

Clinical Trial Protocol

Iranian Registry of Clinical Trials

06 Jul 2026

The effect of sports drink consumption on some hematological indicators, renal function and perception of difficulty in football players

Protocol summary

Study aim

The main purpose of this study is to investigate the effect of consuming sports energy drinks on hematological indicators, renal function, and the Rated Perceived Exertion of football players during football matches.

Design

The design of the present study includes a cross-sectional design, semi-experimental field, one-blinded in which 22 male soccer players were selected by the available sampling method. Fasting blood samples will be taken 5 days before a 90-minute football match, before the start of the game, at the end of the 90-minute match, and one day after the match in two stages. All participants will drink 2 250 ml Hype Sports Drinks at regular intervals. Then, after two weeks of rest, all of the above conditions will be repeated once again using a placebo that contains sucrose water.

Settings and conduct

After calling, first, a briefing session will be held for the volunteers to describe the research program, and the written consent form, physical activity preparation questionnaires, health screening, and personal information will be completed. The present research will be conducted on a football field in the city of Masal. Participants are not aware of the contents of the beverage bottle in two stages.

Participants/Inclusion and exclusion criteria

Inclusion: Gender (male) Age (18 to 30 years) Sports history (at least 5 years) Exclusion: Smoking ingestion of energetic supplements in the past 1 months having a history of cardiovascular disease Having a history of musculoskeletal diseases Having a history of neurological and hormonal diseases No history of surgery

Intervention groups

Energy drink group Placebo group

Main outcome variables

Renal function variables (urea; creatinine) Serum level of hematological indicators (hemoglobin mass; hematocrit

percentage; and red and white blood cell count) Rated Perceived Exertion

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20180503039517N9**

Registration date: **2021-02-01, 1399/11/13**

Registration timing: **prospective**

Last update: **2021-02-01, 1399/11/13**

Update count: **0**

Registration date

2021-02-01, 1399/11/13

Registrant information

Name

Soleyman Ansari Kolachahi

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 13 3375 2906

Email address

solomonansari@phd.iaurasht.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2021-02-18, 1399/11/30

Expected recruitment end date

2021-03-10, 1399/12/20

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of sports drink consumption on some hematological indicators, renal function and perception of difficulty in football players

Public title

The effect of sports drink consumption on some hematological indicators, renal function and perception of difficulty in football players

Purpose

Other

Inclusion/Exclusion criteria

Inclusion criteria:

Age (18-30 years) Gender (male) Have at least 5 years of football training experience

Exclusion criteria:

Smoking ingestion of energetic supplements in the past 1 months having a history of cardiovascular disease Having a history of musculoskeletal diseases Having a history of neurological and hormonal diseases No history of surgery

Age

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

Gender

Male

Phase

N/A

Groups that have been masked

- Participant

Sample size

Target sample size: **22**

Randomization (investigator's opinion)

N/A

Randomization description

Blinding (investigator's opinion)

Single blinded

Blinding description

In this study, participants are unaware of the drink assigned to themselves and other participants.

Placebo

Used

Assignment

Crossover

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics committee of Islamic Azad University of Medical Sciences, Rasht Branch

Street address

Islamic Azad university of Rasht Branch, Lakan Blv

City

Rasht

Province

Guilan

Postal code

۴۱۳۷۶۵۴۹۱۹

Approval date

2020-10-28, 1399/08/07

Ethics committee reference number

IR.IAU.RASHT.REC.1399.082

Health conditions studied

1

Description of health condition studied

The effect of energy drink consumption on renal and hematological function in young footballers

ICD-10 code

ICD-10 code description

Primary outcomes

1

Description

Renal function (Urea and Cratinine)

Timepoint

fasting 5 days before the match, before the start of the match, at the end of 90 minutes of the match, and one day after the match

Method of measurement

Using Pars Azmon laboratory kit (made in Iran)

2

Description

Serum level hematological indicators (hemoglobin mass, hematocrit percentage, and red and white blood cell count)

Timepoint

Fasting 5 days before the match, before the start of the match, at the end of 90 minutes of the match, and one day after the match

Method of measurement

Using Pars Azmon laboratory kit (made in Iran)

3

Description

Rated Perceived Exertion

Timepoint

One week before and at the end of a football match

Method of measurement

In order to know the Rated Perceived Exertion caused by a football match, one week before the protocol, people are asked to start a football match warming up in a Field and explain the understand their pressure from playing the game using the Borg pressure perception scale. And finally, perform the main protocol with a speed that is equal to the pressure of score 13.

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: Energy drink. All participants will drink 2 hype 250 ml sports drinks daily (morning with breakfast and evening with dinner) for 5 days before the race, before and immediately after the race and 24 hours after the soccer match.

Category

Other

2

Description

Intervention group: placebo. After a two-week break, as in the previous stage, all participants will drink 2 placebo drinks daily (morning with breakfast and evening with evening) for 5 days before the race, before and immediately after the race and 24 hours after the match.

Category

Placebo

Recruitment centers

1

Recruitment center

Name of recruitment center

Masal County Football Board

Full name of responsible person

Komeil Kasi

Street address

Islamic Azad University of Rasht Branch, Lakan Blv

City

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Phone

+98 13 3342 2153

Email

adibsaberf@gmail.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Islamic Azad University

Full name of responsible person

Alireza Seidavi

Street address

Islamic Azad University of Rasht Branch, Lakan Blv

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solomonansari@yahoo.com

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

100

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

Soleyman Ansari

Position

Non-faculty specialist

Latest degree

Ph.D.

Other areas of specialty/work

Sport Medicine

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Person responsible for scientific inquiries

Contact

Name of organization / entity

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Full name of responsible person

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Position

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Latest degree

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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)**

No - There is not a plan to make this available

Justification/reason for indecision/not sharing IPD

Due to the confidentiality of participants' information

Study Protocol

Undecided - It is not yet known if there will be a plan to make this available

Statistical Analysis Plan

Not applicable

Informed Consent Form

Undecided - It is not yet known if there will be a plan to make this available

Clinical Study Report

Not applicable

Analytic Code

Not applicable

Data Dictionary

Not applicable