

Clinical Trial Protocol

Iranian Registry of Clinical Trials

09 Jun 2026

The effect of cinnamon on hemoglobin A1c in type 2 diabetic patients

Protocol summary

Study aim

Determining the effect of cinnamon on HbA1c in type 2 diabetic patients

Design

A clinical trial with a control group, with parallel groups, double-blind, randomized, phase 1 on 126 patients, where computer random numbers were used for randomization by the supervisor.

Settings and conduct

In this trial, after obtaining the code of ethics, 126 patients of Farahikhetgan Hospital with type 2 diabetes were included in the study. The patients and the researcher were blinded in this study, and for this purpose randomization was done by the supervisor using computer random numbers. For the treatment group Two cinnamon capsules were prescribed daily for 12 weeks and for the control group, the same amount of placebo was prescribed for 12 weeks.

Participants/Inclusion and exclusion criteria

Inclusion criteria: Age 30 to 70 years; Informed consent; patients of Farahehtegan Hospital; Type 2 diabetes. Exclusion criteria: patients with diabetes along with hypertension, ischemic heart diseases,, rheumatological diseases, renal diseases, insulin treatment, history of bleeding diseases, being treated with anticoagulants such as warfarin or NOAC.

Intervention groups

For the treatment group, two cinnamon capsules were prescribed daily for 12 weeks, and for the control group, placebo the same amount was prescribed for 12 weeks.

Main outcome variables

The effect of cinnamon supplementation for 12 weeks on reducing fasting blood sugar, hemoglobin A1c, triglycerides and cholesterol has been insignificant.

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20230611058448N1**

Registration date: **2023-09-12, 1402/06/21**

Registration timing: **registered_while_recruiting**

Last update: **2023-09-12, 1402/06/21**

Update count: **0**

Registration date

2023-09-12, 1402/06/21

Registrant information

Name

Zahra Sormeili

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 21 7762 2366

Email address

alirezapanahian72@gmail.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2023-09-03, 1402/06/12

Expected recruitment end date

2023-12-03, 1402/09/12

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of cinnamon on hemoglobin A1c in type 2 diabetic patients

Public title

The effect of cinnamon on blood sugar in type 2 diabetic patients

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:
Age over 30 years and less than 70 years Informed consent suffering from type 2 diabetes Patients of Farahehtegan Hospital

Exclusion criteria:
Patients with hypertension Insulin treatment History of bleeding diseases Being treated with anticoagulants such as warfarin or NOAC Patients with kidney diseases Patients with ischemic heart disease Patients with rheumatological diseases

Age
From **30 years** old to **70 years** old

Gender
Both

Phase
1

Groups that have been masked

- Participant
- Investigator

Sample size
Target sample size: **126**

Randomization (investigator's opinion)
Randomized

Randomization description
Since the study is double-blind, the randomization was done by the supervisor. Each patient was assigned a number from 1 to 126. Then, in order to divide people into two groups, control and treatment, online random number generation was used and 63 random numbers were generated from 1 to 126, based on these numbers, these people were placed in the treatment group and the remaining numbers were in the control group.

Blinding (investigator's opinion)
Double blinded

Blinding description
The doctor is unaware of the study groups, the patient is unaware of the study groups, the researcher is unaware of the study groups, the data analyst is unaware of the study groups .The division of patients into drug and placebo groups is done by nurses outside of the above groups.

Placebo
Used

Assignment
Parallel

Other design features

Secondary Ids
empty

Ethics committees

1

Ethics committee
Name of ethics committee
Ethics committee of Islamic Azad University of

Medical Sciences

Street address
Headquarters building of Tehran Islamic Azad University of Medical Sciences, corner of Gol Yakh St., Ayane Blvd., Amir Pabarja St., two-way Qalhak, Doktor Shariati St.

City
Tehran

Province
Tehran

Postal code
1949635881

Approval date
2022-10-29, 1401/08/07

Ethics committee reference number
IR.IAU.TMU.REC.1401.324

Health conditions studied

1

Description of health condition studied
Diabetes mellitus type 2

ICD-10 code
Z71.3

ICD-10 code description
Dietary counseling and surveillance

Primary outcomes

1

Description
HbA1c

Timepoint
At the beginning of the study (before the intervention) and after 12 weeks

Method of measurement
Blood Test

Secondary outcomes
empty

Intervention groups

1

Description
Intervention group: For this group, 2 capsules of 500 mg of cinnamon were prescribed daily for 12 weeks.

Category
Treatment - Drugs

2

Description
Control group: For this group, 2 capsules per day of placebo have been prescribed for 12 weeks.

Category
Placebo

Recruitment centers

1

Recruitment center

Name of recruitment center

Farhikhtegan Hospital

Full name of responsible person

Zahra Sormeili

Street address

in front of the central organization of Islamic Azad University, North of University Square, Satari end

City

Tehran

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1477899679

Phone

+98 21 4484 5163

Email

farhikhteganhospital@gmail.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Islamic Azad University

Full name of responsible person

Zahra Sormeili

Street address

Islamic Azad University of Medical Sciences, Tehran branch , Khagani St., Shariati St.

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Int.affairs@tms.iau.ir

Grant name**Grant code / Reference number****Is the source of funding the same sponsor organization/entity?**

Yes

Title of funding source

Islamic Azad University

Proportion provided by this source

10

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**

Other

Person responsible for general inquiries

Contact

Name of organization / entity

Islamic Azad University

Full name of responsible person

Zahra Sormeili

Position

Medical Student

Latest degree

A Level or less

Other areas of specialty/work

General Practitioner

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In front of the central organization of Islamic Azad University, North of University Square, At the end of Sattari

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Person responsible for scientific inquiries

Contact

Name of organization / entity

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Person responsible for updating data

Contact

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

No - There is not a plan to make this available

Justification/reason for indecision/not sharing IPD

Due to the low number of samples, this study was not enough to draw conclusions, and for this purpose, a large sample size and more facilities are needed, which was not possible in this research.

Study Protocol

No - There is not a plan to make this available

Statistical Analysis Plan

No - There is not a plan to make this available

Informed Consent Form

No - There is not a plan to make this available

Clinical Study Report

No - There is not a plan to make this available

Analytic Code

No - There is not a plan to make this available

Data Dictionary

No - There is not a plan to make this available