Clinical Trial Protocol
Iranian Registry of Clinical Trials

17 Sep 2026

Effect of garlic and lemon juice mixture on lipid profile and some cardiovascular risk factors in people 30-60 years old with hyperlipidemia.

Protocol summary

Summary

According to current knowledge, several studies has been conducted separately concerning the relationship between garlic and lemon juice in reducing inflammatory biomarkers and lipid profile in patients with cardiovascular disease. But yet, the effects of garlic and lemon juice mixture over the indices of cardiovascular disease is not analyzed, and regarding the high and increasing prevalence of these diseases in the world and in Iran, the aim of present study is to investigate effect of garlic and lemon juice mixture on lipid profile and some cardiovascular risk factors.people with hyperlipidemia according to the inclusion criteria were selected and randomly divided into 4 groups and control blood samples were taken, height, weight and blood pressure were recorded, first group received 20 grams of garlic daily, plus 1 tablespoon lemon juice, second 20 g garlic daily , third group 1 tablespoon lemon juice daily2 hours after dinner and forth group did not receive garlic and lemon juice during the intervention. Experiments were repeated after 2 month, the results were analyzed the SPSS softwere.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2015020720986N1**
Registration date: **2015-03-07, 1393/12/16**
Registration timing: **retrospective**

Last update:
Update count: **0**

Registration date

2015-03-07, 1393/12/16

Registrant information

Name

Negar Aslani

Name of organization / entity

Isfahan Univercity Of Medical Science

Country

Iran (Islamic Republic of)

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Recruitment status

Recruitment complete

Funding source

Vice chancellor for research, Isfahan University of Medical Science

Expected recruitment start date

2013-10-23, 1392/08/01

Expected recruitment end date

2013-12-22, 1392/10/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effect of garlic and lemon juice mixture on lipid profile and some cardiovascular risk factors in people 30-60 years old with hyperlipidemia.

Public title

Effect of mixed of garlic and lemon juice on hyperlipidemia

Purpose

Treatment

Inclusion/Exclusion criteria

Subjects were eligible if they have a total cholesterol and LDL levels between 240-200 mmol/l and 160-100 mmol/l respectively. People should not be suffering from any other diseases, including heart problems, kidney, lung,

thyroid disorders, gastrointestinal, rheumatoid arthritis and other liver problems such as hepatitis or fatty liver, pregnancy or lactating, no smoking, their weight may not change fast in the last two months, should not use drugs that affect blood sugar, blood fat, blood pressure and anti-inflammatory and not to have any sensitivity to garlic and lemon juice. Individual with a history of chronic disease, consuming medicine and flowing special regimen were excluded.

Age
From **30 years** old to **60 years** old

Gender
Both

Phase
N/A

Groups that have been masked
No information

Sample size
Target sample size: **120**

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
Ethical Committee of Isfahan University of Medical Sciences

Street address
Isfahan University of Medical Sciences, Hezar jarib street

City
Isfahan

Postal code

Approval date
2013-10-28, 1392/08/06

Ethics committee reference number
392436

Health conditions studied

1

Description of health condition studied
Hyperlipidemia

ICD-10 code
E78.0

ICD-10 code description
Disorders of lipoprotein metabolism and other lipidaemias

Primary outcomes

1

Description
total cholesterol

Timepoint
in the first of intervention and end of 8th week

Method of measurement
enzymatic, mg/dl

2

Description
Serum low-density lipoprotein cholesterol (LDL-C) levels

Timepoint
Before intervention and at the end of 8th week

Method of measurement
Enzymatic, mg/dl

3

Description
Serum hight-density lipoprotein cholesterol (HDL-C) levels

Timepoint
Before intervention and at the end of 8th week

Method of measurement
Enzymatic, mg/dl

4

Description
triglyceride

Timepoint
in the first of intervention and end of 8th week

Method of measurement
Enzyme colorimetric methods, mg/dl

5

Description
Fibrinogen

Timepoint
Before intervention and at the end of 8th week

Method of measurement
Clauss method

6

Description
Systolic blood pressure

Timepoint
Before intervention and at the end of 8th week

Method of measurement
mmHg, Mercurial sphygmomanometer

7

Description
Diastolic blood pressure
Timepoint
Before intervention and at the end of 8th week
Method of measurement
mmHg, Mercurial sphygmomanometer

8

Description
Body mass index
Timepoint
Before intervention and at the end of 8th week
Method of measurement
kg/m2, Weight/Height squar

9

Description
Fasting blood sugar
Timepoint
Before intervention and at the end of 8th week
Method of measurement
Enzymatic, mg/dl

10

Description
Weight
Timepoint
Before intervention and at the end of 8th week
Method of measurement
Scale, kilogram

Secondary outcomes

empty

Intervention groups

1

Description
first group received 20 grams of garlic plus 1 tablespoon lemon juice daily
Category
Prevention

2

Description
forth group did not recive garlic and lemon juice during the intervention
Category
Prevention

3

Description
second group recived 20 gram of garlic, daily
Category
Prevention

4

Description
third group recived 1 tablespoon of lemon juice, daily
Category
Prevention

Recruitment centers

1

Recruitment center
Name of recruitment center
Isfahan Cardiovascular Research Center
Full name of responsible person
Street address
City
Isfahan

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Vice chancellor for research, Isfahan University of Medical Science
Full name of responsible person
Peyman Adibi
Street address
Isfahan University of Medical Science, Hezar Jerib Avenue
City
Isfahan
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Vice chancellor for research, Isfahan University of Medical Science
Proportion provided by this source
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

2

Sponsor
Name of organization / entity
Isfahan University of Medical Sciences, School of Nutrition-School Nutrition Research Center
Full name of responsible person
Miss Samadanian
Street address

School Nutrition Research Center, School of Nutrition and Food Sciences, Isfahan university Of Medical Sciences, Hezar Jerib Street, Isfahan

City

Isfahan

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Isfahan University of Medical Sciences, School of Nutrition-School Nutrition Research Center

Proportion provided by this source

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 University of Medical Sciences

Full name of responsible person

Negar Aslani

Position

MSc Student of Nutrition

Other areas of specialty/work

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Negar Aslani

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Email

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