

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

10 Jun 2026

### The Comparison of the Effect of the 8 weeks aerobic and Resistance training on serum concentrations of nsafatin-1, vaspatin, myonectin, omentin and insulin resistance in obese women with diabetes

#### Protocol summary

Registration timing: **retrospective**

#### Study aim

The purpose of this study was to investigate the effect of aerobic and resistance training on some of the myokines and Adipokines among obese diabetes women .

Last update: **2018-10-28, 1397/08/06**

Update count: **0**

#### Registration date

2018-10-28, 1397/08/06

#### Design

The study design: pre and post test with control group. Among diabetes women (23 to 50 years old) who referred to Shahid Bahonar Hospital in Kerman, after calculating BMI (BMI), 45 were women (BMI > 25) and then are divided into 3 groups: resistance training, endurance training and control group.

#### Registrant information

##### Name

Abdolreza Kazemi

##### Name of organization / entity

##### Country

Iran (Islamic Republic of)

##### Phone

+98 34 3131 2102

##### Email address

a.kazemi@vru.ac.ir

#### Settings and conduct

Place of Practice Protocol: Bahonar Hospital in Kerman and Islamic Azad University of Kerman. Place of Blood Collection and Molecular Cell Tests: Bahonar Hospital in Kerman and Razi Lab

#### Recruitment status

**Recruitment complete**

#### Funding source

#### Participants/Inclusion and exclusion criteria

Conditions for entering the research: Body mass index > 25 specialist permission to perform the practice protocol performed the practice protocol according to PAR-Q diabetes Conditions for not entering the research: Alcohol consumption Smoking Continuous physical activity Cardiovascular disease High blood pressure

#### Expected recruitment start date

2015-10-23, 1394/08/01

#### Expected recruitment end date

2016-02-20, 1394/12/01

#### Intervention groups

1- resistance training group 2- endurance training group 3- control group

#### Actual recruitment start date

2015-10-23, 1394/08/01

#### Actual recruitment end date

2015-11-22, 1394/09/01

#### Main outcome variables

nsafatin-1, visfatin, lipid profile, myonectin, chemrin, omentin and insulin resistance

#### Trial completion date

2016-03-19, 1394/12/29

#### General information

##### Reason for update

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT20180708040399N1**

Registration date: **2018-10-28, 1397/08/06**

#### Scientific title

The Comparison of the Effect of the 8 weeks aerobic and Resistance training on serum concentrations of nsafatin-1, vaspatin, myonectin, omentin and insulin resistance in obese women with diabetes

#### Public title

The effects of aerobic and resistance training on some serum Adipokines and myokines in obese diabetes women.

#### **Purpose**

Health service research

#### **Inclusion/Exclusion criteria**

##### **Inclusion criteria:**

diabetes Body mass index > 25 Permission to performed the practice protocol by a specialist performed the practice protocol according to PAR-Q

##### **Exclusion criteria:**

Cardiovascular disease Negative exercise test High blood pressure Deep scars in the limbs Not having written consent

#### **Age**

From **23 years** old to **50 years** old

#### **Gender**

Female

#### **Phase**

N/A

#### **Groups that have been masked**

*No information*

#### **Sample size**

Target sample size: **45**

Actual sample size reached: **45**

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

Randomized

#### **Randomization description**

Among the volunteers, diabetes overweight and obese women, 45 were randomly selected and then t were randomly divided: 15 women in resistance training group, 15 women for endurance training group and 15 diabetes overweight and obese women will be selected as the control group.

#### **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**

Kerman University of Medical Sciences

###### **Street address**

158257842- Physiology Research Center - Somayeh Crossroads- Shariati Ave.

###### **City**

Kerman

###### **Province**

Kerman

###### **Postal code**

158257842

##### **Approval date**

2016-02-20, 1394/12/01

##### **Ethics committee reference number**

IR.KMU.REC.1394.407

### **Health conditions studied**

#### **1**

##### **Description of health condition studied**

diabetes

##### **ICD-10 code**

E08

##### **ICD-10 code description**

Diabetes mellitus due to underlying condition

### **Primary outcomes**

#### **1**

##### **Description**

Nisfatin

##### **Timepoint**

Before and After 6 Weeks of Exercise training

##### **Method of measurement**

ELISA method

#### **2**

##### **Description**

Visfatin

##### **Timepoint**

Before and After 6 Weeks of Exercise training

##### **Method of measurement**

ELISA method

#### **3**

##### **Description**

, profile lipid

##### **Timepoint**

Before and After 6 Weeks of Exercise training

##### **Method of measurement**

ELISA method

#### **4**

##### **Description**

Myonectine

##### **Timepoint**

Before and After 6 Weeks of Exercise training

##### **Method of measurement**

ELISA method

#### **5**

##### **Description**

chemerin

##### **Timepoint**

Before and After 6 Weeks of Exercise training

##### **Method of measurement**

ELISA method

## 6

### Description

omentin-1

### Timepoint

Before and After 6 Weeks of Exercise training

### Method of measurement

ELISA method

## 7

### Description

Insulin Resistance

### Timepoint

Before and After 6 Weeks of Exercise training

### Method of measurement

ELISA method

## Secondary outcomes

empty

## Intervention groups

### 1

#### Description

Intervention group: 6 Weeks endurance training, No drug is consumed. Do not undergo surgery.

#### Category

Other

### 2

#### Description

Intervention group: 6 Weeks resistance training, No drug is consumed. Do not undergo surgery.

#### Category

Other

### 3

#### Description

Control group: An intervention is not considered.

#### Category

Other

## Recruitment centers

### 1

#### Recruitment center

##### Name of recruitment center

Kerman Physiology Research Center

##### Full name of responsible person

Mohammad Pour ranjbar

##### Street address

158257842- Physiology Research Center - Somayeh Crossroads- Shariati Ave. -Kerman

##### City

Kerman

### Province

Kerman

### Postal code

158257842

### Phone

+98 34 3131 2102

### Fax

+98 34 3131 2102

### Email

rkazemi22@yahoo.com

## Sponsors / Funding sources

### 1

#### Sponsor

##### Name of organization / entity

Kerman University of Medical Sciences

##### Full name of responsible person

Abas Pardakhti

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158257842- Physiology Research Center - Crossroads Somayeh - Shariati Ave. -Kerman

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##### Phone

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##### Email

abpardakhty@kmu.ac.ir

#### Grant name

abas pardakhti

#### Grant code / Reference number

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

Yes

#### Title of funding source

Kerman 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

Kerman University of Medical Sciences

#### Full name of responsible person

Mohammad Pourranjbar

**Position**

Associate professor

**Latest degree**

Ph.D.

**Other areas of specialty/work**

Others

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**Person responsible for scientific inquiries****Contact****Name of organization / entity**

Kerman University of Medical Sciences

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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