Clinical Trial Protocol
Iranian Registry of Clinical Trials

08 Nov 2026

Investigating the effect of the combination of garlic, ginger, olive oil, and lemon juice extracts on blood pressure, blood sugar, and lipid profile in diabetic patients: A clinical trial

Protocol summary

Study aim
Studying the effect of garlic, ginger, olive oil and lemon juice extracts on blood pressure, blood sugar and lipid profile in diabetic patients

Design
A controlled clinical trial with parallel groups, double-blind, randomized, on 60 patients, will be conducted using the Randomization.com or WinPepi software.

Settings and conduct
This interventional study will be conducted in the diabetes clinic, Shahid Mofatteh Clinic, affiliated with Yasuj University of Medical Sciences. Diabetic patients introduced by the endocrinologist will be referred to the nutrition clinic in the clinic. Based on the list, the nurse or nutritionist or resident secretary in the ward will give the patients a number and a type of capsule specified for that number, and will deliver this assignment and numbering to the nutrition group.

Participants/Inclusion and exclusion criteria
Inclusion criteria: Diagnosis of type 2 diabetes, HbA1c level between 7 and 8%, age 18 to 65 years, cholesterol above 200 mg/dL, and ability to take capsules daily. Exclusion criteria: Pregnancy or breastfeeding, age less than 20 years, concurrent participation in other clinical studies.

Intervention groups
Intervention group: Patients who will receive one capsule of a combination of garlic, ginger, olive oil, and lemon juice daily for 8 weeks. Control group: Patients who will receive one cellulose capsule daily for 8 weeks.

Main outcome variables
Hemoglobin A1C Low-density lipoprotein High-density lipoprotein Triglycerides Cholesterol

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20150711023153N6**
Registration date: **2025-11-04, 1404/08/13**
Registration timing: **prospective**

Last update: **2025-11-04, 1404/08/13**
Update count: **0**

Registration date
2025-11-04, 1404/08/13

Registrant information

Name
Seyed Bahman Panahande

Name of organization / entity

Country
Iran (Islamic Republic of)

Phone
+98 74 3322 3505

Email address
panahande-b@razi.tums.ac.ir

Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2026-04-21, 1405/02/01

Expected recruitment end date
2026-06-22, 1405/04/01

Actual recruitment start date
empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title
Investigating the effect of the combination of garlic,

ginger, olive oil, and lemon juice extracts on blood pressure, blood sugar, and lipid profile in diabetic patients: A clinical trial

Public title
The effect of combining extracts of garlic, ginger, olive oil, and lemon juice in the treatment of diabetes
Purpose
Supportive
Inclusion/Exclusion criteria
Inclusion criteria:
Type 2 diabetic patients Age over 18 years
Exclusion criteria:
Suffering from cardiovascular, liver, kidney disease and other complications of diabetes such as diabetic foot ulcers Pregnancy and breastfeeding Diabetic patients over 65 years old Diabetic patients using insulin or acarbose
Age
From **18 years** old to **65 years** old
Gender
Both

Phase
N/A
Groups that have been masked

- Participant
- Care provider

Sample size
Target sample size: **60**
Randomization (investigator's opinion)
Randomized
Randomization description
Block randomization will be implemented using Randomization.com, so that there are 2 blocks in each group (each block contains 15 patients), which are divided based on body mass index (BMI) and duration of diabetes. To create a randomization list on the "Randomization.com" website, follow the steps below, and click on Is randomization.com "validated?". Then clicked, on the new page, click on the "Randomization Plan generator" option, on the new page: enter the type of intervention (I, P) in the box "(Treatment labels: (enter as many as necessary)), the number of blocks (4) In the "Number of subjects per block" box, enter the number of subjects per block (15) in the "Number of blocks" box, and in the "Initial subject ID number" box, enter a random number at the beginning, and at the end Enter the "generate plan" box. We do this four times and create four randomization lists.
Blinding (investigator's opinion)
Double blinded
Blinding description
The placebo is the same capsule without the active ingredients, which will be completely similar in shape, size, color and texture to the pills containing the main ingredient in order to control the psychological effects of taking the drug. And with similar packaging that is encoded with a special code such as A and B at the time of packaging. This code is kept in a special envelope in the nutrition group and no one will know the contents of the envelope until the end of the study. And the intervention and placebo will be distributed to the participants by a third party (nurse or department expert) during the study.
Placebo
Used
Assignment
Parallel
Other design features
Capsule (capsule containing a combination of garlic and ginger, olive oil and lemon juice) produced by the Faculty of Pharmacy, Shiraz University of Medical Sciences

