

Clinical Trial Protocol

Iranian Registry of Clinical Trials

18 Sep 2026

Comparison of the Effect of Eight-Week Trx Exercise and Omega-3 Supplementation on Visfatin Level and Insulin Resistance in Women with Polycystic Ovary Syndrome.

Protocol summary

Study aim

The purpose of this study was to investigate the effect of eight weeks of trx training and omega-3 supplementation on serum visfatin levels and insulin resistance in women with PCOS.

Design

Twenty eight patients were randomly assigned to four complement, exercise, combination and control groups through lottery.

Settings and conduct

The participants were randomly divided into four groups by lottery and the complementary group was followed up through the complementary telegram channel and the intervention group of the training group and the combined gymnasium were conducted.

Participants/Inclusion and exclusion criteria

Women with polycystic ovarian syndrome aged 20-40 years, non-pregnancy, menopause, addiction, taking medications for blood pressure and hormone, diabetes, cardiovascular problems, renal failure, liver and thyroid problems, using omega-3 supplementation regularly in three Last month, as well as regular physical activity in the last three months.

Intervention groups

Exercise TRX and supplementation with omega-3

Main outcome variables

The implications of this study are to reduce insulin resistance and insulin levels and increase visfatin levels.

General information

Reason for update

Acronym

TRX

IRCT registration information

IRCT registration number: **IRCT20180824040856N1**

Registration date: **2018-09-08, 1397/06/17**

Registration timing: **retrospective**

Last update: **2018-09-08, 1397/06/17**

Update count: **0**

Registration date

2018-09-08, 1397/06/17

Registrant information

Name

Fariba Khoshkam

Name of organization / entity

Islamic Azad University Isfahan(Khorasgan)

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Iran (Islamic Republic of)

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Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2017-04-02, 1396/01/13

Expected recruitment end date

2017-06-15, 1396/03/25

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison of the Effect of Eight-Week Trx Exercise and Omega-3 Supplementation on Visfatin Level and Insulin Resistance in Women with Polycystic Ovary Syndrome.

Public title

Effect of trx training and omega-3 supplementation in controlling polycystic ovary syndrome.

Purpose
Supportive

Inclusion/Exclusion criteria
Inclusion criteria:
 Female with polycystic ovarian syndrome age 20-40 years
Exclusion criteria:
 Pregnancy alcoholism or drugs taking certain medications menopause cardiovascular problems Liver problems Renal failure diabetes taking omega-3 supplement regularly in the last three months regular exercise in the last three months

Age
From **20 years** old to **40 years** old

Gender
Female

Phase
2-3

Groups that have been masked
No information

Sample size
Target sample size: **28**

Randomization (investigator's opinion)
Randomized

Randomization description
Randomized randomization, in which I wrote the names of the participants on separate papers and placed in a container, I asked one person to read them one by one and I was replaced by training in four groups.

Blinding (investigator's opinion)
Not blinded

Blinding description

Placebo
Not used

Assignment
Parallel

Other design features
TRX exercises have been used in this research, which is completely new and has not been applied to these participants until now.

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Islamic Azad University Khorasgan Branch (Isfahan)
Ethical Committee

Street address

t, Arghavia, University Blvd. East Gay St

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8155139998

Approval date

2018-06-03, 1397/03/13

Ethics committee reference number

IR.IAU.KHUISF.REC.1397.018

Health conditions studied

1

Description of health condition studied

Polycystic ovary syndrome

ICD-10 code

E28.2

ICD-10 code description

Polycystic ovarian syndrome

Primary outcomes

1

Description

insulin resistance

Timepoint

24 hours before intervention and two months after intervention

Method of measurement

Blood sampling

2

Description

Visfatin level

Timepoint

24 hours before intervention and two months after intervention

Method of measurement

Blood sampling

3

Description

Weight changes

Timepoint

24 hours before intervention and two months after intervention

Method of measurement

Scala Scale

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group 1: Omega-3 supplementation. Receipt of 1000 mg capsule, daily dose of a capsule, after lunch, Zahravi Co.

Category

Lifestyle

2

Description

Intervention group2: Omega-3 supplementation and TRX exercise Get a 1000 mg capsule, a daily dose of capsule, after lunch, Zahrawi's company, and 24 sessions of TRX training, each session is an hour

Category

Lifestyle

3

Description

Intervention group3: Practice, 24 training sessions for TRX, duration of each session for one hour

Category

Lifestyle

4

Description

Intervention group 4: Control group

Category

Lifestyle

Recruitment centers

1

Recruitment center

Name of recruitment center

Shahid Beheshti Hospital

Full name of responsible person

Ferdos Mehrabian

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Shahid Beheshti Hospital , Motahhari Ave

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

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Full name of responsible person

Ahmad Azin

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Web page address

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Islamic Azad University Khorasgan Branch (Isfahan)

Proportion provided by this source

100

Public or private sector

Private

Domestic or foreign origin

Domestic

Category of foreign source of funding

empty

Country of origin

Type of organization providing the funding

Persons

Person responsible for general inquiries

Contact

Name of organization / entity

Khorasgan (Isfahan) Branch, Islamic Azad University

Full name of responsible person

Fariba Khoshkam

Position

Student

Latest degree

Master

Other areas of specialty/work

Physiology

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Sharing plan**Deidentified Individual Participant Data Set (IPD)**

Undecided - It is not yet known if there will be a plan to make this available

Study Protocol

Undecided - It is not yet known if there will be a plan to make this available

Statistical Analysis Plan

Undecided - It is not yet known if there will be a plan to make this available

Informed Consent Form

Undecided - It is not yet known if there will be a plan to make this available

Clinical Study Report

Undecided - It is not yet known if there will be a plan to make this available

Analytic Code

Undecided - It is not yet known if there will be a plan to make this available

Data Dictionary

Undecided - It is not yet known if there will be a plan to make this available