1

Description

total antioxidant

Timepoint

14 day after the initiation of the intervention

Method of measurement

ABTs method

2

Description

Serum Malondialdehyde

Timepoint

14 day after the initiation of the intervention

Method of measurement

by thiobarbituric acid reactive substance (TBARS) and spectrophotometer

3

Description

cratine kinase

Timepoint

14 day after the initiation of the intervention

Method of measurement

by automatic analyzer and PARS azmon kit

4

Description

Blood Lactate

Timepoint

14 day after the initiation of the intervention

Method of measurement

by automatic analyzer and GIESSE kit

5

Description

LDH

Timepoint

14 day after the initiation of the intervention

Method of measurement

by automatic analyzer and PARS azmon kit

Secondary outcomes

1

Description

lipid profile

Timepoint

14 day after

Method of measurement

by automatic analyzer and PARS azmon kit

2

Description

serum hs-CRP

Timepoint

14 day after

Method of measurement

by automatic analyzer

Intervention groups

1

Description

Grape seed extract, 200 mg/day, for 14 days, after the

supplementation period (14 days), all subjects participate in an aerobic exercise at 75% vo2max for 30 minutes

Category

Placebo

2

Description

Inert, 200 mg/day, for 14 days, after the supplementation period (14 days), all subjects participate in an aerobic exercise at 75% vo2max for 30 minutes.

Category

Other

Recruitment centers

1

Recruitment center

Name of recruitment center

University of Tabriz

Full name of responsible person

Dr Vahid Sari-Sarraf

Street address

Faculty of Physical Education & Sports Sciences,University of Tabriz, 29 Bahman Ave, Tabriz, Iran.

City

Tabriz

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

University of Tabriz

Full name of responsible person

Dr Hamidreza Ghassemzadeh

Street address

University of Tabriz, 29 Bahman Ave, Tabriz, Iran.

City

Tabriz

Grant name

Grant code / Reference number

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

Yes

Title of funding source

University of Tabriz

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

University of Tabriz

Full name of responsible person

Dr Vahid Sari-Sarraf

Position

PhD in Exercise Physiology

Other areas of specialty/work

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Person responsible for scientific inquiries

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Person responsible for updating data

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Name of organization / entity

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Full name of responsible person

Hamid Reza Zolfi

Position

Other areas of specialty/work

Street address

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Postal code

Phone

00

Fax

Email

Web page address

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