# Clinical Trial Protocol
# Iranian Registry of Clinical Trials

07 Nov 2026

## The effect of cinnamon supplementation on blood pressure in patients with stage 1 hypertension

## Protocol summary

**Study aim**
Effect of oral cinnamon supplementation on blood pressure in individuals with stage 1 hypertension

**Design**
A randomized, placebo-controlled, double-blind clinical trial

**Settings and conduct**
In this double-blind clinical trial study, new hypertensive patients referred to Imam Reza Hospital Clinic, Mashhad, Iran, with systolic pressure between 130-139 mmhg and or diastolic blood pressure 80-89 mmhg without receiving any anti hypertensive drug, are selected and confirmed by 24-hour Holter monitoring of the blood pressure. Patients are randomly divided into two groups of cinnamon and placebo.Patients in the intervention group are given three capsules of 500 mg cinnamon daily. Written informed consent is obtained from these patients. Lipid profile, fasting blood sugar and systolic and diastolic blood pressure are measured at baseline and 90 days after the start of the trial (end of the study). At the end of the study, patients will be re-tested under 24-hour blood pressure monitoring.

**Participants/Inclusion and exclusion criteria**
Inclusion criteria: Individuals of 40-79 years old, having systolic blood pressure of 139-130 mmhg and or diastolic blood pressure 80-89 mmhg (as measured in the office and confirmed by 24-hour Holter monitoring of the blood pressure ).Exclusion criteria: presence of end organ damage during the last 6 months, secondary hypertension, pregnancy and lactation, patients receiving any type of antihypertensive medication.

**Intervention groups**
Patients with STAGE 1 hypertension

**Main outcome variables**
Systolic blood pressure Diastolic blood pressure BMI Lepid profile Fasting sugar

## General information

**Reason for update**

**Acronym**

**IRCT registration information**
IRCT registration number: **IRCT20191204045605N1**
Registration date: **2019-12-27, 1398/10/06**
Registration timing: **registered_while_recruiting**

Last update: **2019-12-27, 1398/10/06**
Update count: **0**

**Registration date**
2019-12-27, 1398/10/06

**Registrant information**

**Name**
Alireza Abdollahimoghadam

**Name of organization / entity**

**Country**
Iran (Islamic Republic of)

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**Recruitment status**
**Recruitment complete**

**Funding source**

**Expected recruitment start date**
2019-02-04, 1397/11/15

**Expected recruitment end date**
2020-02-20, 1398/12/01

**Actual recruitment start date**
empty

**Actual recruitment end date**
empty

**Trial completion date**
empty

**Scientific title**

The effect of cinnamon supplementation on blood pressure in patients with stage 1 hypertension

**Public title**
The effect of cinnamon supplementation on blood pressure in patients with stage1 hypertension
**Purpose**
Treatment
**Inclusion/Exclusion criteria**
**Inclusion criteria:**
Patients who are a new case of systolic hypertension (139-130 mmhg) and or diastolic hypertension (89-80 mmhg) being 40-79 years old 10-year cardiovascular risk less than 10%
**Exclusion criteria:**
Symptoms of end organ damage arbitrary discontinuation of medication, secondary causes of hypertension, pregnancy and lactation patients receiving any type of antihypertensive medication failure to cooperate till the end of the study complications of cinnamon diabetes
**Age**
From **40 years** old to **79 years** old
**Gender**
Both

**Phase**
3
**Groups that have been masked**

- Participant
- Care provider

**Sample size**
Target sample size: **40**
**Randomization (investigator's opinion)**
Randomized
**Randomization description**
Using random number extraction software, a list of number is obtained; based on the random-numbers list, participants are divided into two groups to receive either placebo or cinnamon.
**Blinding (investigator's opinion)**
Double blinded
**Blinding description**
Cinnamon and placebo will be purchased and given to the research unit. Both containers of cinnamon and placebo are quite similar in appearance and will be labeled as A or B.
**Placebo**
Used
**Assignment**
Parallel
**Other design features**

## Secondary Ids

empty

## Ethics committees

### 1

**Ethics committee**
**Name of ethics committee**
Ethics committee of Mashhad University of Medical Sciences
**Street address**
Daneshgah
**City**
Mashhad
**Province**
Razavi Khorasan
**Postal code**
9179943835
**Approval date**
2018-11-04, 1397/08/13
**Ethics committee reference number**
IR.MUMS.MEDICAL.REC.1397.577

## Health conditions studied

### 1

**Description of health condition studied**
HYPERTENSION
**ICD-10 code**
I10
**ICD-10 code description**
Essential (primary) hypertension

## Primary outcomes

### 1

**Description**
HYPERTENSION
**Timepoint**
At baseline and 90 days later
**Method of measurement**
24-hour blood pressure monitoring using Holter

## Secondary outcomes

### 1

**Description**
Fasting blood sugar
**Timepoint**
The first day of study and 90days after the start
**Method of measurement**
mg/dl

### 2

**Description**
Body max index
**Timepoint**
The first day of study and 90days after the start
**Method of measurement**
Kg/m2

### 3

**Description**
lipid profile

**Timepoint**
The first day of study and 90days after the start
**Method of measurement**
mg/ dl

## Intervention groups

### 1

**Description**
500 mg Cinnamon Capsule 3 times daily for 90 days
**Category**
Treatment - Drugs

### 2

**Description**
Control group: 500 mg placebo capsule 3 times daily for 90 days
**Category**
Treatment - Drugs

## Recruitment centers

### 1

**Recruitment center**
**Name of recruitment center**
Emam Reza Hospital
**Full name of responsible person**
Alireza Abdollahi Moghadam
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## Sponsors / Funding sources

### 1

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Abdollahiar@mums.ac.ir
**Grant name**
**Grant code / Reference number**
**Is the source of funding the same sponsor organization/entity?**
Yes
**Title of funding source**
Mashhad 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**
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Fatemeh Shirzad Shahraki
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## Person responsible for updating data

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## Sharing plan

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

Undecided - It is not yet known if there will be a plan to make this available

**Study Protocol**

Undecided - It is not yet known if there will be 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**

Undecided - It is not yet known if there will be a plan to make this available

**Clinical Study Report**

Undecided - It is not yet known if there will be 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