

Clinical Trial Protocol

Iranian Registry of Clinical Trials

22 Jul 2026

Comparative study of the effects of cinnamon and whortleberry for decreasing fasting blood sugar and HbA1c in patients with type 2 diabetes in Karaj city

Protocol summary

Summary

The aim of this study is to compare the effects of cinnamon and whortleberry on reduction of Hb A1C and fasting blood sugar in patients with type II of diabetes. This is a randomized, double-blind, placebo controlled, multi-center trial with three groups. A total of 90 diabetic patients with fasting blood sugar more than or equal to 126 mg/dl and Hb A1C more than 6 percent who have no underlying disease, will be randomly allocated into the following three groups. The patients in the intervention groups will be treated with cinnamon or whortleberry, two 500 mg capsules per day after breakfast and lunch for three months. The patients in the control group will receive two 500 mg starch capsules per day after breakfast and lunch for three months. Body mass index (BMI), serum concentrations of fasting blood sugar, Hb A1C, and serum level of insulin will be checked before and three months after the intervention.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT138905132892N2**
Registration date: **2011-04-07, 1390/01/18**
Registration timing: **registered_while_recruiting**

Last update:

Update count: **0**

Registration date

2011-04-07, 1390/01/18

Registrant information

Name

Mani Mirfeizi

Name of organization / entity

Islamic Azad University Karaj branch

Country

Iran (Islamic Republic of)

Phone

00982614403254/ 00982614182580/
00982614455635

Email address

mani@kiau.ac.ir

Recruitment status

Recruitment complete

Funding source

Vice chancellor for research, Islamic Azad University of Karaj branch

Expected recruitment start date

2010-08-23, 1389/06/01

Expected recruitment end date

2011-08-23, 1390/06/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparative study of the effects of cinnamon and whortleberry for decreasing fasting blood sugar and HbA1c in patients with type 2 diabetes in Karaj city

Public title

The effects of cinnamon and whortleberry for treatment of diabetes

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: Diabetic patients with fasting blood sugar more than or equal to 126 mg/dl, Hb A1C above 6 percent, not having any underlying disease, treating with oral hypoglycemic drugs Exclusion criteria: Presence of

underlying disease like as renal, connective tissue, cardiac, thyroid, or adrenal diseases, Following an especial type of diet or doing exercise; receiving insulin or taking cinnamon or whortleberry supplemental products; Smoking, drinking alcohol; pregnancy, lactation

Age

No age limit

Gender

Both

Phase

2

Groups that have been masked

No information

Sample size

Target sample size: 90

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

Ethic committee of Islamic Azad university of Karaj branch

Street address

Crossroad of Moazen Blv and Esteghlal Blv, Rajaeeshahr, Karaj, Mailbox: 31485-313

City

Karaj

Postal code

Approval date

2010-08-15, 1389/05/24

Ethics committee reference number

001

Health conditions studied

1

Description of health condition studied

Diabetes mellitus type II

ICD-10 code

E10-E14

ICD-10 code description

Primary outcomes

1

Description

Serum fassting blood sugar

Timepoint

Before intervention, one and half and three months after intervention

Method of measurement

Serological test with Electro Komolomynsans method with using of the company's ROCHE kits

2

Description

Serum Hb A1C

Timepoint

Before intervention and three months after intervention

Method of measurement

Serological test with Electro Komolomynsans method with using of the company's ROCHE kits

Secondary outcomes

1

Description

Serum insulin

Timepoint

Before intervention and three months after intervention

Method of measurement

Serological test with Electro Komolomynsans method with using of the company's ROCHE kits

2

Description

Body mass index

Timepoint

Before intervention, one and half and three months after intervention

Method of measurement

According to kg/m2 with using standard meter and scale

Intervention groups

1

Description

For control group: Two 500 mg starch capsules per day after breakfast and lunch for three months

Category

Placebo

2

Description

For second intervention group: Two 500 mg whortleberry capsules per day after breakfast and lunch for three months

Category

3**Description**

For first intervention group: Two 500 mg cinnamon capsules per day after breakfast and lunch for three months

Category

Treatment - Drugs

Recruitment centers1**Recruitment center****Name of recruitment center**

Endocrinology Clinic of Dr. Mani Mirfeizi

Full name of responsible person

Dr. Mani Mirfeizi

Street address

Omid physician building, Beheshti Avenue, Karaj

City

Karaj

Sponsors / Funding sources1**Sponsor****Name of organization / entity**

Vice chancellor for research, Islamic Azad University of Karaj branch

Full name of responsible person

Dr. Abas Ahmadi

Street address

Vice chancellor for research, Islamic Azad University of Karaj branch, Crossroad of Moazen Blv and Esteghlal Blv, Rajaeeshahr, Karaj

City

Karaj

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, Islamic Azad University of Karaj branch

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**

Islamic Azad University Karaj branch

Full name of responsible person

Dr. Mani Mirfeizi

Position

Professor of Internal medicine / Dean of Nursing and Midwifery Karaj branch

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

Crossroad of Moazen Blv and Esteghlal Blv, Rajaeeshahr, Karaj, Nursing & midwifery faculty

City

Karaj

Postal code**Phone**

00982614403254; 00982614182580;
00982614455635

Fax**Email**

Mani@kiau.ac.ir; Manimirfeizi@yahoo.com

Web page address**Person responsible for scientific inquiries****Contact****Name of organization / entity**

Islamic Azad University Karaj branch

Full name of responsible person

Dr. Mani Mirfeizi

Position

Professor of Internal medicine / Dean of Nursing and Midwifery Karaj branch

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

Crossroad of Moazen Blv and Esteghlal Blv, Rajaeeshahr, Karaj, Nursing & midwifery faculty

City

Karaj

Postal code**Phone**

00982614403254; 00982614182580;
00982614455635

Fax**Email**

Man@kiau.ac.ir; Manimirfeizi@yahoo.com

Web page address**Person responsible for updating data****Contact****Name of organization / entity**

Islamic Azad University Karaj branch

Full name of responsible person

Zahra Mehdizadeh Toorzani

Position

Master of midwifery

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

Crossroad of Moazen Blv and Esteghlal Blv,
Rajaeeshahr, Karaj, Nursing & midwifery faculty

City

Karaj

Postal code

Phone

+98 21 3372 5785

Fax

Email

Zahramehdizade@yahoo.com

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