

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

31 May 2026

### Determination of *Apium graveolens* L. fruits effect on HbA1C, 2HPP & FBS in type 2 diabetic patients

#### Protocol summary

##### Summary

The study was performed as a double-blind clinical trial to examine the effect of *Apium graveolens* L on the blood glucose in type 2 diabetic patients who referred to the diabetic treatment research center of Yazd. 74 patients diagnosed with diabetes type 2 with the age range of 20-80 are randomly selected and categorized into two groups. The patients do not take insulin, non-conventional medical products, and medicines including Aspirin, Warfarin, Clopidogrel, diuretics and Thyroid drugs as well as they are not pregnant and lactating. In the main group, in addition to their standard treatment, FBS, 2HPP, and HbA1C are measured before they start taking the capsules. Then, if the patients do not need to take insulin and are satisfied to participate and also considering the number of their oral medicines and HbA1C, they are enrolled in the study. Subsequently, along with their standard treatment, the patients take three capsules containing celery fruits per day, half an hour before a meal, within three months. After three months, the blood tests are repeated and FBS, 2HPP, and HbA1C are measured again. In the control group, the same procedure is done using placebo containing cellulose. Finally, the results of the two groups are compared together.

#### General information

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT2014081718828N1**  
Registration date: **2017-03-05, 1395/12/15**  
Registration timing: **registered\_while\_recruiting**

Last update:

Update count: **0**

##### Registration date

2017-03-05, 1395/12/15

#### Registrant information

##### Name

Alimohammad Ranjbar

##### Name of organization / entity

Yazd University of Medical Sciences

##### Country

Iran (Islamic Republic of)

##### Phone

+98 35 3820 3419

##### Email address

amranjbar@razi.tums.ac.ir

#### Recruitment status

##### Recruitment complete

#### Funding source

Vice chancellor research and technology Yazd University of Medical Sciences and researchers

#### Expected recruitment start date

2017-02-03, 1395/11/15

#### Expected recruitment end date

2018-03-06, 1396/12/15

#### Actual recruitment start date

empty

#### Actual recruitment end date

empty

#### Trial completion date

empty

#### Scientific title

Determination of *Apium graveolens* L. fruits effect on HbA1C, 2HPP & FBS in type 2 diabetic patients

#### Public title

Determination of *Apium graveolens* L. fruits effect on diabetic patients

#### Purpose

Treatment

#### Inclusion/Exclusion criteria

Inclusion criteria: Patients with diabetes type 2; Patients within the age range 20-80; Patients with the ability to speak Persian; Patients satisfaction with entering the

study Exclusion criteria: Taking insulin; Taking common non-medical products; Patients who cannot take celery fruit capsules for any given reason; Patients with diabetes type 1; Pregnant and breastfeeding women; Patients taking Aspirin, Warfarin, Clopidogrel; Patients receiving diuretics or thyroid treatment

#### Age

From **20 years** old to **80 years** old

#### Gender

Both

#### Phase

N/A

#### Groups that have been masked

*No information*

#### Sample size

Target sample size: **74**

#### 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

Ethics committee of Yazd University of Medical Science

##### Street address

Talar honar alley, Bahonar square, Yazd, Iran

##### City

Yazd

##### Postal code

#### Approval date

2016-07-16, 1395/04/26

#### Ethics committee reference number

IR.SSU.REC.1395.70

## Health conditions studied

### 1

#### Description of health condition studied

type 2 diabete

#### ICD-10 code

E11

#### ICD-10 code description

Non-insulin-dependent diabetes mellitus

## Primary outcomes

### 1

#### Description

Hemoglobin A1c (HbA1c)

#### Timepoint

3 months after drug use

#### Method of measurement

Blood test

## Secondary outcomes

### 1

#### Description

Fasting blood sugar (FBS)

#### Timepoint

3 months after drug use

#### Method of measurement

Blood Test

### 2

#### Description

2 hour Post Prandial (2hpp)

#### Timepoint

3 months after drug use

#### Method of measurement

Blood Test

## Intervention groups

### 1

#### Description

The participants in control group receive three cellulose capsules per day, 30 min before every meal, for three months along with standard treatments.

#### Category

Treatment - Drugs

### 2

#### Description

The participants in intervention group receive three celery fruit capsules per day, 30 min before every meal, for three months along with standard treatments.

#### Category

Treatment - Drugs

## Recruitment centers

### 1

#### Recruitment center

##### Name of recruitment center

Diabete Research Center

##### Full name of responsible person

Masoud Rahmanian

##### Street address

Talar Honar alley, Bahonar square, Yazd, Iran

**City**

Yazd

**Sponsors / Funding sources****1****Sponsor****Name of organization / entity**

Yazd University of Medical Science

**Full name of responsible person**

Hooshang Mehrparvar

**Street address**

Bahonar Square, Yazd, Iran

**City**

Yazd

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

Yes

**Title of funding source**

Yazd University of Medical Science

**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**

Yazd University of Medical Sciences

**Full name of responsible person**

Alimohamad Ranjbar Jamal abadi

**Position**

PhD

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Diabete Research Center

**Full name of responsible person**

Masoud Rahmadian

**Position**

Endocrinologist, Assistant Professor

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Shahid Sadoughi University of Medical Sciences of Yazd

**Full name of responsible person**

Negin Ghafar

**Position**

Student Doctor of Pharmacy

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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*