

Clinical Trial Protocol

Iranian Registry of Clinical Trials

19 Sep 2026

Comparison effects of industrial and traditional honeys on blood glucose levels and its correlation with sucrose tests of honey (randomized clinical trial)

Protocol summary

Study aim

Determining the effects of different types honeys on blood sugar and comparing with laboratory analysis of honey

Design

Clinical trial with 5 intervention group, on 90 patients diabetics, with parallel groups, with one control group, blinded, randomized based on random number table of Krejcie & Morgan. Finally, SPSS software was used for data analysis.

Settings and conduct

The study will be performed in Imam Reza (AS) Clinic in Arak and is double-blind. The intervention group includes diabetic patients receiving traditional honey, industrial honey and fructose syrup (equivalent to 50 grams of dietary carbohydrates) consume fasting. First, fasting blood sugar is measured. Then the participants' blood sugar will be tested again after half an hour.

Participants/Inclusion and exclusion criteria

Inclusion criteria: 1)Diabetic patients with fast blood sugar greater than 110 mg/dL Exclusion criteria: 1)Pregnant and breastfeeding women 2)Patients with history of major surgery, or underlying disease, including cardiovascular, infectious 3)Non-insulin-dependent diabetes mellitus

Intervention groups

Intervention group include 5 groups: diabetic patients that receiving traditional honey, receiving 3 brand of different industrial honey and receiving fructose syrup. Each group consumes equivalent 50 grams of dietary carbohydrates in the form of soluble substance. The control group also includes patients receiving drinking water.

Main outcome variables

Blood glucose

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20210125050135N1**

Registration date: **2022-04-09, 1401/01/20**

Registration timing: **registered_while_recruiting**

Last update: **2022-04-09, 1401/01/20**

Update count: **0**

Registration date

2022-04-09, 1401/01/20

Registrant information

Name

Mohaddeseh Asafari

Name of organization / entity

Country

Iran (Islamic Republic of)

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+98 86 3368 5573

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Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2022-02-04, 1400/11/15

Expected recruitment end date

2022-05-05, 1401/02/15

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison effects of industrial and traditional honeys on blood glucose levels and its correlation with sucrose tests of honey (randomized clinical trial)

Public title

Comparison the effect of industrial and traditional honeys on blood glucose levels in diabetic patients

Purpose

Education/Guidance

Inclusion/Exclusion criteria

Inclusion criteria:

Fast blood sugar upper 110 mg/dl

Exclusion criteria:

Pregnant and breastfeeding women Patients with history of major surgery, or underlying disease, including cardiovascular and infectious Non-insulin dependent diabetes mellitus

Age

From **18 years** old to **60 years** old

Gender

Both

Phase

N/A

Groups that have been masked

- Participant
- Care provider

Sample size

Target sample size: **90**

More than 1 sample in each individual

Number of samples in each individual: **2**

Fasting blood samples and post-consumption, blood samples

Randomization (investigator's opinion)

N/A

Randomization description

Blinding (investigator's opinion)

Double blinded

Blinding description

Clinical caregivers and patients will not know whether they are in the control or intervention group. In this way, industrial, traditional honeys, fructose syrup and drinking water are prepared by a person (out-of-study, in a room away from the eyes of clinical caregivers and patients) in equal amounts in similar glasses as soluble and then coded, that only he is known from the contents of the dishes.

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Arak University of Medical Sciences

Street address

A'lam-Al-Hoda Street, Shahid Shiroodi Street, Arak, Markazi Province, Iran

City

Arak

Province

Markazi

Postal code

3819693345

Approval date

2021-01-19, 1399/10/30

Ethics committee reference number

IR.ARAKMU.REC.1399.291

Health conditions studied

1

Description of health condition studied

Diabetes Mellitus

ICD-10 code

E08

ICD-10 code description

Diabetes mellitus due to underlying condition

Primary outcomes

1

Description

Fast Blood Sugar (FBS)

Timepoint

FBS is measured at the beginning of study, then 30 minutes after consumption of honey will be measured again.

Method of measurement

Digital blood glucose testing device

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group 1: Diabetic patients receiving traditional honey (equivalent to 50 grams of carbohydrates consumed in the diet, once, fasting)

Category

Diagnosis

2

Description

Intervention group 2: Diabetic patients receiving

industrial honey (produced in Khomeyn Honey's Ferdows factory, with the Giti Sabz Khomeyn brand), (equivalent to 50 grams of carbohydrates consumed in the diet, once, fasting)

Category

Diagnosis

3

Description

Intervention group 3: Diabetic patients receiving industrial honey (produced in Khomeyn Honey's Salar factory, with the Salar brand), (equivalent to 50 grams of carbohydrates consumed in the diet, once, fasting)

Category

Diagnosis

4

Description

Intervention group 4: Diabetic patients receiving industrial honey (produced in Shahram Nabavi's factory, with the Teymareh brand), (equivalent to 50 grams of carbohydrates consumed in the diet, once, fasting)

Category

Diagnosis

5

Description

Intervention group 5: Diabetic patients receiving fructose syrup (produced in Zar Industrial and Research Group, with the Zar brand) (equivalent to 50 grams of carbohydrates consumed in the diet, once, fasting)

Category

Diagnosis

6

Description

Control group: Patients receiving drinking water (130 cc, once, fasting)

Category

N/A

Recruitment centers

1

Recruitment center

Name of recruitment center

Clinic of Imam Reza (AS)

Full name of responsible person

Bahman Sadeghi

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Abbas Abad, Shahid Shirodi

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Arak University of Medical Sciences

Full name of responsible person

Abbas Alimoradian

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Grant name

Grant code / Reference number

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

Yes

Title of funding source

Arak 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

Name of organization / entity

Arak University of Medical Sciences

Full name of responsible person

Abbas Alimoradian

Position

Assistant Professor

Latest degree

Ph.D.

Other areas of specialty/work

Pharmacology

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Sharing plan

Deidentified Individual Participant Data Set (IPD)

Yes - There is a plan to make this available

Study Protocol

Yes - There is a plan to make this available

Statistical Analysis Plan

Yes - There is a plan to make this available

Informed Consent Form

Yes - There is a plan to make this available

Clinical Study Report

Yes - There is a plan to make this available

Analytic Code

Yes - There is a plan to make this available

Data Dictionary

Yes - There is a plan to make this available

Title and more details about the data/document

The information will be published in the final report and article.

When the data will become available and for how long

The information will be published in the final report and article.

To whom data/document is available

The information will be published in the final report and article.

Under which criteria data/document could be used

The information will be published in the final report and article.

From where data/document is obtainable

The information will be published in the final report and article.

What processes are involved for a request to access data/document

The information will be published in the final report and article. If they need more information, they can send an email to responsible author.

Comments