

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

27 May 2026

### The Effect of Melatonin on Aerobic Capacity and Time of Exhaustion during a Sub-Maximum Activity in Girls student in Physical Education

#### Protocol summary

2018-06-25, 1397/04/04

#### Study aim

Study of supplementation of melatonin on aerobic capacity, maximum oxygen consumption and under-maximum activity time in girls

#### Design

Clinical trials with control group, cross-over, randomized, 13 female physical education student

#### Settings and conduct

This quasi-experimental and applied research was carried out in a cross-sectional manner. The subjects visited the laboratory of Shahid Chamran physical education faculty of Ahvaz from 9 am to 12 noon.

#### Participants/Inclusion and exclusion criteria

Participants: Students of Ahvaz Shahid Chamran University  
Entry: Non-specific disease, regular physical activity  
Exit: Failure to comply with nutritional requirements  
Do not use pre-test supplements

#### Intervention groups

in the control group, the effect of placebo on performance was investigated. In the intervention group, the effect of supplementation of melatonin on performance was investigated.

#### Main outcome variables

Aerobic Capacity, Time of Exhaustion during a Sub-Maximum Activity

#### General information

##### Reason for update

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT20180325039147N1**  
Registration date: **2018-06-25, 1397/04/04**  
Registration timing: **retrospective**

Last update: **2018-06-25, 1397/04/04**

Update count: **0**

##### Registration date

#### Registrant information

##### Name

Fatemeh Shiravand

##### Name of organization / entity

##### Country

Iran (Islamic Republic of)

##### Phone

+98 66 3322 1984

##### Email address

ro.ranjbar@scu.ac.ir

#### Recruitment status

##### Recruitment complete

#### Funding source

#### Expected recruitment start date

2017-10-23, 1396/08/01

#### Expected recruitment end date

2017-11-22, 1396/09/01

#### Actual recruitment start date

empty

#### Actual recruitment end date

empty

#### Trial completion date

empty

#### Scientific title

The Effect of Melatonin on Aerobic Capacity and Time of Exhaustion during a Sub-Maximum Activity in Girls student in Physical Education

#### Public title

The Effect of Melatonin on Aerobic Capacity and Time of Exhaustion in Girls

#### Purpose

Other

#### Inclusion/Exclusion criteria

##### Inclusion criteria:

regular physical activity Lack of specific disease

##### Exclusion criteria:

Disrespect the nutritional requirements Loss of supplement before the test

### Age

From **20 years** old to **25 years** old

### Gender

Female

### Phase

N/A

### Groups that have been masked

*No information*

### Sample size

Target sample size: **13**

### Randomization (investigator's opinion)

Not randomized

### Randomization description

### Blinding (investigator's opinion)

Not blinded

### Blinding description

### Placebo

Not used

### Assignment

Crossover

### Other design features

## Secondary Ids

empty

## Ethics committees

### 1

#### Ethics committee

##### Name of ethics committee

Shahid Chamran University of Ahvaz

##### Street address

golestan

##### City

اهواز

##### Province

Khouzestan

##### Postal code

6816853566

#### Approval date

2017-06-14, 1396/03/24

#### Ethics committee reference number

IR.BHN.REC.1396.3

## Health conditions studied

### 1

#### Description of health condition studied

Time of Exhaustion, Aerobic Capacity

#### ICD-10 code

#### ICD-10 code description

## Primary outcomes

### 1

#### Description

aerobic capacity

#### Timepoint

Measurement of aerobic capacity half an hour after taking the supplement or placebo with intervals of 5 to 7 days after intervention

#### Method of measurement

Measurement of Aerobic Power by Bruce Test

## Secondary outcomes

empty

## Intervention groups

### 1

#### Description

Intervention group: supplementation of 6 mg of melatonin (made in nature med factory of canada) with water 30 Minutes before each test

#### Category

Treatment - Drugs

### 2

#### Description

Control group: 6 mg of placebo (Starch) with water 30 minutes before each test

#### Category

Placebo

## Recruitment centers

### 1

#### Recruitment center

##### Name of recruitment center

Shahid Chamran University of Ahvaz

##### Full name of responsible person

Fatemeh Shiravand

##### Street address

Golestan

##### City

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##### Province

Khouzestan

##### Postal code

6816853566

##### Phone

+98 66 3322 1984

##### Email

Fatemeh71shiravand@gmail.com

## Sponsors / Funding sources

### 1

#### Sponsor

Name of organization / entity

Shahid Chamran University of Ahvaz

**Full name of responsible person**

Dr Roohollah Ranjbar

**Street address**

Golestan

**City**

Ahvaz

**Province**

Khouzestan

**Postal code**

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**Phone**

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**Email**

Fatemeh71shiravand@gmail.com

**Grant name**

**Grant code / Reference number**

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

Yes

**Title of funding source**

Shahid Chamran University of Ahvaz

**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**

Shahid Chamran University Of Ahvaz

**Full name of responsible person**

Roohollah Ranjbar

**Position**

Assistant Professor

**Latest degree**

Ph.D.

**Other areas of specialty/work**

Physical Education

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**Postal code**

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## Person responsible for scientific inquiries

**Contact**

**Name of organization / entity**

Shahid Chamran University of Ahvaz

**Full name of responsible person**

Fatemeh Shiravand

**Position**

Student

**Latest degree**

Master

**Other areas of specialty/work**

Sport Physiology

**Street address**

Golestan

**City**

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## Person responsible for updating data

**Contact**

**Name of organization / entity**

Shahid Chamran University of Ahvaz

**Full name of responsible person**

Fatemeh Shiravand

**Position**

Student

**Latest degree**

Master

**Other areas of specialty/work**

Physical Education

**Street address**

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**City**

Ahvaz

**Province**

Khouzestan

**Postal code**

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**Phone**

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**Email**

Fatemeh71shiravand@gmail.com

## 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**

Not applicable

**Data Dictionary**

Not applicable

**Title and more details about the data/document**

Only part of the information, such as information on the main outcome or the like, can be shared.

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

Start the access period 2 months after printing results

**To whom data/document is available**

This data will be available to researchers working in academia and academia

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

For scientific research. Rasht Students Physical Education or Nutrition

**From where data/document is obtainable**

shahid Chamran University of Ahvaz. Mr. Dr. Ranjbar

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

If needed, data to complete scientific research or use it for exercise in sports

**Comments**