

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

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Science and Research Branch, Daneshgah Blvd,
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Web page address

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Islamic Azad University

Full name of responsible person

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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

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 updating data**Contact****Name of organization / entity**

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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