

Clinical Trial Protocol

Iranian Registry of Clinical Trials

31 May 2026

The effect of oral L-carnitine supplementation on physical fatigue in bodybuilders

Protocol summary

Summary

The aim of this study is to evaluate the effect of L-carnitine supplementation on physical fatigue in athletes with history of bodybuilding. In this study, 30 men 18-40 years old with history of at least 1 year of bodybuilding activity around 3 hours a week without smoking and diseases that are effective in athletic power (such as asthma, anemia, cancer) will be divided into 2 groups randomly (Each group consists of 15 people). The first group will receive 1.5 grams of L-carnitine for 2 weeks (3 capsules per day). The second group will receive starch in the same duration and the same dose. At the end of the study physical fatigue level will be assessed using visual analogue scale (VAS) before and after exercise in 2 groups.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201110133320N4**

Registration date: **2012-03-29, 1391/01/10**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2012-03-29, 1391/01/10

Registrant information

Name

Mehrangiz Ebrahimi mamagani

Name of organization / entity

Health & Nutrition faculty of Tabriz university of medical sciences

Country

Iran (Islamic Republic of)

Phone

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Email address

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Recruitment status

Recruitment complete

Funding source

Students Research Committee, Vice chancellor for research and technology, Tabriz University of Medical Sciences

Expected recruitment start date

2012-01-20, 1390/10/30

Expected recruitment end date

2012-02-04, 1390/11/15

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of oral L-carnitine supplementation on physical fatigue in bodybuilders

Public title

The effect of oral L-carnitine supplementation on physical fatigue in bodybuilders

Purpose

Prevention

Inclusion/Exclusion criteria

Inclusion criteria: men, 18-40 years old; history of at least 1 year of bodybuilding activity around 3 hours a week. Exclusion criteria: smoking; consumers of vitamin, nutritional and mineral supplement; consumers of drug; diseases that are effective in athletic power (such as asthma, anemia, cancer).

Age

From **18 years** old to **40 years** old

Gender

Male

Phase

2

Groups that have been masked

No information

Sample size

Target sample size: 30

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Double blinded

Blinding description

Placebo

Used

Assignment

Other

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics committee of Tabriz University of Medical Sciences

Street address

Tabriz University of Medical Sciences

City

Tabriz

Postal code

5166614711

Approval date

2011-12-26, 1390/10/05

Ethics committee reference number

5/4/7637

Health conditions studied

1

Description of health condition studied

Physical fatigue

ICD-10 code

T73.3

ICD-10 code description

Exhaustion due to excessive exertion

Primary outcomes

1

Description

Physical fatigue

Timepoint

Before and after the intervention

Method of measurement

The standard questionnaire Visual Analog Scale

Secondary outcomes

empty

Intervention groups

1

Description

1.5 grams of L-carnitine for 2 weeks (3 capsules per day)

Category

Treatment - Drugs

2

Description

starch in the same duration and the same dose

Category

Placebo

Recruitment centers

1

Recruitment center

Name of recruitment center

Erfan Club gym

Full name of responsible person

Amin Sabari

Street address

Rudaki Street

City

Urmia

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Students Research Committee, Vice chancellor for research and technology, Tabriz University of Medic

Full name of responsible person

Dr. Piruzpanah

Street address

Health & Nutrition Faculty, Golgasht street

City

Tabriz

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Students Research Committee, Vice chancellor for research and technology, Tabriz University of Medic

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

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Web page address**Person responsible for general inquiries****Contact****Name of organization / entity**

Food and Drug Administration, Urmia University of
Medical Sciences

Full name of responsible person

Zahra Zeinalabedinzade Sore

Position

Bachelor of Science in nutrition

Other areas of specialty/work**Street address**

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Full name of responsible person

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Position

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Web page address**Person responsible for scientific inquiries****Contact****Name of organization / entity**

Tabriz University of Medical Sciences

Full name of responsible person

Dr. Mehranghiz Ebrahimi Mamagani

Position

PhD of nutrition, Associated professor

Other areas of specialty/work**Street address**

Health & Nutrition faculty, Golgasht Street

City

Tabriz

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