

Clinical Trial Protocol

Iranian Registry of Clinical Trials

04 Aug 2026

Compare the effect of diet and concurrent supplementation conjugated linoleic acid and omega-3 in endurance athletes

Protocol summary

Summary

In this double blind randomized clinical trial, 60 male athletes were chosen and randomly divided into four groups, receiving: a) dietary intervention (CHO:50-65%, PRO:15-25%, FAT:25-30%); b) CLA(4g/d), c) CLA(4g/d) and omega-3(1g/d) and d) placebo (n = 15), for 6 weeks. Inclusion criteria: age between 18 and 35 years old; absence of liver diseases, cardiovascular or muscular, skeletal and pulmonary problems; no consumption of sports supplements during the 3 months before the study. Exclusion criteria: history of any patient during the study; consumption of sports supplements during the study period. Additionally, indices of oxidative stress, body composition, 24-hour dietary recall were measured in two stages: before the supplementation and after it. Furthermore, anaerobic and aerobic performance of athletes were measured by the Wingate test and Astrand. Data were analyzed using version 16 of SPSS/PC statistical package.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201312223236N5**

Registration date: **2013-12-28, 1392/10/07**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2013-12-28, 1392/10/07

Registrant information

Name

Zohreh Mazloom

Name of organization / entity

Shiraz University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 71 1725 1008

Email address

zmazloom@sums.ac.ir

Recruitment status

Recruitment complete

Funding source

Shiraz University of Medical Sciences

Expected recruitment start date

2013-08-23, 1392/06/01

Expected recruitment end date

2013-09-23, 1392/07/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Compare the effect of diet and concurrent supplementation conjugated linoleic acid and omega-3 in endurance athletes

Public title

The effect of diet and CLA plus Omega-3 supplementation on aerobic and anaerobic performance, oxidative stress, body mass in endurance athletes

Purpose

Other

Inclusion/Exclusion criteria

Inclusion criteria: age between 18 and 35 years old; absence of liver diseases; cardiovascular or muscular, skeletal and pulmonary problems; no consumption of sports supplements during the 3 months before the study. Exclusion criteria: history of any patient during the study; consumption of sports supplements during the study period.

Age

From **18 years** old to **35 years** old

Gender

Male

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **60**

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

Shiraz University of Medical sciences

Street address

Zand Street-headquarters of Shiraz University of
Medical Sciences

City

Shiraz

Postal code

1978-71345

Approval date

2013-08-19, 1392/05/28

Ethics committee reference number

CT-92-6679

Health conditions studied

1

Description of health condition studied

Athletes

ICD-10 code

Z10

ICD-10 code description

subpopulation Routine general health cheak-up of
defined

Primary outcomes

1

Description

Anerobic performance

Timepoint

Pre-post intervention

Method of measurement

Monark-ergomedic-894e

2

Description

Aerobic performance

Timepoint

Pre-post intervention

Method of measurement

Monark-ergomedic 928-e

3

Description

Malondialdehyde(MDA)

Timepoint

Pre-post intervention

Method of measurement

Spectrophotometry

4

Description

Body mass index

Timepoint

Pre-post intervention

Method of measurement

(BIA) Bodystat Quadscan 4000

Secondary outcomes

1

Description

weight body

Timepoint

pre-post intervention

Method of measurement

Digital scale

Intervention groups

1

Description

dietary intervention

(CHO:50-65%,PRO:15-25%,FAT:25-30%),

Category

Other

2

Description

CLA(4g/d) for a period of 6 weeks

Category

Other

3

Description

CLA(4g/d), -omega-3(1g/d)for a period of 6 weeks

Category

Other

4

Description

placebo for a period of 6 weeks

Category

Placebo

Recruitment centers

1

Recruitment center

Name of recruitment center

Provincial Sports Complex in Shiraz

Full name of responsible person

Amin Ajdari - Master of Exercise Physiology

Street address

Lane 3- Nyash Street-- Chamran Blvd-Cultural, educational, sports and recreational complex in the province-Shiraz

City

Shiraz

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Research Council of Shiraz University of Medical Sciences

Full name of responsible person

Dr. Gholamreza Hatem

Street address

Red Crescent side- Zand Street - headquarters of Shiraz University of Medical Sciences-Shiraz

City

Shiraz

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Research Council of Shiraz University of Medical Sciences

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

Shiraz University of Medical Sciences - Department of Nutrition and Food Sciences

Full name of responsible person

Saheb Abbas Torki

Position

MSc of nutrition

Other areas of specialty/work

Street address

fatolmobin st-zhara Blvd- Department of Nutrition and Food Sciences-Shiraz

City

Shiraz

Postal code

7153675541

Phone

+98 916 404 3401

Fax

Email

sahebnut@yahoo.com

Web page address

Person responsible for scientific inquiries

Contact

Name of organization / entity

Shiraz University of Medical Sciences, Department of Nutrition and Food Sciences

Full name of responsible person

Zohreh Mazloom

Position

Associate Professor of Nutrition

Other areas of specialty/work

Street address

fatolmobin st-zhara Blvd- Department of Nutrition and Food Sciences-Shiraz

City

Shiraz

Postal code

7153675541

Phone

+98 71 1725 1001

Fax

Email

zohreh.mazloom@gmail.com

Web page address

Person responsible for updating data

Contact

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sahebnut@yahoo.com

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