Secondary Ids

empty

Ethics committees

1

Ethics committee
Name of ethics committee
Ethics Committee of Yasouj University of Medical Sciences
Street address
Yasuj- Shahid Motahari Boulevard- Yasuj University of Medical Sciences
City
Yasouj
Province
Kohgilouyeh-va-Boyrahmad
Postal code
7591741417
Approval date
2025-06-18, 1404/03/28
Ethics committee reference number
IR.YUMS.REC.1404.060

Health conditions studied

1

Description of health condition studied
Type 2 diabetes
ICD-10 code
E11
ICD-10 code description
Type 2 diabetes mellitus

Primary outcomes

1

Description
HbA1C
Timepoint
At the beginning and end of the intervention period
Method of measurement
Laboratory methods - Elisa Kit

2

Description
Low density lipoprotein
Timepoint
At the beginning and end of the intervention period
Method of measurement
Laboratory methods - Elisa Kit

3

Description
High density lipoprotein
Timepoint
At the beginning and end of the intervention period
Method of measurement
Laboratory methods - Elisa Kit

4

Description
Triglyceride
Timepoint
At the beginning and end of the intervention period
Method of measurement
Laboratory methods - Elisa Kit

5

Description
Total cholesterol
Timepoint
At the beginning and end of the intervention period
Method of measurement
Laboratory methods - Elisa Kit

Secondary outcomes

1

Description
Weight
Timepoint
Before and after the period of intervention
Method of measurement
Body Composition

2

Description
systolic and diastolic blood pressure
Timepoint
Before and after the period of intervention
Method of measurement
Blood pressure monitor

Intervention groups

1

Description
Intervention group: Patients receiving capsules (capsules containing a combination of garlic and ginger, olive oil, and lemon juice) produced by the Faculty of Health and Nutrition, Yasuj University of Medical Sciences, will be given one capsule daily for 8 weeks.
Category
Other

2

Description
Control group: Patients receiving cellulose capsules (containing cellulose compounds) produced by the Faculty of Health and Nutrition, Yasuj University of Medical Sciences, will be given one capsule daily for 8 weeks.
Category
Placebo

Recruitment centers

1

Recruitment center
Name of recruitment center
Kohgiluyeh Boyerahmad province. Yasuj city. Shahid Muftah Clinic.
Full name of responsible person
Seyed Bahman Panahande
Street address
Pasdaran street, Shahid Muftah Clinic
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Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Yasouj University of Medical Sciences
Full name of responsible person
Cyrus Salehnasab
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Yasouj- Shahid Motahari Boulevard- Yasouj University of Medical Sciences
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Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Yasouj University of Medical Sciences
Proportion provided by this source
100
Public or private sector
Public
Domestic or foreign origin
Domestic
Category of foreign source of funding
empty
Country of origin
Type of organization providing the funding
Academic

Person responsible for general inquiries

Contact
Name of organization / entity
Yasouj University of Medical Sciences
Full name of responsible person
Fatemeh Marzbani
Position
Student
Latest degree
Bachelor
Other areas of specialty/work
Nutrition
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Person responsible for updating data

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Sharing plan

Deidentified Individual Participant Data Set (IPD)
Yes - There is a plan to make this available
Study Protocol
Yes - There is 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
Yes - There is a plan to make this available
Clinical Study Report
Yes - There is 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
Title and more details about the data/document
Data on primary variables will be shareable after de-identifying individuals
When the data will become available and for how

long

The access period starts 6 months after the results are published

To whom data/document is available

The data will only be available to researchers working in academic and scientific institutions

Under which criteria data/document could be used

Data will be allowed to be reanalyzed for use in secondary studies such as meta-analyses

From where data/document is obtainable

Seyed Bahman Panahande, Yasuj University of Medical Sciences, Yasuj, Iran. Email:panahande.b@gmail.com P.O. Box 7591741417, Tel:+98- 074-33346078, Fax:+98-074-33346079,

What processes are involved for a request to access data/document

After receiving approval from Yasuj University of Medical Sciences (one week to one month), thedata will be sent to the applicant

Comments