

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

07 Jul 2026

### The effects of aerobic exercise and short-term grape seed extract supplementation on some oxidative stress induced 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% VO<sub>2</sub>max 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 induced 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**

**Street address**

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

**City**

Tabriz

**Postal code**

**Phone**

+98 41 3339 3254

**Fax**

**Email**

vsarisarraf@yahoo.comsarraf@tabrizu.ac.ir

**Web page address**

**Person responsible for scientific 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**

**Street address**

Faculty of physical education & sports sciences, University of Tabriz, Tabriz, Iran.

**City**

Tabriz

**Postal code**

**Phone**

+98 41 3339 3254

**Fax**

**Email**

vsarisarraf@yahoo.comsarraf@tabrizu.ac.ir

**Web page address**

**Person responsible for updating data**

**Contact**

**Name of organization / entity**

University of Tabriz

**Full name of responsible person**

Hamid Reza Zolfi

**Position**

**Other areas of specialty/work**

**Street address**

**City**

**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*