

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

25 Jun 2026

### Assessment of the effect of dill powder on gastrointestinal symptoms, glycemic control, lipid profile, serum levels of oxidant and Inflammatory markers in type 2 diabetic patients

#### Protocol summary

##### Study aim

Determination of the effect of dill powder on gastrointestinal symptoms, glycemic control, lipid profile, serum levels of oxidant and Inflammatory markers in type 2 diabetic patients

##### Design

This is a randomized Double-blinded clinical trial with two parallel groups in Phase 3. In this study 48 patients with type 2 diabetes referring to specialized clinic of Golestan Hospital and Then, patients were randomly divided into two control and intervention groups.

##### Settings and conduct

This study will be conducted at the specialized clinic of Golestan Hospital in ahvaz. In this study patients would be randomly allocated to the supplement or placebo groups using random number tables. neither the patients nor administrator of the treatment know which capsules are being received. All patients will provide 10 ml fasting venous blood samples at the beginning and at the end of the study. At the beginning and the end of the study gastrointestinal symptoms, fasting glucose, insulin, serum fructosamine, lipid profile, and serum levels of total antioxidant capacity, malondialdehyde and hs- CRP will be detected in all patients.

##### Participants/Inclusion and exclusion criteria

Inclusion criteria: Patients with type 2 diabetic Body mass index between 25-35 Age between 30-60 years; Exclusion criteria: Having other endocrine disorders, cardiovascular diseases and kidney diseases, consumption vitamin, herbal, mineral or, antioxidants supplements in the last three months

##### Intervention groups

women with type 2 diabetes who receive 3 capsules of one gram of dill powder daily for 8 weeks

##### Main outcome variables

gastrointestinal symptoms, fasting glucose, insulin, serum fructosamine, lipid profile, and serum levels of

total antioxidant capacity, malondialdehyde and hs- CRP

#### General information

##### Reason for update

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT20120704010181N12**

Registration date: **2018-05-12, 1397/02/22**

Registration timing: **retrospective**

Last update: **2018-05-12, 1397/02/22**

Update count: **0**

##### Registration date

2018-05-12, 1397/02/22

##### Registrant information

##### Name

Fatemeh Heidari

##### Name of organization / entity

Ahvaz Jundishapur University of Medical Sciences

##### Country

Iran (Islamic Republic of)

##### Phone

+98 61 1373 8255

##### Email address

haidari-f@ajums.ac.ir

##### Recruitment status

**Recruitment complete**

##### Funding source

##### Expected recruitment start date

2018-01-20, 1396/10/30

##### Expected recruitment end date

2018-02-19, 1396/11/30

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

**Trial completion date**  
empty

**Scientific title**  
Assessment of the effect of dill powder on gastrointestinal symptoms, glycemic control, lipid profile, serum levels of oxidant and Inflammatory markers in type 2 diabetic patients

**Public title**  
The effect of dill powder on the treatment of type 2 diabetic patients

**Purpose**  
Treatment

**Inclusion/Exclusion criteria**  
**Inclusion criteria:**  
Patients with type 2 diabetic Body mass index between 25-35 Age between 30-60 years Desire to collaborate on the research project  
**Exclusion criteria:**  
Having other endocrine diseases, cardiovascular, liver, kidney, thyroid Taking steroids or hormone medications, consumption vitamin , herbal, mineral or, antioxidants supplements in the last three months Having physical activity Weight loss diet pregnancy lactation

**Age**  
From **30 years** old to **60 years** old

**Gender**  
Both

**Phase**  
3

**Groups that have been masked**

- Participant
- Investigator

**Sample size**  
Target sample size: **48**

**Randomization (investigator's opinion)**  
Randomized

**Randomization description**  
Simple (assigning a person to a particular group completely randomly) using a random number table

**Blinding (investigator's opinion)**  
Double blinded

**Blinding description**  
In this double blind study neither the patients nor researcher the treatment know which capsules are being received. In fact, a third person who knows the contents of the capsules distributes supplements among the participants. The shape, size and color of the capsules are similar in both groups, while their content is different.

