

Clinical Trial Protocol

Iranian Registry of Clinical Trials

18 Sep 2026

Acute effects of Ashwagandha consumption on aerobic and anaerobic power and fatigue in soccer players

Protocol summary

Study aim

survey of the acute effects of Ashwagandha supplement on soccer players after 14 days of consuming this supplement to aerobic and anaerobic capacity and fatigue.

Design

A clinical trial with a control group, supplement consumption, triple blind, randomized, on 30 subjects. The rand function of Excel software is used for randomization.

Settings and conduct

Subjects are selected from soccer players in Neiriz city and randomly placed in two groups of supplement and placebo. A session before the introduction, measurements related to anthropometric characteristics and some physical fitness factors are performed. after 14 days of supplementation, post-test will be conducted like the pre-test. Triple blinding is done and the researcher, team coach and players are unaware of the contents of the capsules.

Participants/Inclusion and exclusion criteria

Inclusion criteria: Soccer players, 18-30 years, not suffering from physical and mental diseases, not undergoing any type of treatment during the research period, not using tobacco, alcohol, sports supplements and not following Special diet. Exclusion criteria: injury and Digestive disorders, Unwillingness to continue participating in research

Intervention groups

Intervention group: 15 people consume two 300 mg capsules of Ashwagandha (Olimp Ashwagandha 600 Sport) every day, (in the morning and evening) for 14 days. Control group: 15 people consume two 300 mg capsules of placebo (Corn starch) every day, in the morning and evening for 14 days.

Main outcome variables

The main variables include aerobic and anaerobic capacity and fatigue.

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20230910059392N3**

Registration date: **2023-11-09, 1402/08/18**

Registration timing: **retrospective**

Last update: **2023-11-09, 1402/08/18**

Update count: **0**

Registration date

2023-11-09, 1402/08/18

Registrant information

Name

Hakimeh Akbari

Name of organization / entity

Semnan University

Country

Iran (Islamic Republic of)

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Email address

h.akbari@semnan.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2023-09-17, 1402/06/26

Expected recruitment end date

2023-10-03, 1402/07/11

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Acute effects of Ashwagandha consumption on aerobic and anaerobic power and fatigue in soccer players

Public title

The Effect of Ashwagandha Supplements on Football Players

Purpose

Other

Inclusion/Exclusion criteria**Inclusion criteria:**

General health and no physical and motor complications such as back pain and knee pain Regular physical activity (bodybuilding exercises, soccer training at least three months prior to screening for this study) will be considered eligible

Exclusion criteria:

If taking dietary supplements, medications or steroids used to increase physical performance A history of heart disease, diabetes, Digestive diseases, depression, stroke or neurological disorder Participants if taking sedatives .misuse of drugs, orthopedic or surgical injury in the last 6 months

Age

From **18 years** old to **30 years** old

Gender

Male

Phase

N/A

Groups that have been masked

- Participant
- Investigator
- Outcome assessor
- Data analyser

Sample size

Target sample size: **30**

Randomization (investigator's opinion)

Randomized

Randomization description

Block randomization, blocks of 4, 6 and 8, block sequence randomly and the unit of randomization is the individual, which is done using the RAND function of Excel statistical software. The epidemiologist consultant will prepare a list of subjects based on random numbers created through Excel software (between 0 and 1) before starting the work. Subjects are entered into the random chain in order from number 1 to 30.

Blinding (investigator's opinion)

Triple blinded

Blinding description

In this study, the packaging of the placebo similar to the original drug is done by someone other than the researcher (as an informed person) and the drugs are assigned a code. The packages are delivered to the team coach along with a form where the names of the players are noted in the relevant codes. The coach is not aware of the contents of the packages. Medicines are distributed among the players randomly and the players (participants) are also unaware of the contents of the packages. At the end, the examiner performs the tests without knowing about the groupings and writes down

the names in a form. The data collected from the pre-test and post-test forms are provided to the statistical analyst to analyze the data based on codes and names. Finally, after analyzing the data, decoding is done.

Placebo

Used

Assignment

Other

Other design features

The functional tests of this study are specific to soccer.

Secondary Ids

empty

Ethics committees**1****Ethics committee****Name of ethics committee**

Ethics committee in Semnan medical science research

Street address

Iran, Semnan, Semnan University, Faculty of Humanities, Department of Physical Education

City

Semnan

Province

Semnan

Postal code

35131- 19111

Approval date

2023-08-28, 1402/06/06

Ethics committee reference number

IR.SEMUMS.REC.1402.122

Health conditions studied**1****Description of health condition studied**

Ashuganda and football

ICD-10 code**ICD-10 code description****Primary outcomes****1****Description**

Aerobic power

Timepoint

Aerobic capacity will be measured before and 48 hours after Ashwagandha consumption

Method of measurement

Aerobic power is measured with a stopwatch to determine the desired record and distance, and the YOYO IRL1 test is used to evaluate aerobic power.

2

Description

Anaerobic power

Timepoint

Anaerobic capacity will be measured before and 48 hours after Ashwagandha consumption

Method of measurement

Anaerobic power is measured with a stopwatch to determine the desired record and distance. RAST test is used to measure anaerobic power.

3

Description

Fatigue

Timepoint

Fatigue will be measured before and 48 hours after Ashwagandha consumption

Method of measurement

Fatigue is measured with a stopwatch to determine the desired record and distance, which the RAST test is used to evaluate fatigue.

Secondary outcomes

empty

Intervention groups

1

Description

Control group: 15 people consume two 300 mg capsules of placebo (Corn starch) every day, in the morning and evening for 14 days.

Category

Other

2

Description

Intervention group: 15 people consume two 300 mg capsules of Ashwagandha (Olimp Ashwagandha 600 Sport) every day, (in the morning and evening) for 14 days.

Category

Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Shohada Ni Raz sports stadium, Chaman field

Full name of responsible person

Beigi Mohammad Reza

Street address

Neiriz Shohada Stadium, takhti street, neiriz, fars, IR Iran

City

Neiriz city

Province

Semnan

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7491865517

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+98 71 5384 1012

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mohammadrezabeygi1997@gmail.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Semnan University

Full name of responsible person

Akbari Hakimeh

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Iran, Semnan, Semnan University, Faculty of Humanities, Department of Physical Education

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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

Semnan University

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

Semnan University

Full name of responsible person

Akbari Hakimeh

Position

Assistant Professor

Latest degree

Ph.D.

Other areas of specialty/work

exercise physiology

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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

Not applicable

Informed Consent Form

No - There is not a plan to make this available

Clinical Study Report

Not applicable

Analytic Code

Not applicable

Data Dictionary

Not applicable

Title and more details about the data/document

Provide information on the main outcome

When the data will become available and for how long

Access starts 6 months after results are published

To whom data/document is available

Only researchers working in academic and scientific institutions

Under which criteria data/document could be used

The use of data in review studies and meta-analysis is allowed

From where data/document is obtainable

It is possible to receive the data via e-mail:
h.akbari@semnan.ac.ir

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

Submission of documents is one month after the request.

Comments