

Clinical Trial Protocol

Iranian Registry of Clinical Trials

26 May 2026

Effect of different oil consumption on serum lipids in adults of Isfahan City

Protocol summary

Summary

This study was done to compare the effects of liquid, semi-hydrogenated (free trans fatty acid) and ghee oils with hydrogenated, oil on serum lipids profile of healthy adults. This study was a randomized clinical trial conducted on 200 healthy participants aged 20-60 years old who were beneficiaries of Imam-e-Zaman charity Association. The participants were randomly assigned into 5 groups and each group was treated with a diet containing cooking and frying liquid, ghee, semi-hydrogenated oil (free trans fatty acid), soft margarine or hydrogenated for 40 days. Fasting serum lipids, including total cholesterol (TC), triglyceride (TG), LDL-C, HDL-C, apoprotein A (Apo A), and apoprotein B (Apo B) were measured before and after the study.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT138905124497N1**

Registration date: **2010-11-26, 1389/09/05**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2010-11-26, 1389/09/05

Registrant information

Name

Noushin Mohammadifard

Name of organization / entity

Isfahan Cardiovascular Research Center, Isfahan University of Medical Sciences

Country

Iran (Islamic Republic of)

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+98 31 1337 7883

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mohammadifard@crc.mui.ac.ir

Recruitment status

Recruitment complete

Funding source

Isfahan Cardiovascular Research Center, Isfahan University of Medical Sciences

Expected recruitment start date

2006-09-23, 1385/07/01

Expected recruitment end date

2009-06-20, 1388/03/30

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effect of different oil consumption on serum lipids in adults of Isfahan City

Public title

Effect of different oil on serum lipids

Purpose

Prevention

Inclusion/Exclusion criteria

Inclusion criteria: Normal HTN, no diabetes, no cardiovascular diseases Exclusion criteria: TC \geq 240mg/dl, TG \geq 400mg/dl, LDL-C \geq 160mg/dl, HDL-C \geq 40mg/dl, body mass index (BMI) \geq 35

Age

From **20 years** old to **60 years** old

Gender

Both

Phase

1

Groups that have been masked

No information

Sample size

Target sample size: **200**

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Not blinded

Blinding description

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Research Council of Cardiovascular Research Center,
ISfahan University of Medical Sciences

Street address

Cardiovascular Research Center, Sedigheh Tahereh
Research Center, Khoram St.

City

Isfahan

Postal code

1148-81465

Approval date

empty

Ethics committee reference number

84112

Health conditions studied

1

Description of health condition studied

Hyperlipidemia

ICD-10 code

E78.5

ICD-10 code description

Hyperlipidemia

Primary outcomes

1

Description

Total Cholesterol

Timepoint

Before and 40 days after the interventiondays

Method of measurement

Measurement (Autoanalyzer)

2

Description

Triglyceride

Timepoint

Before and 40 days after the interventiondays

Method of measurement

Measurement (Autoanalyzer)

3

Description

LDL

Timepoint

Before and 40 days after the interventiondays

Method of measurement

Calculating by Friedewald Formula

4

Description

HDL

Timepoint

Before and 40 days after the interventiondays

Method of measurement

Measurement (Autoanalyzer)

5

Description

Apoprotein A

Timepoint

Before and 40 days after the interventiondays

Method of measurement

Measurement (Autoanalyzer)

6

Description

Apoprotein B

Timepoint

Before and 40 days after the intervention

Method of measurement

Measurement (Autoanalyzer)

Secondary outcomes

empty

Intervention groups

1

Description

Unhydrogenated oil and Frying oil, Dosage: Calculating based on individual dietary pattern Period: 40 days
Usage method: In diet

Category

Prevention

2

Description

Semihydrogenated oil (Free trans fatty acid), Dosage:

Calculating based on individual dietary pattern Period: 40 days Usage method: In diet

Category

Prevention

3

Description

Ghee oil, Dosage: Calculating based on individual dietary pattern Period: 40 days Usage method: In diet

Category

Prevention

4

Description

Soft Margarine, Dosage: Calculating based on individual dietary pattern Period: 40 days Usage method: In diet

Category

Prevention

Recruitment centers

1

Recruitment center

Name of recruitment center

Emam-e-Zaman Charity Association

Full name of responsible person

Street address

City

Isfahan

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Isfahan Cardiovascular Research Center, Isfahan University of Medical Sciences

Full name of responsible person

Ahmad Bahonar

Street address

Isfahan Cardiovascular Research Center, Sedigheh Tahereh Research Center, Khoram St.

City

Isfahan

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Isfahan Cardiovascular Research Center, Isfahan 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

Isfahan Cardiovascular Research Center, Isfahan University of Medical Sciences

Full name of responsible person

Noushin Mohammadifard

Position

MSc Nutrition, Head of Nutrition Department

Other areas of specialty/work

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Name of organization / entity

Cardiovascular Research Center, Isfahan University of Medical Sciences

Full name of responsible person

Nizal Sarrafzadegan

Position

Professor of Cardiac Department, Medicine Faculty, Isfahan Univeersity of Medical Sciences, Cardiolo

Other areas of specialty/work

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

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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