

Clinical Trial Protocol

Iranian Registry of Clinical Trials

15 Jul 2026

The effect of Cinnamon, Cardamom, Saffron and Ginger consumption on markers of endothelial function, glycemic control, lipid profile, oxidative stress and inflammation in type 2 diabetic patients

Protocol summary

Summary

Randomly allocation of individuals into 5 separate groups including intervention groups consuming 3 cups of tea with 3 gram Cinnamon daily, 3 cups of tea with 3 gram Cardamom daily, 3 cups of tea with 1gram Saffron daily, 3 cups of tea with 3 gram Ginger, and control group only consumption of 3 cups of tea without any herbs mentioned above. Three weeks run-in period is considered before the intervention phase to make the similar samples as the tea consumption. Blindness is applied for the person who assesses the data. The herbs will be boiled with tea. The method of making tea will be explained for participants as the traditional method such as using tea-pot. The time for making tea is considered 10 minutes. Tea bags (Golestan brand) will be used. Herbs are prepared as grinded or powder for participants. This study will last 8 weeks. Demographic characteristics, weight, height, body mass index (BMI), waist circumference, blood pressure, body fat mass, fat-free mass are measured for each individual. Weight, blood pressure, fat mass and fat-free mass will assess again at the end of the study. To determine the effects of herbs on endothelial function indices, glycemic control, lipid profile, markers of oxidative stress and inflammation, a fasting blood sample will collect. Assessment of physical activity via a valid (content validity) questionnaire and assessment of compliance of individuals, via a 5 day dietary records in the beginning and end of the study will considered.

General information

Acronym

Diabetes and herbs

IRCT registration information

IRCT registration number: **IRCT201206185062N5**

Registration date: **2012-11-28, 1391/09/08**

Registration timing: **registered_while_recruiting**

Last update:

Update count: **0**

Registration date

2012-11-28, 1391/09/08

Registrant information

Name

Reza Ghiasvand

Name of organization / entity

Isfahan University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 31 1792 2742

Email address

ghiasvand@hlth.mui.ac.ir

Recruitment status

Recruitment complete

Funding source

Iran National Science Foundation

Expected recruitment start date

2012-09-22, 1391/07/01

Expected recruitment end date

2012-12-21, 1391/10/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of Cinnamon, Cardamom, Saffron and Ginger consumption on markers of endothelial function, glycemic control, lipid profile, oxidative stress and

inflammation in type 2 diabetic patients

Public title

The effect of Cinnamon, Cardamom, Saffron and Ginger consumption on markers of endothelial function, glycemic control, lipid profile, oxidative stress and inflammation in type 2 diabetic patients

Purpose

Treatment

Inclusion/Exclusion criteria

inclusion criteria: type 2 diabetes patients, voluntary participation, age more than 30 years, body mass index more than 25 kg/m², no injection of insulin, no other chronic diseases, not consumption of mentioned herbs.
exclusion criteria: if patients do not want to continue the project or do not consume the herbs.

Age

From **25 years** old to **60 years** old

Gender

Both

Phase

4

Groups that have been masked

No information

Sample size

Target sample size: **200**

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Single blinded

Blinding description

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Isfahan University of Medical Sciences

Street address

Department of Community Nutrition School of Nutrition and Food Sciences Isfahan University of Medical Sciences, Hezar Jarib Street, Isfahan

City

Isfahan

Postal code

8174673461

Approval date

2010-09-23, 1389/07/01

Ethics committee reference number

90003170

Health conditions studied

1

Description of health condition studied

Type 2 diabetes

ICD-10 code

E11

ICD-10 code description

diabetes (mellitus)(nonobese)(obese):

Primary outcomes

1

Description

fasting blood glucose

Timepoint

the first day of the study and the last day of 8th weeks

Method of measurement

Elisa

Secondary outcomes

1

Description

serum triglyceride

Timepoint

the first day of the study and the last day of 8th weeks

Method of measurement

Elisa

2

Description

Intercellular Adhesion Molecule

Timepoint

the first day of the study and the last day of 8th weeks

Method of measurement

Elisa

3

Description

F2-isoprostan

Timepoint

the first day of the study and the last day of 8th weeks

Method of measurement

Elisa

4

Description

Interlukine-6

Timepoint

the first day of the study and the last day of 8th weeks

Method of measurement

Elisa

Intervention groups

1

Description

Control group: Only 3 cups of tea daily without any mentioned herbs

Category

Treatment - Drugs

2

Description

Intervention group A: 3 cups of tea with 3 gram Cinnamon daily

Category

Treatment - Drugs

3

Description

Intervention group B: 3 cups of tea with 3 gram Cardamom daily

Category

Treatment - Drugs

4

Description

Intervention group C: 3 cups of tea with 1 gram Saffron daily

Category

Treatment - Drugs

5

Description

Intervention group D: 3 cups of tea with 3 gram Ginger daily

Category

Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center

The endocrine and metabolism research center, Isfahan University of Medical Sciences. The screening

Full name of responsible person

Dr. Reza Ghiasvand

Street address

Department of Community Nutrition, School of Nutrition and Food sciences, Isfahan University of Medical Sciences

City

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Iran National Science Foundation

Full name of responsible person

Dr. Reza Ghiasvand

Street address

Department of Community Nutrition School of Nutrition and Food Sciences Isfahan University of Medical Sciences

City

Isfahan

Grant name

Grant code / Reference number

90003170

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

Yes

Title of funding source

Iran National Science Foundation

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

Department of Community Nutrition School of Nutrition and Food Sciences Isfahan University of Medical Sciences

Full name of responsible person

Dr. Reza Ghiasvand

Position

PhD of Nutrition, Assistant Professor

Other areas of specialty/work

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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

Person responsible for updating data

Contact

Name of organization / entity

Isfahan University of Medical Sciences

Full name of responsible person

Dr. Reza Ghasvand