

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 2026

The effect of cranberry supplementation on glucose, lipid, oxidative stress, inflammation markers, fat mass distribution and blood pressure in overweight women with metabolic syndrome

Protocol summary

Summary

To evaluate the effect of cranberry supplement on long term complications in metabolic syndrome, 50 metabolic syndrome women aged 20-50 years old were recruited from Shiraz healthy heart house. The women were randomly assigned into the two groups to receive 2 cranberry supplements equal to 400 mg fruit extract or placebo for 2 months. At baseline and at the end of the second month, the index of total cholesterol, HDL-cholesterol, LDL-cholesterol, triglycerides, IL-6, hsCRP, adiponectin, blood glucose, MDA, insulin and blood pressure will be measured.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201110192480N2**
Registration date: **2012-01-21, 1390/11/01**
Registration timing: **registered_while_recruiting**

Last update:

Update count: **0**

Registration date

2012-01-21, 1390/11/01

Registrant information

Name

Mohammad Hassan Eftekhari

Name of organization / entity

Shiraz University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 71 1725 1001

Email address

eftekhari@sums.ac.ir

Recruitment status

Recruitment complete

Funding source

Shiraz University of Medical Sciences

Expected recruitment start date

2011-11-06, 1390/08/15

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 cranberry supplementation on glucose, lipid, oxidative stress, inflammation markers, fat mass distribution and blood pressure in overweight women with metabolic syndrome

Public title

Effect of cranberry supplement on long-term consequences of metabolic syndrome

Purpose

Supportive

Inclusion/Exclusion criteria

Inclusion criteria: Women with features of metabolic syndrome between 20 and 50 years of age, BMI>25.
Exclusion criteria: Postmenopausal women; medications for any chronic disease (cancer, diabetes, CVD); use of medication known to affect lipid metabolism or possess anti-inflammatory effect; Smoking; Alcohol consumption; use of supplements (antioxidants, multivitamins,...); Chronic disease: renal, liver, thyroid, etc; pregnant or lactating; use of warfarin.

Age

From **20 years** old to **50 years** old

Gender

Female

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: 50

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

Central Medical Building, Zand Avenue, PO Box
1978-71345

City

Shiraz

Postal code

vcrdep@sums.ac.ir

Approval date

2011-10-09, 1390/07/17

Ethics committee reference number

CT-90-5726

Health conditions studied

1

Description of health condition studied

metabolic syndrome

ICD-10 code

Z86.3

ICD-10 code description

Personal history of endocrine, nutritional and metabolic diseases

Primary outcomes

1

Description

lipid profile

Timepoint

Before and 2 months after intervention

Method of measurement

Auto analyzer

2

Description

FBS

Timepoint

Before and 2 months after intervention

Method of measurement

Auto analyzer

3

Description

Systolic and diastolic blood pressure

Timepoint

Before and 2 months after intervention

Method of measurement

Mercury Barometer

4

Description

Waist circumference

Timepoint

Before and 2 months after intervention

Method of measurement

Tape Meter

Secondary outcomes

1

Description

Insulin

Timepoint

Before and 2 months after intervention

Method of measurement

ELISA kit

2

Description

Interlukin-6 (IL-6)

Timepoint

Before and 2 months after intervention

Method of measurement

RIA

3

Description

hsCRP

Timepoint

Before and 2 months after intervention

Method of measurement

ELISA kit

4

Description

adiponectin
Timepoint
Before and 2 months after intervention
Method of measurement
ELISA kit

5

Description
malon-dialdehyde(MDA)
Timepoint
Before and 2 months after intervention
Method of measurement
Spectrophotometry

Intervention groups

1

Description
Cranberry supplements intake is equivalent to 400 mg fruit extract per day, for 2 months
Category
Treatment - Drugs

2

Description
placebo intake for 2 months
Category
Placebo

Recruitment centers

1

Recruitment center
Name of recruitment center
Shiraz Healthy Heart House
Full name of responsible person
Street address
Across from St. Fazilat, Modares Blvd
City
Shiraz

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Shiraz university of medical sciences
Full name of responsible person
Mohammad Hassan Eftekhari
Street address
Central medical building, Zand avenue
City
Shiraz
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?

Yes
Title of funding source
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
School of health & nutrition, Shiraz University of Medical Sciences
Full name of responsible person
Mansooreh Alaei
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MSc student of nutrition
Other areas of specialty/work
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Person responsible for scientific inquiries

Contact

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Full name of responsible person
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Mansooreh Alaei

Position

MSc student of nutrition

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

School of health & nutrition, Shiraz University of
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Shiraz

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