

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

08 Jul 2026

**Comparison the effects of a period of concurrent training on some physical fitness factors, body composition and blood biochemical parameters and glucose homeostasis and leptin,cortisol and testosterone and levels of inflammatory and coagulation markers with normal weight and obese**

### Protocol summary

#### Summary

The main objective of this research Comparison the effects of a period of concurrent training on some physical fitness factors, body composition and blood biochemical parameters and glucose homeostasis and leptin,cortisol and testosterone and levels of inflammatory and coagulation markers with normal weight and obese Design: Is a prevention trial. How do 30girls 15-13 years Voluntarily In this study, there will be Which is based on objective In two groups 15 people Normal weigh and Obese Divided. Exclusion criteria: Unwillingness to participate in research Interventions: Subjects For 6 weeks in Schedule At the same time exercise endurance and Pilates Will participate. Changes the primary outcome: Glucose homeostasis, Blood biochemical parameters and leptin,cortisol and testosterone and levels of inflammatory and coagulation markers , Fitness tests Contains : Shuttle run test and Wingate Also Body Composition Will be examined

### General information

#### Acronym

#### IRCT registration information

IRCT registration number: **IRCT2016022222498N7**  
Registration date: **2016-09-13, 1395/06/23**  
Registration timing: **retrospective**

Last update:

Update count: **0**

#### Registration date

2016-09-13, 1395/06/23

#### Registrant information

#### Name

Ramin Shabani

#### Name of organization / entity

Islamic Azad University

#### Country

Iran (Islamic Republic of)

#### Phone

+98 13 3375 2715

#### Email address

shabani@iaurasht.ac.ir

#### Recruitment status

**Recruitment complete**

#### Funding source

Vice Chancelior of Reserch,University of Islamic Azad,RashtBrach

#### Expected recruitment start date

2015-06-22, 1394/04/01

#### Expected recruitment end date

2015-07-23, 1394/05/01

#### Actual recruitment start date

empty

#### Actual recruitment end date

empty

#### Trial completion date

empty

#### Scientific title

Comparison the effects of a period of concurrent training on some physical fitness factors, body composition and blood biochemical parameters and glucose homeostasis and leptin,cortisol and testosterone and levels of inflammatory and coagulation markers with normal weight and obese

#### Public title

Comparison the effects of a period of concurrent training on some physical fitness factors, body composition and blood biochemical parameters and glucose homeostasis and leptin, cortisol and testosterone and levels of inflammatory and coagulation markers with normal weight and obese female students

#### **Purpose**

Prevention

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

Inclusion criteria: female students aged 13 to 15 years old; and with normal weight and obese Exclusion criteria: Unwillingness to participate.

#### **Age**

From **81 years** old to **79 years** old

#### **Gender**

Female

#### **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**

Single

#### **Other design features**

### **Secondary Ids**

empty

### **Ethics committees**

#### **1**

##### **Ethics committee**

###### **Name of ethics committee**

Ethics Committee of Islamic Azad University, Rasht, Science and R

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

Lakan Gate, Azad University Of Rasht Branch, Guilan

###### **City**

Rasht

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

##### **Approval date**

2015-08-11, 1394/05/20

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

IR.IAU.RASHT.REC.1395.5

### **Health conditions studied**

#### **1**

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

Obesity

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

E66.0

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

Obesity due to excess calories

### **Primary outcomes**

#### **1**

##### **Description**

Insulin resistance

##### **Timepoint**

Before and after 6 Week exercise

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

it was measured with HOMA-IR index

#### **2**

##### **Description**

Insulin

##### **Timepoint**

Before and after 6 Week exercise

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

According mg/dl and Blood samples

#### **3**

##### **Description**

Fasting blood glucose

##### **Timepoint**

Before and after 6 Week exercise

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

According mg/dl and Blood samples

#### **4**

##### **Description**

Total Cholesterol

##### **Timepoint**

Before and after 6 Week exercise

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

According mg/dl and Blood samples

#### **5**

##### **Description**

Triglycerides

##### **Timepoint**

Before and after 6 Week exercise

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

According mg/dl and Blood samples

#### **6**

##### **Description**

High-density Lipoprotein

##### **Timepoint**

Before and after 6 Week exercise

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

According mg/dl and Blood samples

## 7

### **Description**

Low-densityLipoprotein

### **Timepoint**

Before and after 6 Weekexerciese

### **Method of measurement**

Accordingmg/dl and Blood samples

## 8

### **Description**

Cortisol

### **Timepoint**

Before and after 6 Weekexerciese

### **Method of measurement**

Specific Kits

## 9

### **Description**

Testosterone

### **Timepoint**

Before and after 6 Weekexerciese

### **Method of measurement**

Specific Kits

## 10

### **Description**

Leptin

### **Timepoint**

Before and after 6 Weekexerciese

### **Method of measurement**

Specific Kits

## 11

### **Description**

Inflammatory markers and coagulation

### **Timepoint**

Before and after 6 Weekexerciese

### **Method of measurement**

Specific Kits

## 12

### **Description**

Fibrinogen

### **Timepoint**

Before and after 6 Weekexerciese

### **Method of measurement**

Specific Kits

## 13

### **Description**

Hs-CRP

### **Timepoint**

Before and after 6 Weekexerciese

### **Method of measurement**

Specific Kits

## 14

### **Description**

CBC

### **Timepoint**

Before and after 6 Weekexerciese

### **Method of measurement**

Specific Kits

## **Secondary outcomes**

### 1

#### **Description**

Fitness Indicators

#### **Timepoint**

Befor Exercise Training-6Week after Excercise Training

#### **Method of measurement**

Shattel run Test-wingate Test

### 2

#### **Description**

Body composition

#### **Timepoint**

Before Exercise Training-6Week after Excercise Training

#### **Method of measurement**

BMI-WHR-BF%

## **Intervention groups**

### 1

#### **Description**

6 weeks endurance and pilates concurrent Exercises

#### **Category**

N/A

## **Recruitment centers**

### 1

#### **Recruitment center**

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

Education

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

Najmeh Abbaspour

##### **Street address**

Lakan, Rasht

##### **City**

Rasht

## **Sponsors / Funding sources**

### 1

#### **Sponsor**

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

Vice chancellor for research, University of Islamic Azad, Science and Research of Rasht branch

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

Dr Ramin Shabani

**Street address**

Lakan Gate, Azad University, Rasht Branch

**City**

Rasht

**Grant name****Grant code / Reference number****Is the source of funding the same sponsor organization/entity?**

Yes

**Title of funding source**

Vice chancellor for research, University of Islamic Azad, Science and Research of Rasht branch

**Proportion provided by this source**

100

**Public or private sector**

*empty*

**Domestic or foreign origin**

*empty*

**Category of foreign source of funding**

*empty*

**Country of origin****Type of organization providing the funding**

*empty*

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

Islamic Azad University, Rasht Branch

**Full name of responsible person**

Faeghe gahangiri

**Position**

MSC

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**Full name of responsible person**

Dr Ramin Shabani

**Position**

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**Web page address****Person responsible for updating data****Contact****Name of organization / entity**

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**Full name of responsible person**

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llsepide\_hooshyari@yahoo.com faeghejhangiri303@hotmail.com

**Web page address****Sharing plan****Deidentified Individual Participant Data Set (IPD)**

*empty*

**Study Protocol**

*empty*

**Statistical Analysis Plan**

*empty*

**Informed Consent Form**

*empty*

**Clinical Study Report**

*empty*

**Analytic Code**

*empty*

**Data Dictionary**

*empty*