**Placebo**  
Used

**Assignment**  
Parallel

**Other design features**

**Secondary Ids**  
empty

## Ethics committees

### 1

#### Ethics committee

##### Name of ethics committee

Ethics Committee of Ahwaz University of Medical Sciences

##### Street address

Golestan Highway

##### City

ahvaz

##### Province

Khuzestan

##### Postal code

61357-15794

#### Approval date

2017-11-20, 1396/08/29

#### Ethics committee reference number

IR.AJUMS.REC.1396.623

## Health conditions studied

### 1

#### Description of health condition studied

diabetes

#### ICD-10 code

,E10-E14

#### ICD-10 code description

Diabetes mellitus

## Primary outcomes

### 1

#### Description

fasting Glucose

#### Timepoint

baseline, 8 weeks after intervention period

#### Method of measurement

Fasting serum Glucose concentration in mg/dl by kit

### 2

#### Description

Serum levels of insulin

#### Timepoint

baseline, 8 weeks after intervention period

#### Method of measurement

Fasting serum Insulin concentration in  $\mu\text{U/ml}$  by kit

### 3

#### Description

Serum Fructosamine

#### Timepoint

baseline, 8 weeks after intervention period

#### Method of measurement

Fasting serum Fructosamine concentration in  $\mu\text{mol/L}$  by kit

#### 4

**Description**

Serum cholestrol

**Timepoint**

baseline, 8 weeks after intervention period

**Method of measurement**

Fasting Serum cholestrol concentration in mg/dl by kit

#### 5

**Description**

LDL Cholestrol

**Timepoint**

baseline, 8 weeks after intervention period

**Method of measurement**

Fasting Serum HDL Cholestrol concentration in mg/dl, calculating by Friedewald formula

#### 6

**Description**

HDL Cholestrol

**Timepoint**

baseline, 8 weeks after intervention period

**Method of measurement**

Fasting Serum HDL Cholestrol concentration in mg/dl by kit

#### 7

**Description**

Serum Teriglycerid

**Timepoint**

baseline, 8 weeks after intervention period

**Method of measurement**

Fasting serum Teriglycerid concentration in mg/dl by kit

#### 8

**Description**

hs- CRP

**Timepoint**

baseline, 8 weeks after intervention period

**Method of measurement**

serum hs- CRP concentration in mg/L by kit

#### 9

**Description**

Serum malondialdehyde

**Timepoint**

baseline, 8 weeks after intervention period

**Method of measurement**

Fasting serum malondialdehyde concentration in  $\mu\text{mol/ml}$  by kit

#### 10

**Description**

Total Antioxidant Capacity

**Timepoint**

baseline, 8 weeks after intervention period

**Method of measurement**

Fasting serum Total Antioxidant Capacity in U/ml by kit

#### 11

**Description**

Gastrointestinal symptoms

**Timepoint**

baseline, 8 weeks after intervention period

**Method of measurement**

Using the questionnaire by percentage

### Secondary outcomes

#### 1

**Description**

Body Mass Index

**Timepoint**

baseline, 8 weeks after intervention period

**Method of measurement**

body weight / hight square ( $\text{kg/m}^2$ )

### Intervention groups

#### 1

**Description**

Dill powder, 1 gram , three capsule per day for 8 weeks

**Category**

Treatment - Other

#### 2

**Description**

placebo, 1 gram , three capsule per day for 8 weeks

**Category**

Treatment - Other

### Recruitment centers

#### 1

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

Specialized clinic of Golestan Hospital

**Full name of responsible person**

Mihammad Ali Sheikhi

**Street address**

Golestan Highway

**City**

AHVAZ

**Province**

Khouzestan

**Postal code**

61357-33118

**Phone**

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**Email**

sheikhi-m@ajums.ac.ir

## Sponsors / Funding sources

1

### Sponsor

**Name of organization / entity**

Ahvaz University of Medical Sciences

**Full name of responsible person**

Mohammad Badavi

**Street address**

Golestan Highway

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**Province**

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badavi-m@ajums.ac.ir

**Grant name**

**Grant code / Reference number**

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

Yes

**Title of funding source**

Ahvaz University of Medical Sciences

**Proportion provided by this source**

40

**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

**Name of organization / entity**

Ahvaz University of Medical Sciences

**Full name of responsible person**

Golnaz Amoochi Froushani

**Position**

Master of Student

**Latest degree**

Bachelor

**Other areas of specialty/work**

Nutrition

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## Person responsible for scientific inquiries

### Contact

**Name of organization / entity**

Ahvaz University of Medical Sciences

**Full name of responsible person**

Fatemeh Haidari

**Position**

Associate Professor

**Latest degree**

Ph.D.

**Other areas of specialty/work**

Nutrition

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## Person responsible for updating data

### Contact

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**Position**

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**Latest degree**

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**Other areas of specialty/work**

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Golnazamoochi@gmail.com

## 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**

it is not the objective of this study.

**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