

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

30 May 2026

### Survey glycemic index, glycemic load and satiety index of cookies prepared from white wheat flour and whole oleaster powder In healthy people

#### Protocol summary

##### Study aim

Determination of glycemic index, glycemic load and satiety index of cookies prepared from white wheat flour and whole oleaster powder In healthy people

##### Design

Randomized, not blinded, clinical trial in Phase 3 and for the determining the satiety index 30 healthy individuals are sufficient.

##### Settings and conduct

In this study will be participate 10 healthy people for determining the glyceamic index(GI) and load(GL), and 20 healthy people for determining the satiety index(SI). At the begining, people are referred to the laboratory after 10-12 hours fasting and a FBS sample is taken from them. Then glucose solution, cookies containing white flour, white flour mixed by whole oleaster powder (with different proportions) are given to individuals. then, for determinding of the GI and GL, blood samples will be taken at intervals of 30, 15, 45, 60, 90 and 120 minutes after eating. and for determinding of SI, the questionnaire will determine the amount of satiety of individuals at fasting times and every 15 minutes to 120 minutes after eating bread containing white flour and cookies containing white flour, white flour mixed by whole oleaster powder (with different proportions).

##### Participants/Inclusion and exclusion criteria

Inclusion criteria: Both sexes! ages 20-40 years! FBS levels (< 110 mg / dl) and BMI(18.5 to 24.9 kg / m<sup>2</sup>) within the normal range! following a common diet  
exclusion criteria: Pregnancy! Breast feeding! the use of drugs and diseases that affect the metabolism of blood sugar and the amount of the satiety and hunger

##### Intervention groups

Healthy people consume white bread, cookies prepared from white wheat flour and whole oleaster powder.

##### Main outcome variables

Glycemic index; glycemic load; satiety index

#### General information

##### Reason for update

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT20181016041362N1**

Registration date: **2018-11-19, 1397/08/28**

Registration timing: **prospective**

Last update: **2018-11-19, 1397/08/28**

Update count: **0**

##### Registration date

2018-11-19, 1397/08/28

##### Registrant information

##### Name

Jomaneh Heidari

##### Name of organization / entity

##### Country

Iran (Islamic Republic of)

##### Phone

+98 61 3338 7142

##### Email address

jheidari93@gmail.com

##### Recruitment status

**Recruitment complete**

##### Funding source

##### Expected recruitment start date

2018-11-22, 1397/09/01

##### Expected recruitment end date

2019-01-21, 1397/11/01

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

## Scientific title

Survey glycemic index, glycemic load and satiety index of cookies prepared from white wheat flour and whole oleaster powder In healthy people

## Public title

Determination of glycemic index, glycemic load and satiety index of cookies prepared from white wheat flour and whole oleaster powder In healthy people

## Purpose

Prevention

## Inclusion/Exclusion criteria

### Inclusion criteria:

The level of fasting blood glucose in the normal range (less than 110 mg / ml) normal BMI range (18.5 to 24.9 kg / m 2) following the usual diet

### Exclusion criteria:

Metabolic diseases Diabetes Cardiovascular disease

## Age

From **20 years** old to **40 years** old

## Gender

Both

## Phase

N/A

## Groups that have been masked

*No information*

## Sample size

Target sample size: **30**

## Randomization (investigator's opinion)

N/A

## Randomization description

## Blinding (investigator's opinion)

Not blinded

## Blinding description

## Placebo

Not 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

2018-10-13, 1397/07/21

## Ethics committee reference number

IR.AJUMS.REC.1397.478

## Health conditions studied

### 1

#### Description of health condition studied

healthy people

#### ICD-10 code

#### ICD-10 code description

## Primary outcomes

### 1

#### Description

Satiety index

#### Timepoint

Measure satiety in fasting and every 15 minutes after eating each bread for up to two hours in the first week, the second week and the third week.

#### Method of measurement

Using the VAS Questionnaire and Formula

### 2

#### Description

Glycemic index

#### Timepoint

Measurement of fasting and accurate fasting blood glucose levels at 15, 30, 45, 60, 90 and 120 after glucose and any of the breads in the first, second and third weeks.

#### Method of measurement

Using the glucometer device

## Secondary outcomes

### 1

#### Description

Glycemic load

#### Timepoint

First week, second week, third week

#### Method of measurement

Using formula

## Intervention groups

### 1

#### Description

Intervention group: cookies made from white wheat flour, water, baking powder, salt and oil, which each person randomly consumes once in the course of this 4-week intervention. This cookie should contain 50 grams of available carbohydrates for the glycemic index and 1,000 kiloules (240 kilocalories) of energy for the Satiety index.

#### Category

Lifestyle

## 2

### **Description**

Intervention group: cookies made from mixture of whole oleaster powder and white flour to a ratio of 1/2, water, baking powder, salt and oil, which each person randomly consumes once in the course of this 4-week intervention. This cookie should contain 50 grams of available carbohydrates for the glycemic index and 1,000 kiloules (240 kilocalories) of energy for the Satiety index.

### **Category**

Lifestyle

## 3

### **Description**

Intervention group: cookies made from mixture of 1/4 whole oleaster powder and 3/4 white flour, water, baking powder, salt and oil, which each person randomly consumes once in the course of this 4-week intervention. This cookie should contain 50 grams of available carbohydrates for the glycemic index and 1,000 kiloules (240 kilocalories) of energy for the Satiety index.

### **Category**

Lifestyle

## 4

### **Description**

Intervention group: Glucose solution (50 g dissolved in 250 ml of water) used to determine the glycemic index as a reference food.

### **Category**

Lifestyle

## **Recruitment centers**

## 1

### **Recruitment center**

#### **Name of recruitment center**

Nutrition and Metabolic Diseases Research Center

#### **Full name of responsible person**

Farideh Shishehbor

#### **Street address**

Golestan Highway

#### **City**

Ahvaz

#### **Province**

Khouzestan

#### **Postal code**

61357-33118

#### **Phone**

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#### **Email**

fari.shishehbor@gmail.com

## **Sponsors / Funding sources**

## 1

### **Sponsor**

#### **Name of organization / entity**

Ahvaz University of Medical Sciences

#### **Full name of responsible person**

Mohammad Badawi

#### **Street address**

Golestan Highway

#### **City**

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#### **Province**

Khouzestan

#### **Postal code**

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#### **Phone**

+98 61 3336 2414

#### **Email**

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**

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**

Ahvaz University of Medical Sciences

#### **Full name of responsible person**

Jomaneh heidari

#### **Position**

Masters of Nutrition

#### **Latest degree**

Bachelor

#### **Other areas of specialty/work**

Nutrition

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## Person responsible for scientific inquiries

### Contact

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PhD Nutrition

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Ph.D.

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## Person responsible for updating data

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**Position**

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**Latest degree**

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**Phone**

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**Email**

jheidari93@gmail.com

## 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