

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

21 Jun 2026

### the Effect of Eight Weeks Resistance Training With Dumbbell and Thera Band on the Body Composition and Muscular Strength in Middle-aged Obese Women

#### Protocol summary

##### Study aim

Comparison the Effects of Resistance Training With Dumbbell and Thera Bands on Muscular Strength and Body Composition in Middle-aged Women

##### Design

Control, Two Parallel Group, Single Blinded Randomised Controlled Trail that Conducted on 26 Middle-age Healthy Women.

##### Settings and conduct

The Resistance Training Program is Conduct in Tehran For Eight Weeks in a Gym. Subjects in Training Groups with dumbbells or Thera Band Will Train Four Sessions Per Week for 40 to 60 Minutes Per Session. Each Exercise Session for Both Intervention Groups Includes 10 Minutes Warm-up, a Major Resistance Training and Five Minutes Cooling Down. In Order to Dividing subjects, Single Blinded Trail and Random-number Table Will Used.

##### Participants/Inclusion and exclusion criteria

All Subjects in Present Study Should be Healthy, Obese and With no Cardiovascular Disease and Diabetes. In the Case of Physical Restrictions for Take Part in Exercise Training, the illness and the Age of Less Than 40 and More Than 50 Years, Subjects are Excluded From the Research.

##### Intervention groups

Subjects in Intervention Groups, including a Training with dumbbell or Thera Band Groups Participate in a Resistance Training Program for Eight Weeks and Four Sessions per Week. At the Same Time, the Control Group Will Continue to Their Daily Routines Without Participating in Regular Exercise Training.

##### Main outcome variables

Muscle Strength, Body Composition

#### General information

##### Reason for update

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT20180411039273N1**

Registration date: **2018-06-24, 1397/04/03**

Registration timing: **prospective**

Last update: **2018-06-24, 1397/04/03**

Update count: **0**

##### Registration date

2018-06-24, 1397/04/03

##### Registrant information

##### Name

Mandana Gholami

##### Name of organization / entity

##### Country

Iran (Islamic Republic of)

##### Phone

+98 21 8824 0851

##### Email address

m.gholami@srbiau.ac.ir

##### Recruitment status

**Recruitment complete**

##### Funding source

##### Expected recruitment start date

2018-07-23, 1397/05/01

##### Expected recruitment end date

2018-08-01, 1397/05/10

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

##### Scientific title

the Effect of Eight Weeks Resistance Training With

Dumbbell and Thera Band on the Body Composition and Muscular Strength in Middle-aged Obese Women

**Public title**

Effect of Exercise Training on Body Composition and Muscular Strength in Obese Women

**Purpose**

Supportive

**Inclusion/Exclusion criteria**

**Inclusion criteria:**

Healthy Obese Women Who are not Suffering from Any Disease Subjects Should not be Menopause The Subjects' Age Ranges from 40 to 50 Years

**Exclusion criteria:**

Women Afflicted by diabetes or Cancer Subjects with Cardiovascular Diseases Women Aged Less Than 40 and Over 50 Years Physical Restrictions to Participate in Exercises Training

**Age**

From **40 years** old to **50 years** old

**Gender**

Female

**Phase**

N/A

**Groups that have been masked**

- Participant
- Data analyser

**Sample size**

Target sample size: **26**

Actual sample size reached: **9**

**Randomization (investigator's opinion)**

Randomized

**Randomization description**

Subjects Individually and According to Simple Randomization Assigned in Different Groups by Means of Random-number Table.

**Blinding (investigator's opinion)**

Single blinded

**Blinding description**

In Order to Subjects Dividing in Different Groups, at Meeting with no Presence of Subjects, Each of Them Was Allocated a Number, and the Numbers Were Randomly Selected by One Person and the Researcher Was Not Involved in the Selection of the Numbers. The First 12 Subjects were Chosen for Thera band Group, Second 12 Person for Control Group and 12 Final Person for Training Group with Dumbbells.

**Placebo**

Not used

**Assignment**

Parallel

**Other design features**

**Secondary Ids**

empty

**Ethics committees**

**1**

**Ethics committee**

**Name of ethics committee**

Ethics Committee of the Institute of Physical Education and Sport Sciences

**Street address**

No. 3, 5 th st., Mir Emad st., Motahari Ave., Tehran

**City**

Tehran

**Province**

Tehran

**Postal code**

1587958711

**Approval date**

2018-04-07, 1397/01/18

**Ethics committee reference number**

IR.SSRI.REC.1396.196

**Health conditions studied**

**1**

**Description of health condition studied**

obesity

**ICD-10 code**

E66

**ICD-10 code description**

Overweight and obesity

**Primary outcomes**

**1**

**Description**

Changes in Subjects Strength

**Timepoint**

Measure of Muscle Strength in Baseline (Before Intervention) and After Eight Weeks Resistance Training with Dumbbell or Thera Band

**Method of measurement**

One Maximum Repetition (1RM) Test

**2**

**Description**

Body Composition Changes

**Timepoint**

Determine the Body Composition in Baseline (Before Intervention) and After Eight Weeks Resistance Training with Dumbbell or Thera Band

**Method of measurement**

Measuring Skin Folds With Caliper

**Secondary outcomes**

empty

**Intervention groups**

## 1

### **Description**

Intervention Group: Subjects in This Group Train with Dumbbell for Eight Weeks and Four Session Per Week.

### **Category**

Rehabilitation

## 2

### **Description**

Intervention group: Participants Train for Eight Weeks and Four Session Per Week with Elastic Bands

### **Category**

Prevention

## 3

### **Description**

Control group: This Group Participants Continue Daily Routine Activities and Avoided from Take Part in an Exercise Training Over Eight Weeks Period.

### **Category**

Rehabilitation

## **Recruitment centers**

## 1

### **Recruitment center**

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

Fath Gym

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

Mandana Gholami

#### **Street address**

Science and Research Branch, Daneshgah Blvd,  
Simon Bulivar Blvd,

#### **City**

tehran

#### **Province**

Tehran

#### **Postal code**

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#### **Phone**

+98 21 4486 8486

#### **Email**

gholami\_man@yahoo.com

#### **Web page address**

## **Sponsors / Funding sources**

## 1

### **Sponsor**

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

Islamic Azad University

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

Mandana Gholami

#### **Street address**

Simon Bolivar st

#### **City**

Tehran

#### **Province**

Tehran

#### **Postal code**

1477893855

#### **Phone**

+98 21 8824 0851

#### **Email**

gholami\_man@yahoo.com

### **Grant name**

### **Grant code / Reference number**

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

Yes

### **Title of funding source**

Islamic Azad University

### **Proportion provided by this source**

20

### **Public or private sector**

Private

### **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**

Islamic Azad University

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

Mandana Gholami

#### **Position**

Assistant Professor

#### **Latest degree**

Ph.D.

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

Sport Medicine

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## **Person responsible for scientific inquiries**

### **Contact**

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

Islamic Azad University

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**Email**

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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 File Will be Presented in The Form of a Thesis and Research Article

**When the data will become available and for how long**

4 Month After Results Publication

**To whom data/document is available**

All students

**Under which criteria data/document could be used**

For Functional Use

**From where data/document is obtainable**

At Islamic Azad University

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

At the Central Library of The Islamic Azad University of Science and Research Branch

**Comments**