Clinical Trial Protocol
Iranian Registry of Clinical Trials

17 Sep 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)

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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

Person responsible for general inquiries

Contact
Name of organization / entity
Food and Drug Administration, Urmia University of Medical Sciences
Full name of responsible person
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Person responsible for updating data

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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