

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

Khuzestan

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

Ahvaz

Province

Khuzestan

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

۶۸۱۶۸۵۳۵۶۶

Phone

+98 66 3322 1984

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

Street address

Golestan

City

Ahvaz

Province

Khouzestan

Postal code

۶۸۱۶۸۵۳۵۶۶

Phone

+98 66 3322 1984

Email

Ro.Ranjbar@Scu.Ac.Ir

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

Ahvaz

Province

Khouzestan

Postal code

6816853566

Phone

+98 66 3322 1984

Email

Fatemeh71Shiravand@gmail.com

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

Golestan

City

Ahvaz

Province

Khouzestan

Postal code

۶۸۱۶۸۵۳۵۶۶

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+98 66 3322 1984

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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